





Ethnographic Overview and Assessment for Arches National Park

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Final Report
June 2016

SCHOOL OF ANTHROPOLOGY

ARIZONA

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Arches National Park Ethnographic Overview and Assessment

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School of Anthropology
University of Arizona
Tucson, Arizona

Final Report
June 3, 2016

Project Number:
UAZDS-415
PX.P0187876A.00.1 / PPIMARCH00

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ACKNOWLEDGMENTS

The Arches National Park (Arches NP) Ethnographic Overview and Assessment (EOA) was completed with the assistance and hard work of many people and agencies. The University of Arizona (UofA) research team would like to extend our thanks to everyone involved.

Without the participation of the Pueblo of Zuni, the Hopi Tribe, the Southern Ute Indian Tribe, the Paiute Indian Tribe of Utah, the Kaibab Band of Paiute Indians, and the Ute Indian Tribe of the Uintah and Ouray Reservation this study would not have been possible. The American Indian representatives that joined UofA researchers on site visits to the EOA study areas at Arches NP endured extreme weather, difficult hikes, and long days; for all of their efforts we are grateful. We also wish to express our thanks to everyone for sharing their knowledge about cultural and natural resources observed at Arches NP. We sincerely thank all of you for your time and energy, especially Mr. Kurt Dongoske, Mr. Harry Chimoni, Mr. Cornell Tsalate, Mr. Eldred Quan, Mr. Octavius Seowtewa, Mr. Ben Kallestewa, Mr. Ronnie Cachine, Ms. Elise Redd, Mr. Alden Naranjo, Ms. Cassandra Naranjo, Mrs. Dorena Martineau, Mr. Charley Bulletts, Mrs. Ernestine Lehi, Mrs. Eleanor Tom, Mrs. Carmen Clark, Mr. Glenn Rogers, Mr. Arthur Richards, Ms. Vala Parashonts, Mrs. Betsy Chapoose, Mr. and Mrs. Longhair, Mr. Leigh Kuwanwisiwma, Mr. Joel Nicholas, Mr. Gilbert Naseyowma, Mr. Charleston Lewis, Mr. Wilson Huma, Sr., and all of the tribal officials who helped facilitate the study. The dedication and openness of these individuals made the study possible, and we are appreciative of their efforts.

We would like to thank Chris Goetze, the Southeast Utah Group Cultural Resource Program Manager, Laura Martin, and numerous other Arches NP employees and volunteers who contributed to the success of the project. The knowledge of Arches NP staff helped guide the UofA researchers in their choice of EOA study areas and park navigation. Thank you for all of the effort and time that everyone dedicated to this study. The UofA research team also wishes to extend our thanks to Karen Wurzburger, Regional Cultural Anthropology Program Manager of the National Park Service Intermountain Region. Ms. Wurzburger and Ms. Goetze were very supportive of this study and directed the UofA research team to a variety of reports, publications, and resources that were useful in conducting background research for this EOA. Thank you for your support and continued interest in the work that our research team produces.

This report was prepared at the Bureau of Applied Research in Anthropology (BARA) in the School of Anthropology at the UofA. Many thanks to our BARA interns Hyea Lim Lim, Chelsea Forer, and Mariah Albertie. We wish to extend our thanks to all of the administrative staff in the BARA business office who helped facilitate our budgets, travel advances, payments for independent contractors, and a host of other financial details. The willingness of Marie Roberts and Veronica Peralta to answer questions and assist the research team when needed, even while we were out on fieldwork, is greatly appreciated.

CHAPTER ONE
EXECUTIVE SUMMARY

This chapter presents selected findings from field visits with participating tribal and pueblo representatives during the Ethnographic Overview and Assessment (EOA) of Arches National Park (Arches NP), Utah. Participating tribes include the Pueblo of Zuni (or A:shiwi, a term which some prefer), the Hopi Tribe, the Southern Ute Indian Tribe, Ute Indian Tribe-Uintah and Ouray, the Paiute Indian Tribe of Utah, and the Kaibab Band of Paiute Indians.

Arches NP protects an abundance of natural and cultural resources. Five EOA study areas were visited by participating tribes, pueblos, and University of Arizona (UofA) researchers. These sites were chosen because they encompass an assortment of natural and cultural resources that are of interest to the tribes, pueblos, and the park. Each tribe and pueblo who participated in this EOA study believe Arches NP to be a very powerful place, and are interested in opportunities to return with other tribal and pueblo members for private camping, reconnecting with the land, teaching purposes, and ceremony. Ethnographic fieldwork provided an opportunity for some associated tribes and pueblos to interpret not only the meaning of the place, but also the condition of several locations and the natural and cultural resources present.

This executive summary highlights some of the responses given by tribal and pueblo representatives at the following locations: Arches NP Visitor Center for orientation, the Windows Section, Courthouse Wash, Wolfe Ranch and the Ute Panel, Salt Valley Overlook, and Landscape Overlook A and B. Some of the comments are EOA study area specific, while other comments are applicable to the entire park.

1.1 Ethnographic Resource Interpretations

The tribal and pueblo representatives who participated in this EOA held in common a number of perspectives regarding the cultural meaning of Arches NP and its resources. Subsequent chapters of this report have been approved by the respective tribes and pueblos, and thus these should be consulted for details of each specific cultural perspective.

- The park was primarily a place for ceremony for the Indian people who lived and farmed in Moab Valley, which is further defined in Chapter One as the American Indian Crossing of the Colorado River (AICC).
- The arches in the park are portals in space and time, and may have been used by different individuals, groups, and cultures at various times.
- Hoodoos were living people or beings who not only represent the past but are sentient and can give people today needed resources of various kinds.
- The park contains many traditional medicine plants.
- The park contains many traditional food plants.
- The park contains traditional pigments and minerals used for various cultural purposes.

- The park is located along the Colorado River at a crossing point on a traditional American Indian trail, thus it is a central cultural feature for all participating American Indian people.
- The La Sal Mountains are a culturally important place directly related to ceremonial and medicinal activities that occurred in the park. Views of the mountains from the park are essential in American Indian activities conducted there.

Each tribe and pueblo has their own unique interpretation of the park as a whole and of each individual EOA study area. The following are some of the tribe and pueblo-specific cultural interpretation highlights, listed in the same order as the following chapters. Cultural interpretations provided by participating tribes and pueblos are organized by ethnic group.

1.1.1 Zuni

Zuni representatives described strong connections to many of the features present at visited EOA study areas. They are connected to the park through their origin narrative, which describes a clan migration that passes through Arches NP on the way to the Middle Place. Additional connections are found in plant resources, such as phragmities, and ceremonial connections to geological formations, like hoodoos and arches (for further discussion see Chapter Four).

- Arches are windows which, when facing a certain direction, can be used to look into the past, present, and future.
- Zuni origin emergence narrative is illustrated and celebrated by a pecking of the phragmites (reed) emerging from the previous world. It is found alone on the far left at the Ute Panel.
- Zuni clan migrations are marked by the peckings at the Moab Panel, which represent ancestral footprints.
- Hoodoos are reminiscent of prayer shrines seen in Zuni kivas.
- Selenite (gypsum) from the Wolfe Ranch and Ute Panel EOA study area is used in ceremony and arts.
- Much of contemporary Zuni traditional ecological knowledge was gained during the clan migrations. During this time they gained a great deal of their knowledge of plants, water, medicines, stars, and many other technologies and resources.
- The Colorado River serves as a religious trail, transporting ideas, prayers, and people. It can be thought of as an umbilical cord, providing life in many ways to human kind, plants, animals, and the planet itself.
- Prayer shrines made of larger stone alignments indicate long-standing Zuni connections with the region. A prayer shrine was identified at one of the study areas.
- The La Sal Mountains had low hanging clouds and snow during the Zuni site visits, which indicates that good things are in the area and that old spirit beings reside here. This is very significant.

1.1.2 Hopi

Hopi representatives described cultural connections to Arches NP from markings left by their ancestors and stories passed down through generations. Geologic features were reminiscent of culturally central beings and resources. Additionally, plant materials often used in the construction of cultural resources were widely available. Hopi representatives have traditionally referred to this region as the Place of Rainbows, or *Pavayoykasi*, due to the arch formations (for further discussion see Chapter Five).

- Arches are viewed as rainbows, which are special.
- Hopi clan migrations are marked by the spiral pecking at the Moab Panel, representing ancestral footprints.
- Willows growing at Wolfe Ranch were used in making prayer sticks, also known as *pahos*.
- Hoodoos are representative of *ka'tsinas*, particularly the Mudhead ka'tsina (Spiritual Beings that visit the Hopi community seasonally).
- The turquoise colored Mancos Shale was used in body paint, as ceremonial offerings, and as a color in pottery decoration.
- Cottonwood root is used for making ka'tsina figurines, and there are many cottonwoods growing along Courthouse Wash, especially near the spiritual area called the Moab Panel.
- Hoodoos at the Windows Section EOA study area are reminiscent of corn.
- Hunting would have been a major activity in the park. Salt Valley Overlook EOA study area was a place to prepare for the hunt, and other EOA study areas served as camping and hunting places. All of the resources needed for making arrows, bows, points, and other tools can be found in the park.
- Prayer shrines made of naturally occurring stone arrangements indicate long-standing Hopi connections with the region. A prayer shrine was identified at one of the study areas.

1.1.3 Ute

The visiting Ute representatives described the long standing connection Ute people have to this region. Arches NP is located within the larger traditional Ute territory. This region is significant to Ute people because of the AICC, is part of a traditional Ute trading and ceremonial route. Additionally, the Moab Valley and surrounding drainage systems provided fertile land for long- term, irrigated agriculture used by Ute people since time immemorial (for further discussion see Chapter Six).

- The arches are seen as portals and important features associated with time keeping and star watching.
- Horse and rider peckings at the Wolfe Ranch and Ute Panel EOA study area represent Ute presence in Arches NP after 1680, when horses were introduced to North America.
- Purple sage (*Poliomintha incana*) continues to be an important medicinal plant for Ute people today. The park's Purple Sage TCP area is one of three known Ute gathering areas for this medicine in the Southwest.

- The park was perceived as having traditional Ute trails (although these cannot be seen today), which were used for both spiritual and utilitarian purposes.
- Archaeological materials found at Salt Valley Overlook EOA study area were interpreted as offerings placed there in the past during ceremony.
- Traditionally, Ute people visited various locations in and around the park for ceremony.
- The Ute people have been in the Arches NP region since time immemorial. The Ute people stipulate that they are the descendants of the people who lived here and practiced irrigated agriculture.

1.1.4 Southern Paiute

Southern Paiute representatives have been connected to this region since time immemorial. This connection is represented by the presence of a very old rock pecking located just south of Arches NP along the Colorado River. This pecking is a key component of the Southern Paiute origin narrative. The Moab Valley provided ancestral Paiutes with wetlands for large scale farming, while Arches NP area contained sacred places and numerous resources used during ceremony (for further discussion see Chapter Seven).

- The park is a sacred area used for vision questing, singing, praying, and ceremony.
- The arches at the Windows Section EOA study area were used as a time keeping device in the past.
- The park is full of medicinal plants. Purple sage was used for many purposes, including medicine.
- The single pecking located to the far left of the Ute panel indicates that the area was used for medicine and doctoring.
- Mancos Shale is used for painting the faces of some participants in ceremonies.
- The traditional trail crossing of the Colorado River served as a trade and exchange point, as well as a place for spiritual and ceremonial activities.
- The basket pecking along the Colorado River (located southwest of the park boundaries) illustrates the Southern Paiute presence in this region since time immemorial and demonstrates that the irrigated farmers of the area are Southern Paiute ancestors.

While it is difficult to summarize complex and detailed understandings provided by the participating tribal and pueblo representatives, this chapter has endeavored to serve as an introduction to subsequent chapters, which are organized by participating tribe or pueblo. Because this chapter is a summary of what the Indian people said, it should not be considered an exact representation of the voices of the tribal and pueblo representatives who participated in the study.

1.2 Ethnobotanical Resources

Arches NP is renowned for its geologic features, but also conserves other natural and cultural resources significant to American Indians. Participating tribes and pueblos commented in depth on the features and ecology of the park. The ethnobotanical resources stand out because of their abundance and quality. Some plants, like the purple sage, are rare and only grow in a few stands regionally. Similarly, representatives remarked on the quality of plants like greasewood

(*Sarcobatus vermiculatus*) and willow (*Salix* ssp.), which grow strong and straight in the park. Tribal and pueblo representatives have a complex understanding of plant resources, which was emphasized during field visits, making these resources a key topic of discussion in this summary.

American Indians have interacted with their environment over hundreds of generations, accumulating a body of knowledge known as Traditional Ecological Knowledge (TEK). This body of knowledge identifies plant uses, such as food, medicine, ceremony, and utility, for a wide variety of plants (Figure 1.1). Participating tribal and pueblo representatives provided in depth and complex interpretations of natural and cultural resources at each EOA study area. The text below is an introduction to some of the TEK shared with researchers during the study, and serves as an example of this knowledge domain.



Figure 1.1 Abundant Plant Life at Arches NP

Information about American Indian use plants was recorded during formal and open-ended data collection events at each EOA study area. The data for each tribe or pueblo were gathered and categorized by EOA study area. These individual tables were then combined into a Master Plant Table, which shows the total plants recorded by each individual tribe and pueblo. Appendix D offers the complete list of recorded plants.

A total of 46 plants were documented by participating tribal and pueblo representatives visiting Arches NP. Of those 46 observed plants, Zuni identified 17, Hopi representatives identified 26 plants, 13 plants were identified by Ute representatives, and 34 were identified by

Southern Paiute representatives. A number of important use plants were identified by all tribes and pueblos, such as Indian ricegrass (*Oryzopsis hymenoides*) and Indian tea (*Ephedra* ssp.). These plants are abundant throughout the park. The plants listed in Appendix D are a partial representation of the ethnobotanical resources within Arches NP. Further studies focused on ethnobotany within Arches NP could assemble a larger plant index.

In this section, we highlight three distinct traditional use plants: purple sage, willow, and phragmites (*Phragmites australis*). These plants are valuable resources among visiting tribes and pueblos. Each example provides insight into the complex and time tested knowledge regarding plant use as medicine, food, and ceremony.

Purple sage grows in a uniquely large stand at the park's entrance (Figure 1.2). This area was deemed as being a Traditional Cultural Property (TCP) eligible area in a previous study. This location was noted as being one of few traditional gathering areas by visiting Paiute and Ute representatives. The plant has a wide range of medicinal and utilitarian uses. For example, this plant is traditionally and contemporarily brewed into a medicinal tea to treat a sore throat.



Figure 1.2 Purple Sage Growing in Arches NP

Willow was another important use plant noted as growing along riparian systems (Figure 1.3). Hopi representatives explained that these willows would have been used in making prayer sticks, or pahos, an important feature of Hopi ceremony. To the Hopi, pahos are instrumental in communicating with the Creator (Waters 1963:132). Representatives noted the quality of the willows being very high; their straight structure and dark green color are characteristics Hopi people look for when gathering willow for making pahos.



Figure 1.3 Willow Growing at Wolfe Ranch L) and a Traditional Paho R) (Cosgrove 1947)

Like willows, phragmites also grow along the riparian systems at the Wolfe Ranch and Ute Panel EOA study area (Figure 1.4 L). Zuni representatives explained that phragmites have cultural significance because they are a part of the central Zuni origin narrative, and are used in ceremony. In the narrative provided by visiting pueblo representatives, phragmites were used by the first humans to pull themselves out of an earlier world. One representative demonstrated how, in current ceremonies, the reed is hollowed out and stuffed with tobacco. In addition to the plant growing at Wolfe Ranch, the single pecking on the left side of the Ute Panel was interpreted by visiting Zuni as depicting this sacred plant (Figure 1.4 R).



Figure 1.4 Zuni Representatives Explaining Phragmite Use L) and the Phragmites Pecking at Ute Panel R)

An abundance of ethnobotanical resources grow within the boundaries of Arches NP. Throughout the EOA study area visits, participating tribal and pueblo representatives observed many plants that they found to be culturally significant. The representatives were impressed by the quality and quantity of traditional use plants within Arches NP, many of which are not found elsewhere. The participating tribes and pueblos would like to be consulted in a future ethnobotany study; these resources will be a key topic in future government-to-government consultation between associated tribes, pueblos, and Arches NP.

1.3 Chapter Summaries

This EOA study provides a broad overview of American Indian interpretations of the sites, resources, and archaeology of Arches NP. It also offers management recommendations presented by the participating tribe and pueblo representatives.

Chapter One provides a brief introduction to the study. Chapter Two offers a comprehensive cultural association analysis of the four ethnic groups that participated in this study. Their connections with the region are examined with details focused on the spiritual, physical, and historical ties they have with the Arches NP area and the Moab Valley. A methodology section is presented in Chapter Three, which explains the data collection process.

Chapters Four through Seven are ethnic group specific. Each chapter highlights the tribe or pueblo interpretation of the natural setting, cultural resources, and special features identified at each of the five EOA study areas. The chapters are ordered by tribe or pueblo field session participation, beginning with Zuni (Chapter Four), Hopi (Chapter Five), Ute (Chapter Six), then Southern Paiute (Chapter Seven). Repetition present within each of the ethnic chapters was unavoidable due to the fact that each participating tribe or pueblo reviewed their own ethnic chapter as a stand-alone document. Protocol for the documents reviewed by participating representatives prohibits changes to the text following tribal or pueblo approval. Therefore, each of the reviewed chapters must remain in the same form as they were when the ethnic groups approved their section.

In addition to their specific chapter, each of the ethnic groups offered management recommendations during their field visits to Arches NP. These recommendations are presented within Chapter Eight of this report. The recommendations are divided by EOA study area, with general park management recommendations provided at the start of the chapter.

Appendix A provides the legislation and historic overview of tribal treaties, land tenure, and recent American Indian occupation of the area. Based on the significant interest in plants at Arches NP, a summary list of ethnobotanical resources identified by each ethnic group is included in Appendix B.

CHAPTER TWO
CULTURAL ASSOCIATION ANALYSIS

This chapter provides insight into a series of key issues, which were addressed by all of the American Indian tribal representatives who participated in the Ethnographic Overview and Assessment (EOA) for Arches National Park (Arches NP) in Moab, Utah. Consulting tribes and pueblos (Figure 2.1) raised a variety of issues during this study. One of the most important points raised was related to cultural association with Arches NP and the surrounding region. These cultural associations occur at various times during the thousands of years when American Indian people lived in the study area.



Figure 2.1 Tribal and Pueblo Representatives Participating in the Arches NP EOA Study

This chapter begins with an attempt to ethnographically define the spatial boundaries of the study from diachronic and synchronic American Indian perspectives whose time frame can only be called time immemorial and whose spatial dimensions can only be called multidimensional. After addressing the issue of cultural association, the chapter provides short and concise understandings of the range of cultural meanings each tribe or pueblo has shared about the park. These sections are not summaries of the much longer tribal or pueblo chapters that follow, but are instead intended to be informative vignettes.

2.1 Cultural Association

The American Indian interpretations of Arches NP in this study involve the need to understand culturally defined spatial and temporal dimensions that do not generally correspond with Western philosophical stipulations (epistemology) regarding what exists and what can be done with that reality. In the simplest terms, Arches NP exists today and in the past, at the nexus of worlds. These worlds simultaneously exist; they were and are connected by access portals (Figure 2.2). These are worlds that can be accessed by culturally prepared and appropriately chosen individuals from each of the tribal and pueblo peoples participating in the study. Without this understanding and acceptance of these epistemological possibilities, the Western reader of this report will be confronted by a series of statements that appear at face value as impossible, which may affect their opinions regarding this study.



Figure 2.2 View of the La Sal Mountains and Delicate Arch, Arches NP

For a Pueblo religious group, movement between worlds occurs when their kiva songs pass into the ground and arrive at Arches NP. Some pueblo people sing to and with the elements of the park. Numic people[1] also can pray to and with the park and expect those prayers to arrive, be heard, and be responded to by the park itself. American Indian people can engage with the park from afar. In addition, elements of the park can be, today and in the future, active partners in American Indian ceremonies that are conducted at sites within the park.

[1] The term Numic is used to describe both Ute and Southern Paiute in this report. It is a term used to describe the language family both Ute and Southern Paiute come from.

In many American Indian cultures, time bends. This allows for events to be accessed at a later point or before they occur. Within Western epistemology, human actions are believed to only occur at a moment in time, then they immediately are forever gone and thus have past and are inaccessible. In American Indian epistemologies, human and non-human events and actions may be recorded, preserved, and shared again by the natural resource that initially experienced them. For example, an arch can keep a ceremonial song it recorded a thousand years ago, and then share it at any moment with an appropriate American Indian person. Hoodoos were once living beings and at any given time the earth from their foundations can be an active partner used in ceremonies conducted in distant Native communities. Songs sung today along the Colorado River can pass down stream and be heard by people, past and present, living along the way. Likewise, prayers for rain can be carried down the Colorado River and stimulate evaporation from the ocean thus causing the formation of clouds, which are alive and sentient beings. They return back up stream to the prayer's point of origin. The clouds then provide rain for the nourishment of the land and the people give thanks.

2.2 Where Is The Study Focused?

The physical boundary of Arches NP is well understood and clearly defined, but that federal boundary does not correspond with the broader cultural areas and resources within which the park is situated. At this time we suggest the ethnographically defined term American Indian Crossing of the Colorado River (AICC) to refer to our study area (Figure 2.3). This term incorporates two culturally central aspects of the broader area - the Colorado River and the location where an important ancient American Indian trail crosses the river.

The Colorado River is understood from American Indian perspectives as the veins of Mother Earth. By implication all of its tributaries, which constitute the watershed of the Colorado Plateau, are integrated sacred areas (Figure 2.3). The American Indian trail that crosses the Colorado River at Arches NP is similarly unique and occupies a special place in landscape perceptions. It is the best crossing of the Colorado River between Grand Junction upstream and the Crossing of the Fathers downstream. As such, it certainly has been the focus of human activities including trade, ceremony, livelihoods, and residence for thousands of years. Trails to and from the crossing have been developed and culturally constructed in terms of their locations and destinations during this time span. Such major trails are perceived today to be sacred by all of the American Indian peoples involved in this study.

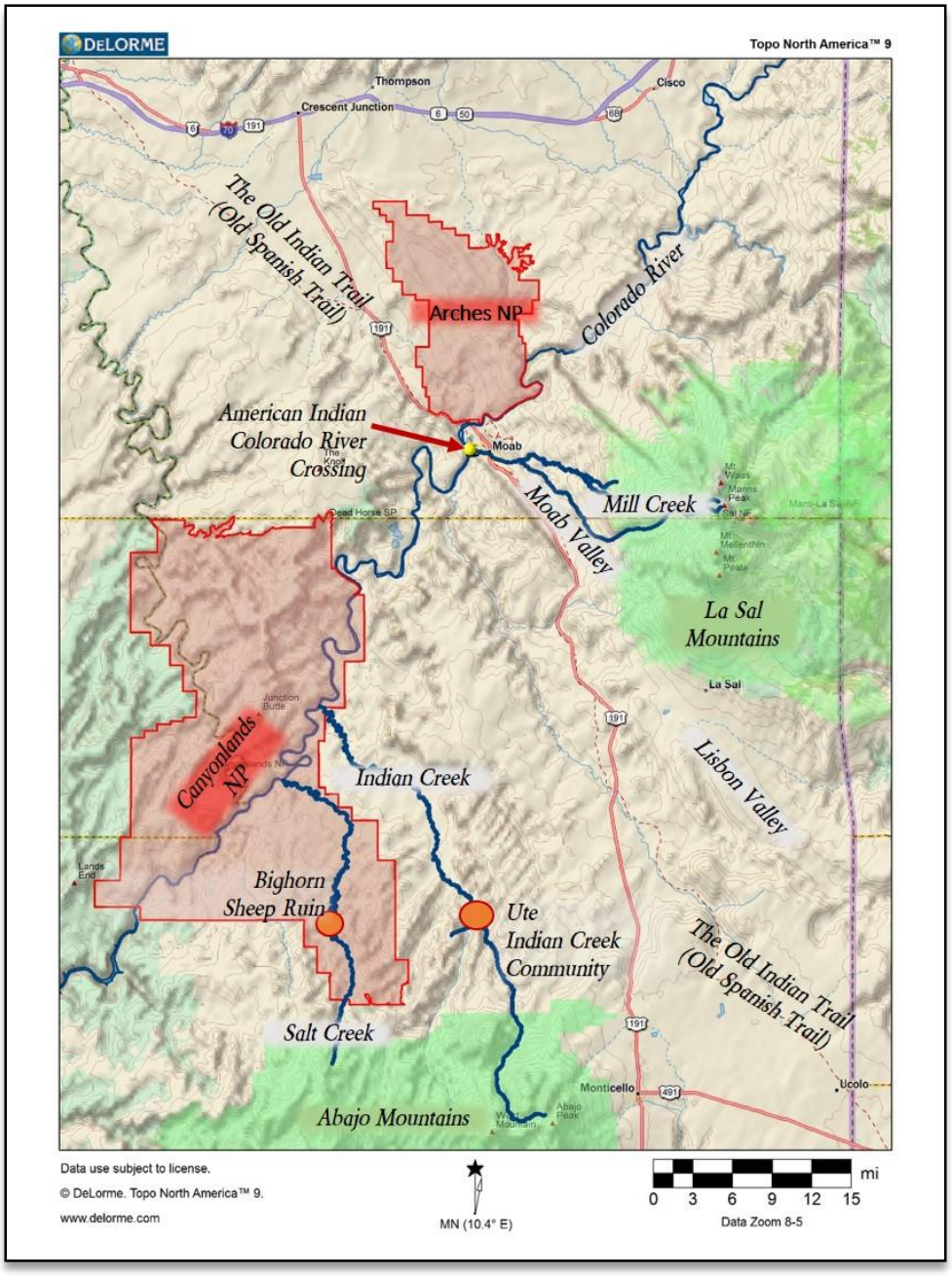


Figure 2.3 Map of the AICC

While the AICC and the Colorado River itself are the focus of this ethnographically defined study area, key hinterlands with different primary functions are involved (Figure 2.4). These include the La Sal Mountains, which are a sky island to the southeast, and various topographic features of Arches NP to the north. The former was always used for hunting and, in later times, irrigated farming communities that were established along its outflowing streams. Arches NP contains many topographical features which form a large integrated ceremonial area. To the southeast, the Abajo Mountains are another sky island that provide key northeastern flowing streams, which have contributed to the farming-based settlements of American Indian people and thus the various cultural interpretations found in this report.



Figure 2.4 Colorado River near Moab, Utah

The AICC is structured around and centered on these two prominent topographic features. AICC as a term describes how the broader area has been used and perceived since time immemorial. This perspective is useful because American Indian people have lived in this area for more than 10,000 years and contemporary tribal and pueblo representatives have made interpretations regarding how they lived in this area over that enormous span of time.

2.3 Occupation of the AICC

Some understandings of who occupied the AICC and surrounding areas over the past 10,000 years are quite clear and largely undisputed. A number of scholars, however, dispute issues regarding who made what, who did what to whom, and who are these people today. This portion of the chapter presents only the clear archaeological findings, which are most relevant to the tribal and pueblo representatives' ethnographic interpretations.

2.3.1 The Paleo-Indian and Archaic Periods

Archaeological research has documented the ancient occupation of the AICC. Hunt and Tanner (1960) summarized the earliest archaeology of the AICC as extending from what they termed the Moab Complex which includes Folsom and Pinto Basin point types. A Clovis point was found in Lisbon Valley, south of the La Sal Mountains (Black, Copeland, and Horvath 1981: 91). These locally found types of stone points are roughly 10,000 years old, extending the Paleo-Indian occupation of the area from the end of the late-Pleistocene. Temporally, this Moab Complex was followed by the La Sal Complex, which contains Gypsum Cave points that were

found at high elevations up to 10,000 feet. The following period is known as the Uncompahgre Complex, during which time the bow and arrow came to be used by the people. This period extends to the beginning of agriculture in the AICC. Contributing to this deep time occupation argument is a pecking of a mammoth or mastodon along the Colorado River located three miles downriver just west of Moab (Scientific Monthly 1935: 378-379). Mammoth bones were found in a small cave located less than a mile up the Colorado River from the confluence of Courthouse Wash (Pierson 1980:26). Mammoth bones and Clovis points generally place human activity in the broader region for up to 10,000 years (Schroedl 1977, Schroedl and Coulam 1994). While the terms used to describe these oldest occupation periods have been debated and even changed, Hunt and Tanner's original research (1960) still serves to document a very old and continuous American Indian occupation of the AICC.

During the Archaic people, American Indian interactions with native plants were key to their livelihoods. Through time, probably throughout the Paleo-Indian and Archaic periods, American Indian people continued to learn about plants and their ecosystems and how to better use them. Over more than 10,000 years, since the Pleistocene to Holocene transition, the climate of the western United States underwent some major ecological changes which directly impacted the ability of plants and people to co-adapt. During this long period we know from the archaeology of very dry caves that American Indian people used dozens of wild plants over thousands of years (Figure 2.5).



Figure 2.5 Wild Indian Ricegrass Growing Near Salt Valley Overlook, Arches NP

Hockett's (2010:221-222) data from Bonneville Estates Rockshelter, Utah, documents that there were major changes in occupational intensity, which began about 12,900 B.P. largely due to the onset of a much dryer climate. Data from this study support the "nutritional ecology model" which couples climate change in the early Holocene with dietary diversity, especially an increasing reliance on seeds, and increases in population numbers and residential stability. Rhode and Louderbeck (2010) analyzed the wild plants observed in this cave and concluded that

American Indian people at this time (about 12,000 B.P.), and for a thousand years later, had a diet that was heavily dependent on small seeds. Table 2.1 lists 20 plants that were identified from this cave and were being used by the American Indian people at this time. According to Rhode and Louderbeck (2010), the sample is biased towards the more resilient seeds; whereas it is likely that roots, tubers, berries, and greens from these and other plants would have been used, they were just not preserved. This seed gathering component of their diet was eventually strengthened by the use of pickleweed (*Salicomia utahensis*), which apparently became a common plant because the area had become more arid. Rhode and Louderbeck (2010) concluded that broad-scale adaptation to resources such as desert grass seeds and cacti may already have had a quite a long history at the time they were used at the start of the Holocene.

Cultural Component Plant Remains, Bonneville Estates Rockshelter, Utah	
Scientific Name	**Common Name**
Achnatherum hymenoides	Ricegrass seed
Artemisia ssp.	Sagebrush seed
Asteraceae	Sunflower (Helianthus) seed
Atriplex argentea	Saltbush fruit
Brassicaceae	Mustard family seed
Cactaceae	Cactus family seed, spine, cluster
Carex ssp.	Sedge seed
Chenopodiaceae	Goosefoot seed
Cleome serrulata	Beeweed (Rocky Mountain Bee Plant) seed
Fabaceae	Pea Family seed
Forsellesia spinecens	Greasebush seed
Leymus cf. cinereus	Wild rye seed
Liliaceae	Lily family bulb
Mentezlia,f. albicaulis and M. laevigata	Blazingstar seed
Poaceae	Grass family seed
Rosa cf. woodsii	Wild rose seed
Salicornia utahensis	Pickleweed
Scirpus ssp.	Bulrush seed
Sporobolus ssp.	Dropseed sandgrasss seed
Symphoricarpos cf. longiflorus	Snowberry seed

Table 2.1 Paleo-Indian and Archaic Period Plants

At some point in the process of learning to use plants, use practices shifted from the passive gathering of seeds to a more active and knowledgeable engagement called horticulture. Horticulture, as we use the term here, involves the conscious use, modification, and redistribution of natural plants to serve human needs. Horticulture is based on traditional ecological knowledge (TEK) of plant species, management outcomes, and overall ecology. As such, it involves deliberate engagements such as pruning pinyon trees, burning Indian ricegrass,

and carrying selected seeds to new habitats to make them more accessible (Stoffle, Toupal, and Zedeño 2003). An intimate knowledge of plant genetics has been suggested as a major "cultural focus" of desert-dwelling American Indian people (Anderson 1956; Shipek 1970). These desert dwelling people have sustainable adaptive strategies that maximized the carrying capacity of the land (Stoffle et al. 1982). During thousands of years of co-adapting with plants, American Indian people developed complex understandings of both plants and their ecosystems (Stoffle et al. 1990, Halmo et al. 1993). This knowledge persists today despite the ravaging impacts of European animals on the desert landscape and plant resources and European diseases on the people (Stoffle, Halmo, and Evans 1999; Stoffle and Evans 1976; Stoffle, Jones, and Dobyns 1995).

Co-adaptation also involves establishing and maintaining relationships between people and animals. This includes water management animals, such as beavers (Albert and Trimble 2000). Before being decimated by early trappers, such as French-Canadian Denis Julien who trapped the AICC in 1832 and 1844, beavers were common along the Colorado River where they lived in riverbank dens and in its tributaries, where they stabilized the ecosystem with stream-wide dams and ponds (Williams 2013: 100). In recent years, the Pueblo of Zuni has reaffirmed their traditional relationship with beavers through their successful ecological wetlands restoration project on the reservation (Albert and Trimble 2000).

American Indian people in the Great Basin and Colorado Plateau, therefore, have been doing more than just gathering and using plants and animals for the past 10,000 years. The distribution, genetics, and ecology of the plants have changed while they have been engaged by American Indian people (Nabham et al. 1981).

2.3.2 The Irrigated-Farming Period

The time and way of life that archaeologists define as the Archaic Period has slowly transformed into a period that we are terming here as the Irrigated-Farming Period. Other types of farming include fields watered by floodwaters, rainfall, and seepage, persisted in some areas (Nickens 1982: 93-94). The largest concentrations of people during this period, however, were supported by the larger carrying capacity of irrigated farming. There are a number of other terms used to define the archaeological traditions in this period, but we are avoiding the use of these common terms because they imply that artifacts present in these periods (often as few as four) can indicate a connection or disconnection with contemporary cultural groups. Instead, in this essay, the term Irrigated-Farming Period refers to a livelihood and a time when it dominated the landscape. The term does not imply a connection with any contemporary American Indian peoples. A more comprehensive discussion on this topic is addressed later in this chapter.

With the adoption of cultigens like corn (*Zea mays*), squash (*Cucurbita* ssp.), and beans (*Phaseolus vulgaris*) by as early as 500 BC, farming would be added to horticulture and together they would become a permanent foundation for a new and more resilient livelihood involving the management and use of wild plants and cultivars. After corn, beans, and squash arrived north of the Colorado River, they certainly could have moved into central Utah between AD 0 and AD 500. Cowboy Cave has an early corn date of 40 BC, but most corn dates are between then and AD 440 (Schroedl and Coulam 1994: 13). Schroedl and Coulam's (1994: 24) reanalysis of

Cowboy Cave seed data support the interpretation that there was a general trend of increasing intensification of plant husbandry during what they call the Terminal Archaic, which ended for Cowboy Cave around AD 600 (cf. Schroedl 1992; Winter and Hogan 1986). Given the apparent addition of corn to a well-established livelihood, Schroedl and Coulam (1994) concluded that corn was initially just another grass that was incorporated into an existing horticultural subsistence pattern.

As cultivars became prevalent in in the livelihood of the people, their population numbers and the distribution of their sedentary communities greatly expanded (Pierson 1980). Lindsay and Loosle (2006:17) note that storage features reflecting early farming activities in the Uinta Basin date back to around AD 1. Talbot and Wilde (1989) conclude that between AD 700 and AD 800 the frequency of farming sites in the Great Salt Lake area increased more than tenfold, suggesting that populations were either growing, becoming more sedentary, or both as a consequence of increasing reliance on maize. During this period in the AICC, the central irrigated fields and settlements were primarily in the Moab Valley, but farming villages also occurred in Castle Valley and in other stream fed valleys around the La Sal and Abajo Mountains such as Indian Creek and Salt Valley Creek.

Irrigated farming continued to flourish because of increased precipitation and warmer annual temperatures. By around AD 1150, the carrying capacity of the land was maximized due to a full set of cultigens being grown in optimized irrigation networks and broad-spectrum gathering with flourishing natural plants. To the north of the AICC in the Uinta Basin, Lindsay and Loosle's (2006: 10) study of the Johnson Rockshelter (dated AD 880) documented the presence of Dent Corn (a regionally unique variety), pumpkin or squash, and beans.

Just to the south of the AICC, in Canyonlands National Park, Chandler (1990: 97) inventoried the American Indian use plants at the extensive Bighorn Sheep Ruin (dated AD 1164-1282) on Salt Creek. She notes that plants which were modified to make other objects are diverse including all of the following objects:

> Basketry, cordage, sandals, cloth, quids, arrowshafts, worked wood, a painted squash rind pendant, and perforated corn shanks. The following parts of 13 taxa of plants were used by the site occupants in the manufacture of modified vegetal artifacts: dogbane (Apocynum), yucca, grass, and cotton fiber; squash pericarp; Dicotyledoneae, cottonwood, and willow wood, Gymnospermae resin, juniper bark; reed (Phragmites) and sedge cub, and various corn parts (Chandler 1990: 97) (see also analysis by Matthews 1988) (Figure 2.6).

Cotton was locally grown and processed with looms into textiles and cordage. While the people living at Bighorn Sheep Ruin would have used some of these cotton products, cotton and items manufactured from it generally were prime trade goods and must have passed along the American Indian trail through the AICC. It is important to note that cotton typically was grown that far to the south, thus documenting the higher rainfall and warmer climate near the AICC at this time.



Figure 2.6 Plant Species Still Found Growing at Arches NP today: Top) Purple Sage, L) Juniper, and R) Narrow Leaf Yucca

The Bighorn Sheep Ruin study is especially important for this ethnographic overview because the study documents that even at the height of irrigated agriculture, natural plant resources continued to be important. Fifty percent of the wild plants recorded at Bighorn Sheep Ruin had been used by American Indian people more than 10,000 years ago (Table 2.2). All of the plants identified at Bighorn Sheep Ruin are used by contemporary American Indian peoples from the AICC.

Bighorn Sheep Ruins Plants				
Domestication Status	**Scientific Name**	**Common Name**	**Used 10,000 Year Ago**	**Contemporary Use**
Cultigens	*Cucurbita*	Squash		Yes
	Gossypium	Cotton		Yes
	Phaseolus ssp.	Beans		Yes
	Zea mays	Corn		Yes
Non-Cultigens	*Achnatherum hymenoides*	Indian Ricegrass	Yes	Yes
	Amaranthus ssp.	Pigweed		Yes
	Apocynum ssp.	Dogbane		Yes
	Carex ssp.	Sedge	Yes	Yes
	Chenopodium ssp.	Goosefoot	Yes	Yes
	Cleome ssp.	Beeplant	Yes	Yes
	Descurainia ssp.	Tansymustard	Yes	Yes
	Hesperostipa comata	Needle and Thread grass	Yes	Yes
	Juniperus ssp.	Juniper		Yes
	Opuntia ssp.	Prickly Pear	Yes	Yes
	Phragmites australis	Common reed		Yes
	Physalis ssp.	Groundcherry	Yes	Yes
	Pinus ssp.	Pinyon		Yes
	Pinus ponderosa	Ponderosa Pine		Yes
	Populus ssp.	Cottonwood		Yes
	Portulaca ssp.	Purslane		Yes
	Pseudotsuga menziesii	Douglas Fir		Yes
	Rhus trilobata	Three-leaf sumac	Yes	Yes
	Salix ssp.	Willow		Yes
	Suaeda ssp.	Seepweed		Yes
	Yucca ssp.	Yucca		Yes

Table 2.2 Bighorn Sheep Ruins Plant List

The gathering of wild plants continued during the peak of irrigated agriculture according to coprolite analysis from Bighorn Sheep Ruin. Chandler (1990: 101) documents that:

> Weedy annuals appear to have been the dominant pioneer plant food consumed at Bighorn Sheep Ruin. Goosefoot, seepweed, purslane, groundcherry, and tansy mustard seeds were all found in coprolites. The pollen and macrobotanical analyses also indicate exploitation of pigweed, beeweed, and Indian ricegrass seeds. It is likely that the greens of many of these species, particularly beeweed, were also consumed. Wild plant seeds represented include squawberry, sedge, and prickly

pear cactus. The presence of sedge in the macrobotanical and pollen records indicates minor use of riparian species, presumably obtained from Salt Creek.

The TEK needed for horticulture was developed and transferred over 10,000 years to the time when people were living at the Bighorn Sheep farming community, and from then until modern times. Traditional ethnobotanical knowledge continued to be important despite the transition to irrigated agriculture. So for more than a thousand years during the rise and dominance of farming, traditional knowledge of wild plants continued to be taught to each generation. Plant TEK has been an important aspect of American Indian people's livelihoods for as long as there are data on the subject, so despite the increased importance of and dependency on farming cultigens, the wild plant TEK persisted.

Lindsay and Loosle (2006) provide an extensive analysis, based largely on the size and distribution of storage pits in various archaeology sites. They noted that the Uinta Basin irrigation farmers continued to participate in seasonal hunting and gathering, despite the demands of farming on their time. The authors conclude that the extensive subterranean storage pits at the Johnson Rockshelter and elsewhere in the area support Yoder's (2005) hypothesis that between AD 550 and AD 950 the Uinta Basin farmers were semi-sedentary, perhaps seasonally leaving their primary farming residences after the maize harvest for hunting and other resource procurement trips.

Both patterns of wild plant management and animal hunting persisted during the rise and maximization of irrigated farming in the greater region around the AICC. TEK essential to these gathering activities persisted in contrast to the common wisdom that farmers diminish their commitment to gathering and hunting and over time, especially more than a thousand years as occurred in the AICC.

2.3.3 The Little Ice Age: Mixed Economic Livelihoods

In general, livelihoods in the northern Southwest involved a clear dependency on irrigated agriculture by AD 500. This livelihood system was fully developed producing a peak of agriculture production by around AD 1200. Between AD 1250 and AD 1350, changes in climate resulted in a slow decline in irrigated agriculture due to the onset of the Little Ice Age.

This significant climatic phenomenon began around AD 1200 and lasted until about AD 1900 (Figure 2.7). A drop in temperature worldwide marks a climatic shift with measurable environmental and social impacts based on the regional scale, duration, and severity of the event. The cooling temperatures and resulting livelihood impacts of the Little Ice Age affected ecology and people alike.

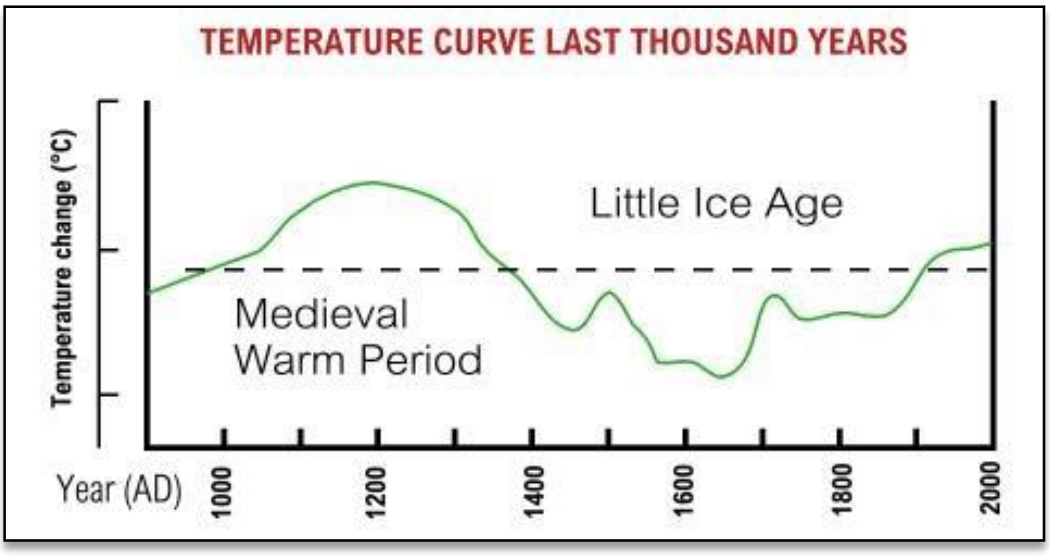


Figure 2.7 Temperature Fluctuations between AD 1000 and AD 2000 (Foster 2011)

During the colder and dryer climate of the Little Ice Age, communities dependent on irrigated agriculture began a transition to a livelihood that increasingly became structured around a combination of horticulture, small scale irrigated farming, hunting, and gathering. This then became the new and most productive livelihood for most people in the Colorado Plateau and the Great Basin.

Coltrain and Stafford (1999: 77-78) conclude that after AD 1150 one set of economic options, probably maize production, was eliminated from the Great Salt Lake area. They combined their own data with that of others and further conclude that after AD 1190 most of the northern Colorado Plateau and northern and western Utah were no longer occupied by Fremont people living in village settings (Coltrain and Stafford 1999). The few irrigated farming villages after this time were clustered to the south in wetter and warmer regions. This was one in a series of similar American Indian responses to climate change.

This livelihood shift has been termed from "Pretty Pots to Beautiful Baskets" (Stoffle 2014), which is an expression that was coined to reflect a key and comparatively rapid material culture shift at this time. The expression also implies cultural and biological continuity over this ecological transition. From a material standpoint, the onset of the little Ice Age clearly changed the way people lived in this area and throughout the region. Our position is similar to what Simms (1999) and others have argued in that people remained largely in place while drastically changing how they subsisted and what they made to adapt to their new livelihoods (Figure 2.8).

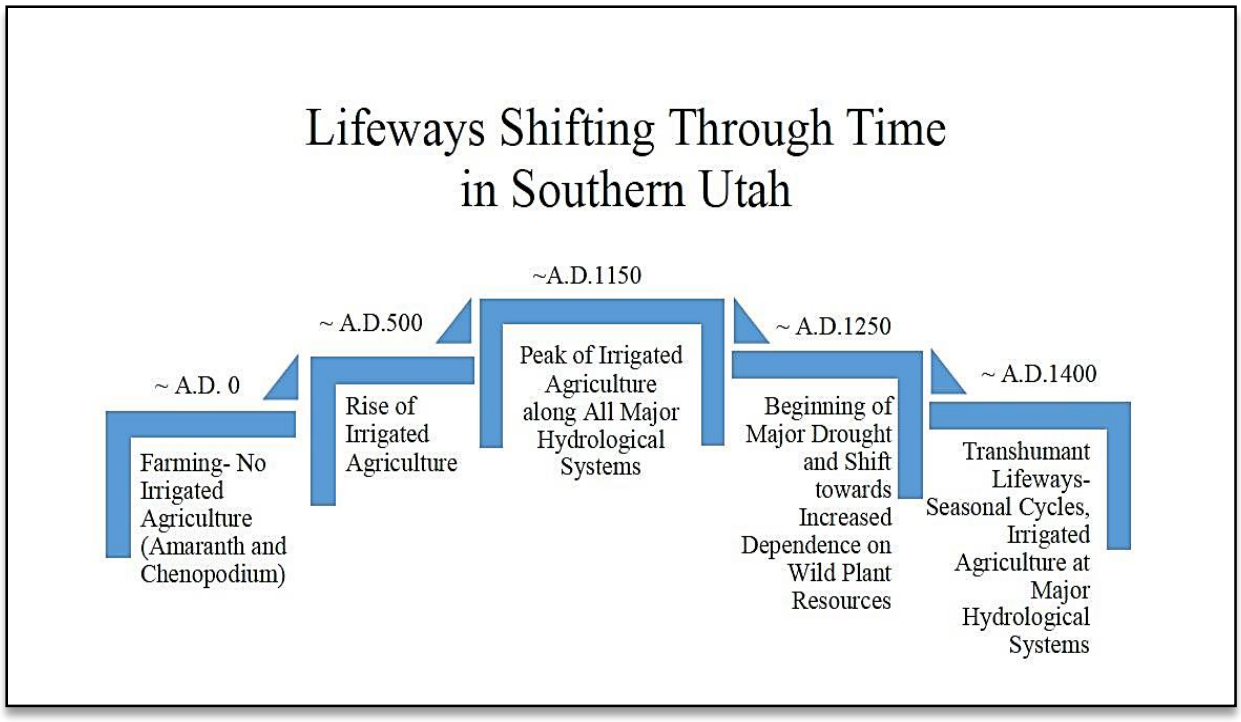


Figure 2.8 Shifting Southern Paiute Lifeways (Stoffle et al. 2013)

Climatic shifts differentially impact local and often regional communities. In order to understand the exact impacts in any particular area, climate-specific research is needed. Such research has been conducted for the Kaibab Paiute Tribe in northern Arizona and will serve here to illustrate the climate-induced impacts on dozens of local agricultural communities (Stoffle et al. 2013). While the case is located about 115 miles south and 170 miles west of the AICC, this study provides a comprehensive analysis of climate change impacts on American Indian communities in the region.

Based on pottery types found on the surface along the edges of a (now dry) hydrological system on the contemporary Kaibab Paiute reservation, the majority of these traditional irrigated agriculture farming communities were occupied from AD 700 to AD 1300. Some farming communities had pottery that dated well before AD 700 and some farming communities were active around AD 1400, thus these data document almost a 1000 years of farming on and near the current Kaibab Paiute Indian Reservation. Irrigated agriculture occurred continuously and was spatially extensive for 600 years in all of these Kaibab Paiute hydrological systems. During the period from about AD 1300 until AD 1400 the climate became dryer and colder, and most of these hydrological systems could no longer support irrigated agriculture. Springs at the top of the watershed continued to serve as places for gardening and domestic use. Most of these springs are active today. Kaibab Paiute people continued to use all the hydrological systems after AD 1400 but did so in different ways than they had earlier. The Kanab River Mainstream continued to flow and support agriculture along most of its length. The upper Virgin River in the western portion of the Kaibab District and the Paria River in the east also were used to sustain agricultural practices. We believe a similar pattern of climate-induced lifestyle changes occurred to the American Indian farming communities in the AICC.

Simms, Bright, and Ugan's (1997) study compared the degree of investment in ceramic manufacturing at archaeology sites reflecting different forms of mobility. On the one hand support was found for a hypothesis of greater investment in the quality of ceramic manufacture with increasing residential stability and occupational redundancy, implying caching of ceramics with long use-life. The mirror hypothesis was also supported that regardless of how they measured investment in pottery, the trend across all variables is for a decrease in the level of investment as mobility increased. The study supported the hypothesis that women remained in residential communities during peak irrigated agricultural times and men moved to surrounding habitats.

Although not studied by Simms, Bright, and Ugan (1997), their findings imply that as agriculture declined in importance many farming areas were abandoned and both men and women became more mobile in what we have called a Transhumant Adaptive Strategy (Stoffle and Evans 1976). We argue here that these climate-based understandings are the foundation for producing a rapid shift from making pretty pots to producing beautiful baskets. No migration or conquest theory is needed to explain this shift in technology, lifestyle, or residence pattern. The same people now just emphasized familiar adaptation components like hunting and gathering of wild plants. At this point in time, due to climate shifts TEK-based subsistence knowledge and use patterns, which they had never relinquished over the past thousand years, became a more essential part of their lives.

Aesthetically pleasing and ornate pots were made during the peak of irrigated farming, but these were replaced by elegant carrying (burden) baskets that were more suitable to the subsequent mobile transhumant lifestyle of both men and women. The people who fired the carefully made pots then made elegant baskets. After AD 1300, even though the reliance upon irrigated agriculture and horticulture was greatly reduced in most locations, some farming would always contribute to the livelihoods of the American Indian people in the AICC.

2.3.4 Life after Columbus: Living With Europeans

After Christopher Columbus arrived in the New World in 1492 nothing would ever be the same for humans on Earth, because the planet was now fully united as one earth. The sharing of ideas, plants, resources, and human experiences that eventually would be considered as positive outcomes of the one earth event, what many call the Columbian Exchange (Crosby 2003), would be over shadowed by hundreds of years of depopulation and social disruption due to diseases, warfare, domination, and displacement (Dobyns 1966; Nunn and Qian 2010). The negative impacts of the one earth would go both ways, but would especially impact American Indian civilizations; Nunn and Qian's (2010: 165) review of the literature suggest that 80-90 percent of the American Indian population was decimated within the first 100-150 years following 1492.

The people of the AICC would be a part of the invasion of the Americas long before they would see the first European explorers. They experienced what is termed "Virgin Soil Epidemics," meaning Old World pathogens spread far beyond Spanish frontier so disease impacts were never recorded (Crosby 1976; Jones 2003). Such disease episodes were so geographically extensive that they are called pandemics. These began with the Spanish arrival in Hispaniola. Upon setting foot on Hispaniola, Columbus and his crew exposed the indigenous

peoples to numerous diseases. The pigs that were brought from Spain carried swine flu, ship rats brought the bubonic plague, and his crew transported human lice, which led to typhus transmission (Cook 2002). The Spanish brought smallpox on their second voyage in 1493. Within 30 years of Spanish occupation, the American Indian population of Hispaniola went from an estimated 8-12 million people to extinction. The Spanish occupation of Hispaniola socially and physically diminished the millions of indigenous people living on that island (Cook 2002; Lovell 1992). Further explorations on the mainland of North America, such as that of Hernando de Soto in 1539, would spread diseases far and wide (Dye 1989).

Diseases primarily would move along established American Indian trade routes; initially these were water-based routes, but eventually diseases also would spread along overland trade routes (Dobyns 1966, 1983; Fenn 2001). Upham (1986) argues that smallpox spread to the Southwest during the period before systematic Spanish exploration of the region (AD 1519 - 1581). He observes that in virtually every region of the New World where the Spanish contacted large populations, epidemics of smallpox followed almost immediately, and so it must have been in the Southwest. With mortality rates ranging from 30 to 100 percent, Upham concludes that the small Indian populations commonly observed after AD 1850 were certainly not representatives of the Indian populations existing before the arrival of the Spanish. While Upham's analysis focuses on the impacts of smallpox, Dobyns (1983) documents that there were six major but different pandemics after Spanish contact in the early 1500s: (1) smallpox AD 1520–1524, (2) measles AD 1531–1533, (3) bubonic plague AD 1545–1548, (4) smallpox AD 1562, (5) bubonic plague AD 1576-1580, and (6) measles and smallpox AD 1592–1593.

The Pueblo of Zuni can serve to illustrate a number of processes discussed in this chapter, especially those of climate shifts and the arrival of European diseases. The Zuni region was probably only sparsely populated by small agricultural settlements until the 12th century AD when the population and the size of the settlements began to increase. Between AD 1275 and AD 1400 (Figure 2.9), the Zuni people inhabited a dozen large and well organized pueblos, which were often up to three stories high and contained between 180 to 1,400 rooms (Kintigh 2008). Figure 2.9 displays a map of 12 Zuni Pueblos before AD 1400. All of these pueblos, except Zuni itself, were abandoned before AD 1400. Nine large new pueblos, however, were constructed after AD 1400. These later became the imagined the "seven cities of gold, or Cibola (Vasquez de Coronado 1890), which were sought by early Spanish explorers (Kintigh 2008).

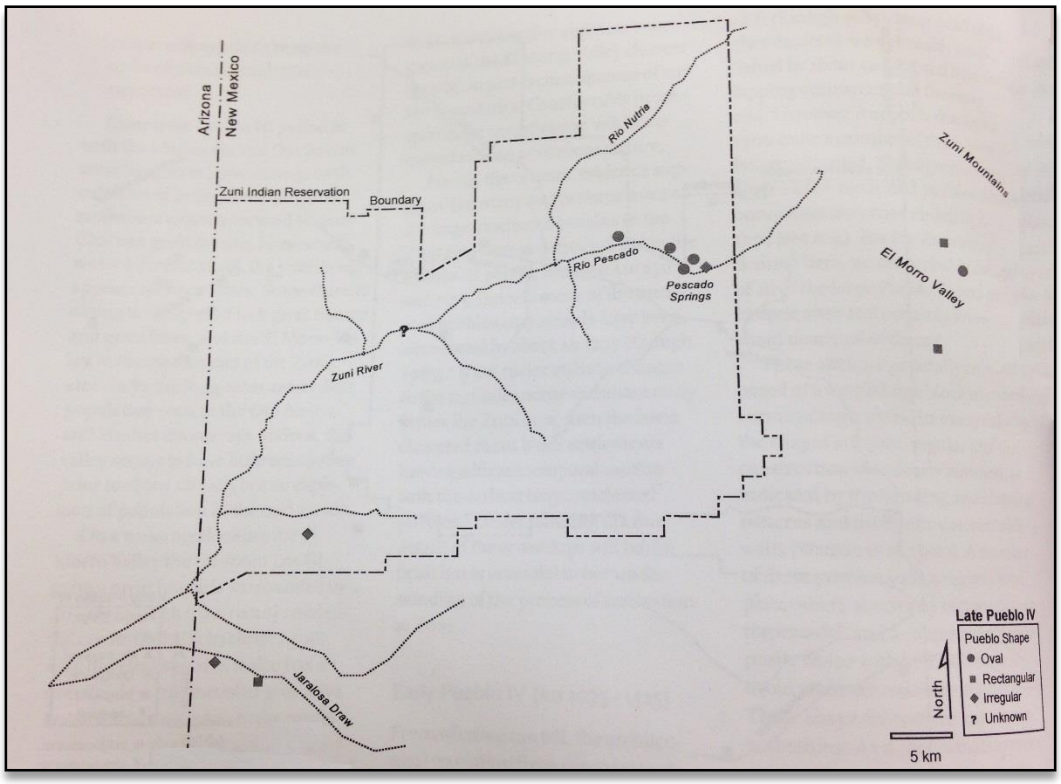


Figure 2.9 Map of 12 Zuni Pueblos (Kintigh 2007:370)

In 1539, Fray Marcos de Niza observed the pueblos of Cibola. Subsequently, between 1540 and 1542 Francisco de Coronado and his large expedition traveled from the new Spanish capital now called Mexico City to the north, up the old American Indian trading trail to Zuni, then passed further north through the Southwest, and then east onto the central Plains of Kansas. While most impacts deriving from these two initial contacts between the peoples of the Southwest and the Spanish resulted in Virgin Soil pandemics, they were largely unknowable. Subsequent analysis of later Spanish expeditions provides evidence of disease, death, and disruption occurring. Large agricultural communities disappeared throughout the Southwest between AD 1550 and AD 1600 (Pritzker 2000). By AD 1700, only the Pueblo of Zuni remained, all other Zuni pueblos were depopulated, apparently from diseases.

2.4 Modern Cultural Associations

The cultural groups who participated in this study stipulated that they are the descendants of the people who lived since time immemorial in the AICC. During the field studies, each cultural group found one or more physical signs that confirmed their own oral history regarding being culturally and biologically connected with the people of the AICC. Some ancestral signs were similar, such as the pecked spiral and footprints, but others such as the pecked burden basket were very unique (Figure 2.10).



Figure 2.10 Ancestor Signs Pecked into Rock near Colorado River and Moab Panel, Arches NP

Some representatives actually heard the songs of their ancestors, which had been held in the land waiting for their return. The following section, discusses these cultural connections as representatives of the participating tribes and pueblos expressed them.

2.4.1 The Pueblo Connection

Both Zuni and Hopi have prophecies that explain the arrival of groups of American Indian people from distant areas (Dongoske et al. 1997). These prophecies express the belief that the center of the world is located at either Zuni or Hopi. After Creation, according to these prophecies, many humans dispersed over great distances and for long periods of time; although eventually most would return to the Middle or Center Place as was the Creator's plan. People would come to Zuni and Hopi throughout time. In doing so, they announced their desire to live at the Middle or Center Place with the others. In order to be admitted, each group would identify some ceremony or practice that they could contribute to the good of the whole population. When such ceremonies or practices were performed and the expected goals were achieved, the immigrant group was accepted and incorporated as a new clan. Each clan is given their own social, linguistic, and physical space within which they can practice their own ways, but each new clan generally agrees to live by the language and culture of the whole society. In other words, the new clan members agree to live as the other Hopi or Zuni people (clans) live.

The new clans, over time, become fully integrated into the society; however, each remains aware of and at some level committed to where they came from. While over generations a few clan leaders may periodically engage in an actual pilgrimage back to the former homeland, more regular interactions with the homeland occur through prayer and ceremony. Prayers are sent to the homeland asking that the migrants be remembered and hoping that their ancestors would send resources, like peace and rain, to their now distant relatives and their new society.

According to the Pueblo representatives there are clans from the north who currently reside at Hopi and Zuni who maintain relationships with the AICC. At Arches NP, the Puebloan representatives observed rock peckings and shrines during their field visits, which these migrating clans left as signs that they once lived there while on their migration back to the Middle or Center Place. Some representatives heard the songs of their ancestors that remained at special locations in Arches NP. Some of the signs of the Zuni and Hopi ancestral homelands are

currently physically replicated at a small scale in the clan kivas, talked about in ceremonial songs, and represented in paintings and art.

Hopi and Zuni representatives identified a pecked spiral and sandal footprints at the Moab Panel as having been left by their migrating clans who returned to the respective pueblos. In addition to these peckings, the Zuni identified a spatially isolated pecking at what the park calls the Ute Panel as representing their origin up a reed into the present world. The reed also grows in the wetlands nearby. The combination of the origin emergence reed pecking and the contemporary presence of the reed made the area culturally special to the Zuni.

2.4.2 The Numic Connection

Numic is a linguistic term that includes both Southern Paiute, Ute, and Shoshone language speakers and it reflects broader common culture, biology, and historical connections (Fowler and Fowler 1971). While today the Ute people and the Southern Paiute people have some fundamental cultural differences, both agree that they have a common heritage. Many attribute the divergence between the two Numic peoples to have derived from the spread of the horse after the Pueblo Revolt of 1680. Once the Ute people acquired the horse it revolutionized their livelihood causing them to reduce their commitment to a gathering and farming based economy. They instead became extremely mobile and focused heavily on trade. In other words, they adopted North American horse-based culture, similar to the Cheyenne, Comanche, Pawnee, and Dakota peoples. During this period, Southern Paiute people continued with a more traditional livelihood based on horticulture, farming, gathering, and hunting.

Both Ute and Southern Paiute tribal representatives observed signs of their ancestors' presence in Arches NP. Some representatives heard the songs of their ancestors while in Arches. The Ute and Paiute origin stories and claims to have been created in their current homelands are the same. The following is a portion of the origin story from the Southern Ute Tribe's official website (Wroth 2000):

> The Utes do not have a migration story. The Utes have always lived here in the mountains. This is the Ute Creation Story as told by Alden Naranjo, a revered Southern Ute Elder and a member of the Mouache and Caputa bands.
>
> In the ancient times only Sinawav, the Creator and Coyote lived on the earth. They had come out of the light so long ago, that no one remembered when or how. The Earth was young and the time had come to increase the people. Sinawav gave a bag of sticks to Coyote and said "Carry these over the far hills to the valleys beyond." He gave specific directions Coyote was to follow and told him what to do when he got there. "You must remember, this is a great responsibility. The bag must not be opened under any circumstances until you reach the sacred grounds."
>
> "What is this I carry?" asked Coyote
>
> "I will say no more. Now be about your task" Sinawav answered.

> Coyote was young and foolish, consumed with curiosity. "What is this I carry?" he kept asking himself.
>
> As soon as he was over the first hill and out of sight, he stopped. He was just going to peek in the bag. "That could hurt nothing." He thought. Just as he untied the bag and opened a small slit they rushed for the opening. They were people. These people yelled and hollered in strange languages of all kinds. He tried to catch them and get them back into the bag. But they ran away in all different directions. From how full the bag was after he had gotten it closed he could tell there was only a fraction of what he had started out with. He went to the sacred valley and dumped them out there. There was a small number of these people. But those few ones were the Utes, the real Utes from around here.

The Paiute origin account is almost identical to that of their Ute cousins. Normally Paiutes talk about Ocean Women sending the burden basket of all humans to be released in the sacred lands, an account which was first recorded by Powell in 1875 (Fowler and Fowler 1971). Paiutes do not have a migration account because they too were created in their homelands.

Especially iconic to the Ute representative were the peckings of horses and mounted riders at what the park calls the Ute Panel, a term the Ute representative agreed was very accurate (Figure 2.11). At the Moab Panel, the Ute representatives interpreted some of the pecking as being about the Ute people when they were the traditional farmers of the Arches area. The Moab Panel paintings and pecking stimulated his discussion of the Ute account of all Creation and the connection of the Utes as the Star People who came from a hole in the sky.[2]

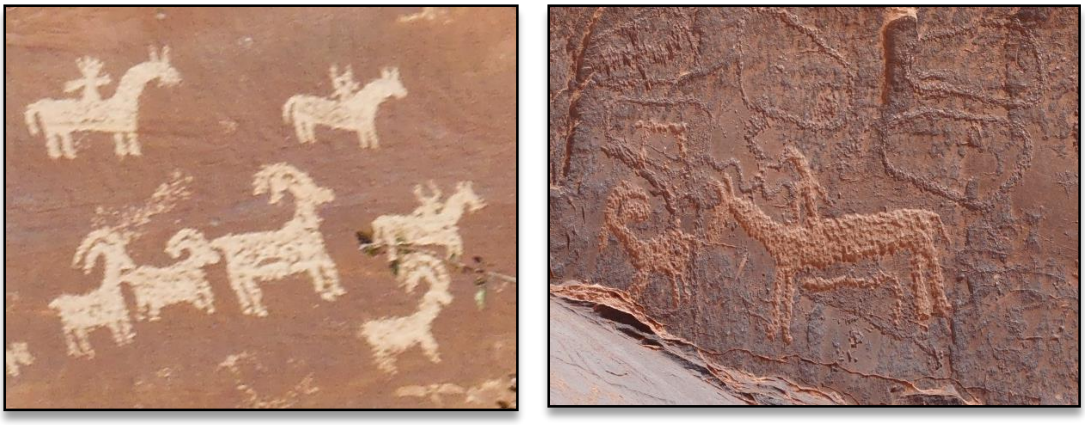


Figure 2.11 Rock Peckings illustrating mounted riders, L) Ute Panel, and R) Moab Panel, near Arches NP

When Southern Paiute representatives viewed a rather long and complex series of pecking along west side of the Colorado River just downriver from the junction with Mill Creek, among the many peckings one stood out to them. It is a pecking of a burden basket located high on a wall. The burden basket pecking apparently is quite old given it has acquired its own patina

[2] That story is not presented here because of its length but it is available as a TEDxParkCity talk presented by Larry Cesspooch, a storyteller and filmmaker from the Unitah & Ouray Ute Reservation (https://www.youtube.com/watch?v=2wown_X_YgY).

since it was made. Southern Paiute representatives interpreted this pecking as representing the ancient residence of the Southern Paiute people. They also stipulated that it represents their origin story in which all human kind were given by Ocean Woman to the world in a burden basket. This burden basket then was carried from the ocean far inland to the recognized Southern Paiute homelands (Figure 2.12).

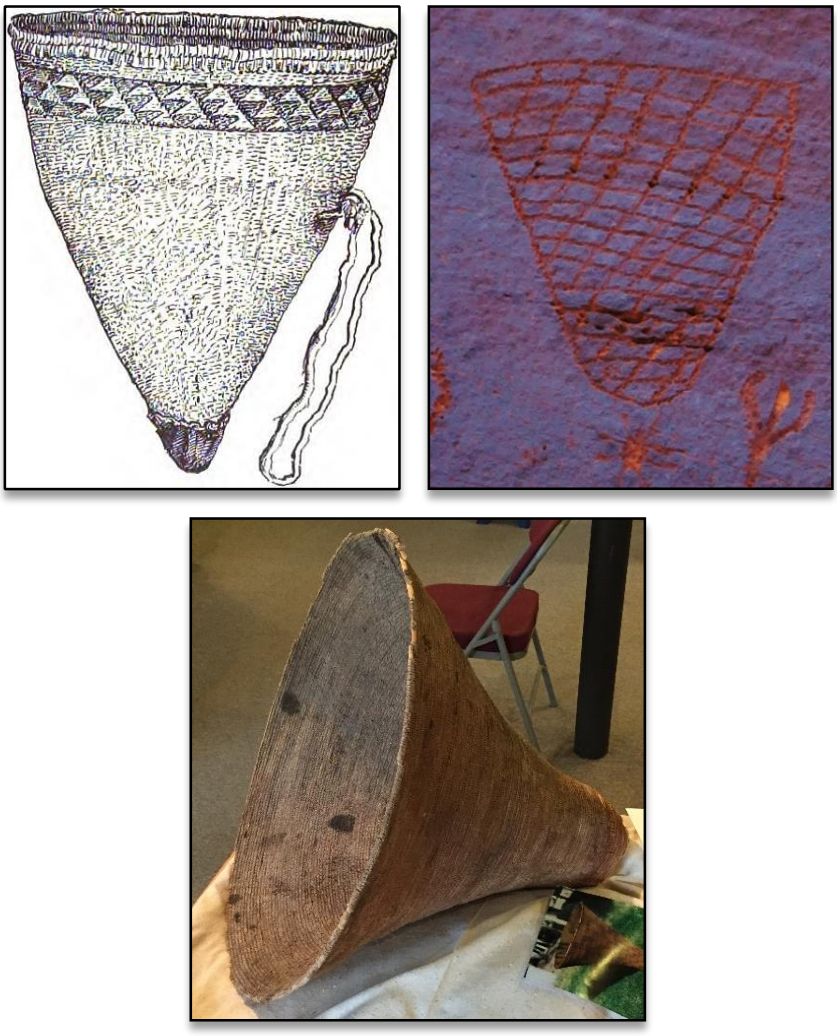


Figure 2.12 Burden Baskets from left to right L) Illustration of Southern Paiute Burden Basket Collected by J.W. Powell, C) Basket Pecking Found Near Arches NP, R) Burden Basket Recovered near Moab, Utah, Courtesy of the Moab Museum

Next to the burden basket is a seven-foot long medicine man's knotted string, also known as *tapitcapi* in the Southern Paiute language (Figure 2.13). Citing the Father Garces diary from 1776, Trafzer (2015: 38) notes that traditionally when Chemehuevi (Paiute) groups planned important events, runners were sent from village to village over large geographical areas carrying the tapitcapi. The number of knots indicated the number of nights before a ceremony would begin, and the runner would inform people where the ceremony would occur. Knotted strings are recognized as existing all over the Americas. The successful Pueblo Revolt of 1680 was coordinated using knotted strings (Folsom 1973). In the Andes of South America, they are called *quipus*.

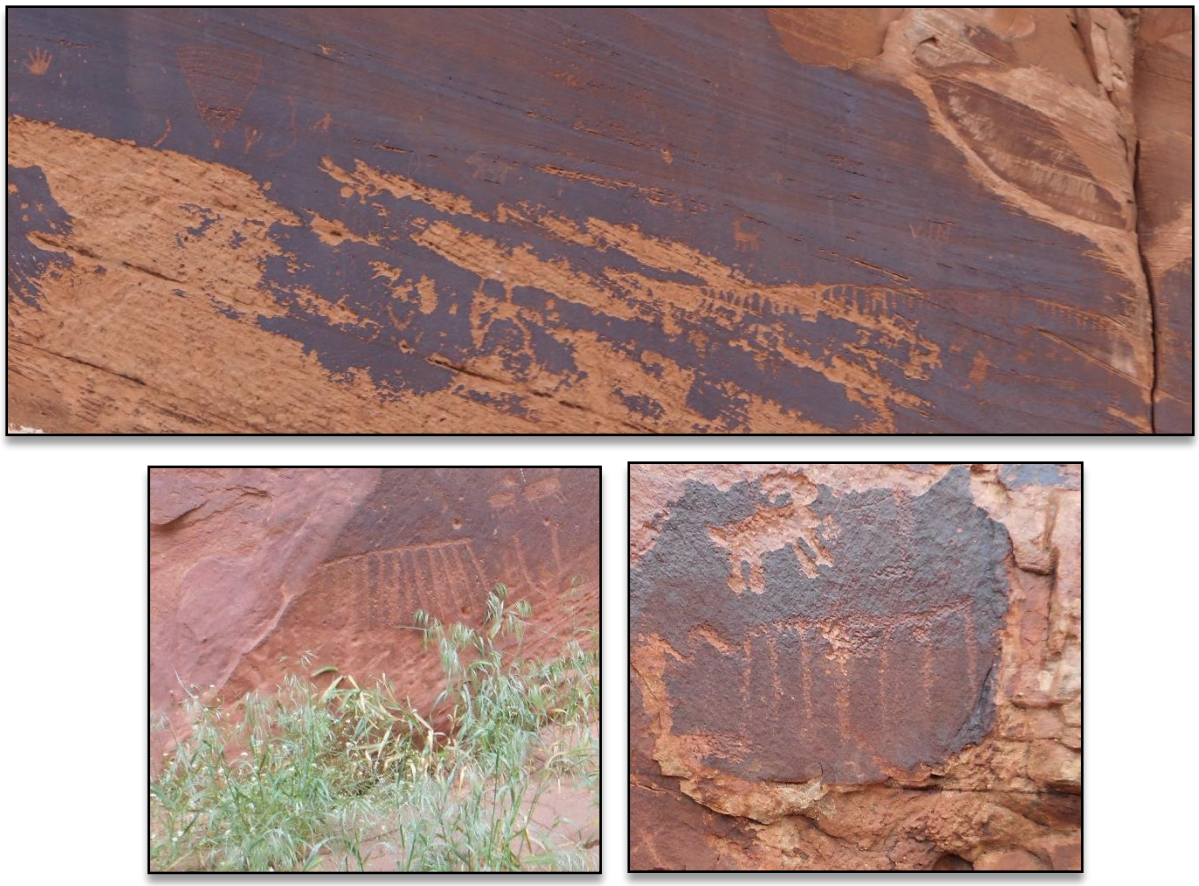


Figure 2.13 Knotted String Petroglyph Images along Banks of the Colorado River, Near Arches NP

Knotted strings are associated with the activities of medicine people, especially those involved with coordinating activities at ceremonies and along pilgrimage trails. Tapiticapi rock pecking and paintings are essential for marking ceremonial and pilgrimage trails (Van Vlack 2012). Given their location next to each other and on the banks of the Colorado River, the burden basket and knotted string peckings were interpreted by American Indian representatives as being involved in on-going large-scale ceremonies.

2.5 Historic Period

While the pueblo communities of Hopi and Zuni received immigrating groups from the AICC, it can be argued that the Numic speaking people continued to reside in the area until modern times. When the first recorded Euro-Americans visited the area in 1765, the Spanish explorer Juan Rivera, who was being guided by a Paiute person from the Las Animas River in Colorado, observed a series of Mouache Ute farming villages near Rone Bailey Mesa and then the larger Tabeguache Ute villages on Indian Creek in Canyonlands National Park (Jacobs 1992: 214-215). When Rivera continued his journey to the AICC, he crossed the river to meet with Sabuagana Utes who both lived there and upstream in Professor Valley in lower Castle Valley (Jacobs 1992:217-218).

For the next ninety years there are few Euro-American records of American Indian lifeways in the AICC, although some fort and trapping records are available for the Uinta Basin area (Firmage 1996). After the 1780 Spanish colonial leaders responded to strong Ute protests about outsiders using their trails and entering their lands for trade, Spain set and enforced official proscriptions against usurping Ute trading relationships and passing along trails into their country. These state regulations, however, would be revoked after the Mexican colonial revolt (occurring between 1811 and 1821). The New Mexican administration now formally approved and physically sponsored explorations to find a trail (actually linking preexisting American Indian trails) from Santa Fe, New Mexico, to Los Angeles, California. Eventually a link was established and so from 1829 to 1849 state permitted caravans moved goods and animals each way about every six months along what would become known as the Old Spanish Trail. It is important to note that the name is a misnomer since this trade route and associated activities were sponsored by the Mexican state and the trails used for these activities were all well-established American Indian travel routes. The Old Spanish Trail caravans generally crossed the Colorado River at what now would be called the Ute Crossing (Stoffle et al. 2008b). As official and self-sufficient trading caravans, their participants paid little attention in the form of diaries to what they observed and the human and environmental impacts that occurred as a consequence of their activities. Generally caravan participants pushed away unneeded and unwelcome American Indian groups that they encountered along the trail and at camping locations (Stoffle et al. 2008b). Violence, human trafficking, and disease impacts necessarily occurred (Stoffle et al. 2011).

The next best documentation of American Indian lifeways in the AICC occurred when Church of Latter Day Saints (LDS) representatives scouted the Moab and Spanish Valleys in 1855 seeking a farming and trading location for a new mission that would also control a major travel entrance into Salt Lake City (Firmage 1996). This Elk Mountain Mission would be established in 1856 and be both a resource and source of stress for AICC American Indians. Elk Mountain was a name used to refer to the American Indian people living near the La Sal Mountains. Eventually, local American Indian people would attack the mission confiscating crops, taking cattle, and killing some of the mission residents. The mission would be totally abandoned and the AICC would revert to the complete control of the American Indian people for at least 25 years.

For a generation, roughly from the demise of the Elk Mountain Mission in 1856 and the beginning of formal plan settlements by the LDS church in the early 1880s, the AICC was functionally a region of refugee (a term discussed in detail in Chapter Six). Firmage (1996: 100) concludes that Grand County lands were frequented or used occasionally by the Yamparika, Pariaanuche, Weeminuche, and Uncompahgre (Tabegauche) Utes as well as Paiutes and Navajos. The presence of these Indian groups derived in part from political pressures in Colorado that were forcing Ute people onto restricted portions of their traditional lands and the growth of Mormon communities along the front range of the Wasatch Mountains. Firmage (1996:101) concluded that Indians of various tribes, including some of the more rebellious and angry who either escaped the reservations or resisted confinement, found some respite from white domination in the isolated and topographically rugged lands of Grand County. This is a classic definition of a region of refugee. During this period, American Indian people actively and successfully resisted outside intrusion into their traditional lands.

The process of European successful intrusion and increasingly unsuccessful Indian resistance must be understood in terms of a number of factors including diseases and the expansion of the U.S. frontier partly due to gold in Californian in 1849. Indian people never abandoned the AICC lands, or for that matter any traditional lands in Utah and Colorado. Treaties of sovereign extension were achieved with military threats and actions, day-to-day territory intrusions were increasingly frequent due to the number of Euro-Americans pushing west for corporate and personal gains. Eventually, the U.S interethnic frontier shifted from resource competition to social domination (Stoffle and Evans 1976). Critical for understanding this process is a listing of diseases beginning with the massive smallpox pandemic of 1780. Before this time, the Utes for hundreds of years had successfully rebuked the expansion pressures of the Spanish empire in northern New Spain. Within fifty years (1829), however, the Utes were so weakened they were unable to resist a militarily weak Mexican expansion to California.

By 1880, American Indian power, in terms of people and resources, was so greatly reduced that wholesale territory loss would simply occur when outsiders wanted their land. The process would continue through the early 20th century. The only organized resistance to this would be instigated by the Paiute William Posey who organized a final armed resistance movement in 1915, which is often called the Last Indian War (Lacy and Baker 2007) (see Appendix C for more information on the Last Indian War). Most American Indian people, however, would either officially join reservation-based tribes, live as private citizens as cowboys on ranches, be workers at the edges of mine camps, or provide labor near small towns.

2.6 Combining Cultural Associations

What is critical at this point in the analysis is the question of how so many different perceptions of cultural association can make sense within a single analytical frame. First, it has been argued here that Indian people have lived in the AICC for more than 10,000 years. During this time, there is no evidence that the area was ever abandoned; in fact, when people left their residential areas elsewhere in the region it most likely occurred because of cold weather and drought. Neither of these climate variable could fully impact the livelihoods of the AICC, which has the La Sal Mountains to the east and the Colorado River at its center. Both of these features contribute to the hydrology and ecology of the Moab Valley.

Second, if the people of the AICC continued to live here until the Historic Period, then who migrated to Hopi and Zuni? This question seems on face value to be rather easy to address. The human carrying capacity of the AICC at peak irrigated farming production (AD 1200–1300) probably supported thousands of people. Both Zuni and Hopi describe the arrival of small groups who subsequently became clans. So small groups of people could have left the larger population of AICC without disrupting either the home population or the migrating people. This time frame for the migration is attractive because at that time there were prime irrigation climatic conditions for the people of the AICC, Hopi, and Zuni; so losing people was not a problem and the absorption of new groups at Hopi and Zuni should have been facilitated by agricultural surplus. After the onset of the Little Ice Age, however, not only was irrigated agriculture less viable in the AICC, but the carrying capacity at both Hopi and Zuni would also have similarly declined making admission of a new clans less probable.

Third, the Numic people argue that they have always lived in these homelands. This stipulation can only be accurate if they were in fact the Irrigated Farmers who made the climatically stimulated transition to horticulture, farming, gathering, and hunting by AD 1400. A leader of the professional Utah archaeology community first made this argument in 1990 (Simms 1990); this argument still seems to be the most logical explanation of what happened with the on-set of the Little Ice Age. Climate change shifted people out of one lifestyle where they made great pots into another where they made great baskets.

The purpose of this chapter has been to better explain the expressed cultural associations of participating ethnic groups using archaeology, climatology, and ethnography. The essay is not an attempt to test any of these cultural origin stipulations; instead the essay makes sense of (at least from a western science perspective) the various ways American Indian representatives from the participating tribes and pueblos say they are connected with Arches NP and the surrounding AICC area.

CHAPTER THREE
METHODOLOGY

This chapter outlines the methodology used by the University of Arizona (UofA) researchers in the design and implementation of the Arches National Park (Arches NP) Ethnographic Overview and Assessment (EOA). It is the goal of an EOA to review and summarize existing ethnographic literature and gather new data as a way to provide an evaluation of a park's resources. The solicited study is a synthesis of both existing information and new information, acquired through interviews, concerning ethnographic resources and park associated ethnic groups (Figure 3.1). When completed, this first overview serves as the baseline for determining the need for additional ethnographic work and future studies.



Figure 3.1 UofA Researcher and ZCRAT Representative Discussing Ethnobotany at Salt Valley Overlook EOA Study Area

Key areas of focus for the EOA study were broadly defined as cultural and natural resources within Arches NP, with specific categories including archaeological, geological, ethnobotanical, and ceremonial resource types at each EOA study area. Many topics, such as viewscape, land use past and present, and cultural significance of the area and nearby mountains, were discussed at the five chosen EOA study areas. The various kinds of data, generated by visiting different park features, contributed to a comprehensive ethnographic analysis. The data and documentation resulting from this study allows the National Park Service (NPS) to begin to

understand the connections and future needs of American Indian groups that are culturally associated with Arches NP.

3.1 Tiering

The federal government recommends that, wherever possible, new research should not duplicate previous studies but rather build upon earlier work and reference it. This is a process called *tiering*, which involves building one study upon another to reach a conclusion regarding what resources are present in the potentially affected environment and what impacts to those resources may result from the proposed project. This report meets the federal tiering requirement by 1) using background essays produced elsewhere, and 2) contextualizing findings with reference to previous studies in the region and with the involved tribes and pueblos.

The UofA research team has worked with over 100 tribes on a range of cultural and environmental issues since the early 1970s. This includes the six participating tribes and pueblos (four ethnic groups) for the Arches NP EOA[1]. During this time, these tribes and pueblos have participated in numerous federally funded studies, including a number of NPS funded projects. Table 3.1 highlights sixteen projects and notes which of these included the invited Arches NP EOA study tribes and pueblos.

Project Title	Year	Ethnic Group				
		Hopi	Navajo	Paiute	Ute	Zuni
Devers-Palo Verde Power Line SIA (Bean and Vane 1978)	1978			X		
Kaipowerwits Development & Transportation Study (ERT 1980)	1980			X		
Intermountain Power Project (Stoffle and Dobyns 1982)	1982			X	X	
Pinyon Canyon Ethnohistory and Ethnographic Study (Stoffle et al. 1983)	1983				X	
Petroglyph NM Ethnographic Study (Evans, Stoffle, and Pinel 1993)	1993	X				X
Utah Test and Training Range (Halmo, Stoffle, and Evans 1993)	1993			X	X	
Fajada Butte Ethnographic Study (Stoffle et al. 1994)	1994	X	X			X
Grand Canyon Ethnographic Studies (Stoffle et al. 1994; Stoffle et al. 1995A; Stoffle et al. 1995B)	1994			X		
Casa Grande Cultural Affiliation Study (Zedeño and Stoffle 1995)	1995	X				X

[1] Seven tribes from five ethnic groups were invited to participate, however due to unforeseen circumstances the Navajo Nation did not participate. This does not mean they do not have a lack of interest in cultural issues at Arches NP.

Southern Paiute Cultural Resources Study At Zion NP (Stoffle et al. 1999)	1999			**X**		
Hoover Damn Bypass Project (Stoffle et al. 2000)	2000	**X**	**X**	**X**		**X**
The Three Parks Project (Zedeño, Schrag-James, and Basaldu 2001)	2001	**X**				**X**
Four Monuments Ethnographic Use Study (Toupal at al. 2004)	2004	**X**	**X**	**X**		**X**
Arizona Strip Cultural Landscape Study (Stoffle et al. 2005)	2005			**X**		
Old Spanish Trail Native American Ethnographic Study (Stoffle et al. 2008)	2008			**X**	**X**	
Tonto NM Ethnographic Study (Stoffle et al. 2008)	2008	**X**				**X**
Total Number of Projects Per Tribe		**7**	**3**	**10**	**4**	**7**

Table 3.1 Selected Projects and Tribal Involvement

Interactions between UofA researchers and the Southern Paiute tribes have occurred on ten different projects from 1978 to 2008. The most recent interaction between the Southern Paiute tribes and UofA researchers took place in September 2015, with their participation in the Arches NP EOA study.

Both the Hopi Tribe and Pueblo of Zuni have a long history of involvement in UofA research activities, with study participation occurring on seven different projects spanning from 1993 to 2008. Recent interactions between these two pueblos and UofA researchers took place in 2014-2015. Representatives from the Pueblo of Zuni joined UofA researchers at Arches NP in November 2014, while representatives from the Hopi Tribe joined UofA researchers for the Arches NP EOA study in March of 2015.

Relationships with the Navajo and Ute tribes were formed on previous projects as well, although participation has occurred less frequently than studies involving the Paiute and Puebloan cultures. UofA researchers have had the pleasure of collaborating with Navajo representatives on three different projects occurring between 1994 and 2004. Ute representatives participated in four studies with UofA researchers between 1982 and 2008, and most recently joined UofA representatives on the Arches NP EOA study in March of 2015.

Prior to the current project, UofA researchers had the opportunity to establish relationships and gather baseline ethnographic data from all of the culturally associated tribes and pueblos that were invited to participate in the Arches NP EOA. Making use of the already known ethnographic data and existing relationships, the UofA research team was able to build upon previous work.

3.2 Study Methodology

The current study was funded on August 1, 2014, with a kick-off meeting taking place between Arches NP and the UofA researchers on August 21, 2014, via conference call. During the kick-off meeting specific study objectives were reviewed. Plans for the NPS to invite six of the twenty-six Arches NP culturally associated tribes and pueblos to participate in the study were discussed. The tribes and pueblos that were initially selected included: 1) the Hopi Tribe, 2) the Pueblo of Zuni, 3) Navajo Nation, 4) the Paiute Indian Tribe of Utah, 5) the Southern Ute Indian Tribe, and 6) the Uintah and Ouray Tribe. Unfortunately, Navajo Nation did not respond to the NPS or UofA invitations to participate. Later the Kaibab Band of Paiute Indians was added to the list of invited tribes. Following the kick-off meeting, NPS staff shared copies of requested reports and provided a list of potential sites within the park that tribal and pueblo representatives and the UofA research team might want to visit during the fieldwork portion of the study. These EOA study areas are described in Section 3.3 of this chapter.

After the kick-off meeting, the UofA research team began reading about the cultural history and archaeology of Arches NP and the surrounding landscape. Data collection methods that were important in writing the report included a review of existing geology, ecology, and archaeology literature about Arches NP, and a review of previously published ethnographic literature focused on each of the six participating tribes and pueblos. Historic diaries, journals, and accounts from settlers and explorers served as valuable resources as well. The UofA research team also read and learned about other case studies where American Indian people have been engaged in the interpretation and protection of sites throughout the study region.

During the Fall of 2014, UofA researchers interacted with NPS officials, tribal and Pueblo officials to coordinate the fieldwork portion of this study. Section 3.5 outlines the chronology of interactions occurring between the UofA researchers, participating tribes and pueblos, and government agencies.

In November 2014, the first field session at Arches NP was completed. Zuni Cultural Resource Advisory Team (ZCRAT) members drove to Moab, Utah, to meet with the UofA research team and visited the five selected EOA study sites within the park over the next three days. Representatives from the Hopi Tribe joined the UofA research team for Arches NP field visits from March 19-23, 2015, and the Southern Ute Tribe sent representatives from March 23-27, 2015. A third series of site visits at Arches NP took place with representatives from the Paiute Indian Tribe of Utah from May 14-18, 2015. Representatives from Ute Tribe- Uintah and Ouray and Kaibab Band of Paiute Indians joined the UofA researchers at Arches NP in September 14-18, 2015.

At four of the five EOA study areas within the park, tribal and pueblo representatives were offered the opportunity for an individual interview about the site, its uses, natural resources, cultural significance, and future management recommendations (Figure 3.2). A copy of the EOA study area recording form can be found in Appendix A. At the fifth EOA study area, referred to as Landscape Overlook A and B, a landscape interview took place, either individually or as a group. A copy of the landscape data recording form can be found in Appendix B. More

information on the interview process and the number of interviews conducted is presented within Section 3.4, which provides a summary of data collection events.



Figure 3.2 Southern Paiute Representatives in Group Discussion about Sites in Arches NP

Following each field visit, the participating tribal and pueblo representatives were sent home with copies of the UofA researcher's photographs of the site visits at Arches NP. Also, each participating tribe and pueblo was given several copies of *Arches: Window in Time*, the Arches NP visitor center film. It was the goal of the UofA researchers to send these materials home with the tribal and pueblo representatives so that they could share their experience with the tribal and pueblo government, cultural department, and other representatives who were unable to join us for site visits. By distributing these materials, a visual and historical orientation to the park and its resources was provided to more of the tribal and pueblo members than just the few men and women able to join the UofA researchers in the park.

The UofA researchers returned to Tucson, Arizona, and drafted each ethnic group specific site-by-site analysis chapter. The research process was collaborative and tribal and pueblo representatives reviewed the text prepared for their chapters following their field visits. Each tribal and pueblo representative that participated in the study and the head of their cultural resources division received a copy of their ethnic group specific chapter.

Site visits to Arches NP and the report write-up process continued in a cyclical manner, beginning with the first field session in November of 2014 and continuing through the autumn of 2015. Following both tribal and NPS review, the final Arches NP EOA report will be printed and distributed.

3.3 Site Selection

Five EOA study areas were selected for field visits (Figure 3.3). Each EOA study area was chosen based on the variety of features available there, including plants, animals, archaeology, geology, and viewscapes. Accessibility was also a key factor in place selection. The five EOA study areas include: 1) The Windows Section, 2) Courthouse Wash, 3) Wolfe Ranch and Ute Panel, 4) Salt Valley Overlook, and 5) Landscape Overlook A and B. The names of these places do not reflect Native American use or cultural affiliation. The names were assigned either by NPS officials, UofA researchers, or by local non-Indian residents.



Figure 3.3 Southern Ute Representative and UofA Researcher Discussing Plant Resources at Wolfe Ranch

The selection of the Windows Section EOA study area was based on the views of arches, canyons, the La Sal Mountains, and other geologic features in the area. Along the Windows Section trail, North Window, South Window, and Turret Arch can be accessed. An additional arch, Double Arch, is visible to the north. From each arch, a unique viewscape of other geologic features is available. Parade of Elephants and Garden of Eden are north of the Windows Section, and Balanced Rock is further to the northwest.

A second EOA study area was selected at the convergence of the Colorado River and Courthouse Wash, one of the predominant hydrological features in Arches NP. The wash flows into the park from the west and converges with the Colorado River just outside of the park boundary to the south. The Courthouse Wash EOA study area contains both natural and archaeological resources, including a large rock pecking and painting panel called the Moab

Panel[2]. The panel faces the Colorado River. The EOA study area also encompasses a small valley containing a dense patch of purple sage (*Poliomintha incana*) just outside of the visitor center. This patch of purple sage was determined to be eligible to be nominated as a Traditional Cultural Property (TCP). Along with purple sage, other important use plants grow along Courthouse Wash and throughout the EOA study area.

The Wolfe Ranch and the Ute Panel EOA study area is located along Delicate Arch Road, to the east of Salt Valley and north of the Windows Section. Salt Valley Wash, Salt Wash, Winter Camp Wash, and Cache Valley Wash converge south of the EOA study area and flow south to the Colorado River, contributing to the cultural significance of the area. The Ute Panel is a key feature of this EOA study area. The panel has two primary components: a series of zoomorphic and anthropomorphic figures on the east side, and a single pecking on the west. The study area has numerous medicinal, utilitarian, and ceremonial use plants. A viewscape of the Windows Section to the south also enhances the cultural meaning of the EOA study area.

Salt Valley Overlook EOA study area is located on a small plateau just south of the Fiery Furnace rock formations. From the overlook, one can see the Klondike Bluffs to the northwest and Wolfe Ranch to the east. Salt Valley is visible below the plateau and the La Sal Mountains are visible along the horizon. The overlook location was selected based on the archaeological resources identified by Karen Kramer (1991). Salt Valley Overlook was the largest identified archaeological site documented during the 1991 study within Arches NP. Within the area, tribal representatives observed a large lithic scatter, turquoise, multiple projectile points, and other culturally significant materials. According to participating tribal representatives, the landscape surrounding the EOA study area provides insight as to why this place would have been used by American Indians.

Cultural landscape discussions took place at two locations within Arches NP. These are referred to as Landscape Overlook A and B. Landscape Overlook A is located near the center of Arches NP at a relatively high point that has 360 degree views of the surrounding features, including the La Sal and Abajo Mountains. Landscape Overlook B is located north of Landscape Overlook A, at a higher elevation, and has similar views but also offers an unobstructed view of the Henry Mountains to the west. Views encompassing a large area of Arches NP are important for this study because they provide an opportunity to reflect on park as a whole and the experience of visiting the other EOA study areas. The majority of the participating tribes visited Landscape Overlook B because it offers a spectacular view of both the La Sal and the Henry Mountains to the Southeast.

Other areas of the park, not included in our initial choice of EOA study areas, were of interest to participating tribal representatives as well. As a co-produced EOA study, it is important to illustrate the additional resources that were noted and discussed as culturally significant. To the south of the Wolfe Ranch and Ute Panel EOA study area, on the left side of Delicate Arch Road, tribal members identified a selenite covered hill. Selenite, a crystal form of gypsum, is frequently used in ceremony, ritual arts, and serves utilitarian functions for several participating tribes. Also near the Wolfe Ranch and the Ute Panel EOA study area, large deposits

[2] The Moab Panel is sometimes referred to as the Courthouse Wash Panel. Both names are terms of reference used by Arches NP.

of brilliant blue Mancos shale were observed nearby and visited by tribal representatives (Figure 3.4). Mancos shale is used as body paint by several tribes. Other tribal representatives explained its use as a ceremonial offering, while others noted its utilitarian purpose in painting and firing pottery.



Figure 3.4 Tribal Representatives and UofA Researcher Viewing Mancos Shale Deposit

Together, all of the EOA study areas offered an opportunity for tribal representatives to view many of the cultural and natural resources present at Arches NP. The selection of five areas that were representative of the park as a whole proved to be a challenge. However, tribal representatives informed UofA researchers of other areas of importance found near the selected EOA study areas or located at other points in Arches NP, serving to further create a co-produced study based on collaboration. The site-by-site analysis of each EOA study area is divided by ethnic group and can be found in the following chapters.

3.4 Summary of Data Collection Events

Opportunities for discussing and sharing cultural data occurred at all five of the EOA study areas found within Arches NP. Each opportunity for sharing information, discussing EOA study areas, and conducting interviews is referred to as a data collection event. This section outlines the various types of data collection events, and provides a summary table of the number of each type of event that occurred for each ethnic group.

Formal data collection events involve semi-structured lists of proposed topics. Formal data collection events were digitally recorded and physically written down on paper forms. The two types of recording forms are: 1) American Indian Ethnographic Resources form and EOA study area recording form and 2) the Cultural Landscape form. American Indian Ethnographic Resources form is a place-specific inventory of traditional uses for each area, its role in the history of the people, and other cultural resources associated with the place. Other cultural resources can include water, plants, animals, minerals, landforms, and archaeological materials. The Cultural Landscape form records tribal perceptions about place and resource specific information.

Open-ended data collection events provided a third opportunity to record important cultural information. These are defined as informal participant guided conversations held between the researcher and tribal and pueblo member that contain information specific to the project (Figure 3.5).



Figure 3.5 Hopi Representatives and UofA Researcher Interviewing at Landscape Overlook B

Table 3.2 displays the three types of data collection events. The first category involves the structure and focus of the data sharing events: either 1) formal discussions about the EOA study areas and cultural landscapes, or 2) informal open-ended discussions. In the left column of Table 3.2, the locations where data collection events took place are listed. A total of 168 data collection events occurred and were recorded either with digital tape recorders, via hand written notes, or both (Table 3.2).

Tribe	Location of Data Collection Events	Types of Data Collection Events		Total
		Formal Data Collection Events	Open-Ended Data Collection Events	
Pueblo of Zuni	Courthouse Wash	6	12	18
	Wolfe Ranch/Ute Panel	6	12	18
	Salt Valley Overlook	6	6	12
	Windows Section	6	1	7
	Landscape Overlook A	0	6	6
	Total	24	37	61
The Southern Ute Indian Tribe & The Ute Indian Tribe	Courthouse Wash	3	5	8
	Wolfe Ranch/Ute Panel	3	3	6
	Salt Valley Overlook	3	1	4
	Windows Section	3	3	6
	Landscape Overlook B	2	1	3
	Total	14	13	27
Paiute Indian Tribe of Utah & Kaibab Band of Paiute Indians	Courthouse Wash	5	14	19
	Wolfe Ranch/Ute Panel	6	2	8
	Salt Valley Overlook	7	0	7
	Windows Section	7	0	7
	Landscape Overlook B	6	1	7
	Total	31	17	48
The Hopi Tribe	Courthouse Wash	4	7	10
	Wolfe Ranch/Ute Panel	4	3	8
	Salt Valley Overlook	4	1	5
	Windows Section	4	0	4
	Landscape Overlook B	4	1	5
	Total	20	12	32
	Grand Total	**89**	**79**	**168**

Table 3.2 Summary of Data Collection Events for all Participating Tribes

Within Table 3.2, there is a list of the total number of collected interviews for each ethnic group. The Pueblo of Zuni had a total of 24 formal data collection events and 37 open-ended data collection events, amounting to 61 data collection events recorded during their site visits at Arches NP. Ute representatives contributed 14 formal data collection events and 13 open-ended data collection events to the EOA study, amounting to a total of 27 data collection events. The Paiute Indian Tribe of Utah and the Kaibab Band of Paiute Indians joined the UofA researchers at Arches NP, providing a total of 31 formal data collection events and 17 open-ended data

collection events, amounting to a grand total of 48 data collection events. During the Hopi portion of the site visits at Arches NP the Hopi Tribe participated in a total of 20 formal data collection events, and 12 open-ended data collection events, amounting to 32 data collection events.

3.5 Chronology of Interactions

The following section outlines the interactions between the UofA researchers, American Indian tribes and pueblos participating in the EOA study, Arches NP staff, and NPS personnel. Each event is preceded by the date when it occurred and is followed by a brief description of the activity.

August 20, 2014
Project kick-off meeting held via conference call. Participating in the conference call meeting were Karen Wurzburger (Regional Cultural Anthropology Project Manager), Chris Goetze (Southeast Utah Group Cultural Resource Program Manager), and the UofA research team.

August 22, 2014
Project notification letter sent by the NPS inviting six culturally associated tribes and pueblos to participate in the EOA study at Arches NP.

October 1, 2014
The UofA research team sent letters of introduction to the six culturally associated tribes and pueblos that were invited to participate in the EOA study at Arches NP.

November 16-20, 2014
Representatives from the Pueblo of Zuni joined UofA researchers at Arches NP for a three-day field session to visit sites around the park.

January 26, 2015
A draft of the Zuni chapter was distributed to pueblo representatives and the head of the cultural department for their review.

March 15-19, 2015
Hopi tribal representatives joined UofA researchers at Arches NP for a three-day field session to visit sites around the park.

March 19-23, 2015
A member from the Southern Ute Indian Tribe joined UofA researchers at Arches NP for a three-day field session to visit sites around the park.

April 21, 2015
The Hopi draft chapter was distributed to participating tribal representatives and head of cultural department for their review.

May 12, 2015
The Ute draft chapter was distributed to the participating tribal representative and the head of cultural department for their review.

May 14-19, 2015
Representatives from the Paiute Indian Tribe of Utah joined UofA researchers at Arches NP for a three-day field session to visit sites around the park.

July 1, 2015
The Southern Paiute draft chapter was distributed to participating tribal representatives and head of cultural department for their review.

September 14-18, 2015
Representatives from the Kaibab Band of Paiute Indians and Ute Indian Tribe - Uintah and Ouray joined UofA researchers at Arches NP for a three-day field session to visit sites around the park.

November 23, 2015
The Southern Paiute and Ute draft chapters were distributed to participating tribal representatives and the heads of cultural departments for their review.

January 2016
A full copy of the draft report was distributed to NPS Officials for review.

June 2016
The final Arches NP Ethnographic Overview and Assessment report was distributed to NPS officials, participating tribal governments, and participating tribal representatives.

3.6 BARA Research Qualifications

The Bureau of Applied Research in Anthropology (BARA) was founded in 1952 as the Bureau of Ethnic Research, charged with the responsibility to monitor the socio-economic welfare of American Indian communities in Arizona. In 1982, BARA changed its name and expanded its mission. Currently, the BARA faculty is comprised of 16 state-funded and project-funded academic professionals organized around six different programs. For each program, a set of research activities exists that is consistent with the BARA mission as well as corresponding courses and student participation that contribute to BARA's commitment to applied training.

The BARA ethnographic team involved with this study directs a program called Native American Cultural Resource Revitalization. Consistent with BARA's founding mission to monitor the welfare and well-being of American Indian groups in Arizona, this program focuses on the national need to assure the preservation of American Indian cultures and languages. A long history of misguided policy-making and disregard for native cultures in this country has created marginalized and dependent peoples with severe economic disadvantages and little control over their own destiny. Recent legislation, such as AIRFA (1978) and NAGPRA (1990), has attempted to redress the situation and establish new policy paths that emphasize tribal

empowerment and cultural respect. BARA has contributed to these new directions by developing standard procedures that assure the full participation of American Indian tribes and pueblos in the process of identifying and controlling their cultural resource inventories. In this program, BARA researchers facilitate the interaction of tribes and pueblos with government agencies and private organizations. Through the use of ethnography, BARA professionals have assisted communities in the reconstruction of their cultural histories, made Geographic Information Systems (GIS) technologies available to tribes wanting to identify and maintain their cultural landscapes, and worked to address language shifts through the development of dictionaries and the promotion of language literacy on reservations.

This program also has contributed to the development of cultural resource theory within applied anthropology and has generated genuine, mutually respectful, and productive partnerships between the University and American Indian tribes and pueblos. One of BARA's most consistently supported research programs focuses on Native American Cultural Resource Revitalization, which has received long-term funding from tribes, the NPS, the Department of Energy, the Department of Defense, the Bureau of Reclamation, National Science Foundation, and other entities.

CHAPTER FOUR
ZUNI EOA STUDY AREA ANALYSIS

This chapter presents the Zuni interpretation and the ethnographic analysis of the places discussed during the Zuni portion of field visits for the Arches National Park (Arches NP) Ethnographic Overview and Assessment (EOA) in Moab, Utah. Tribal representatives from the Pueblo of Zuni Cultural Resources Advisory Team (ZCRAT)[1] visited five areas within the park (Figure 4.1).



Figure 4.1 ZCRAT and UofA Researchers at the Windows Section, Arches NP

Since this EOA focuses on understanding a range of cultural resources that include types of water, plants, landscapes, geologic features, and archaeology, the UofA researchers worked to select a range of EOA study areas that represented these various resources. The following section details the EOA study areas visited, and provides a map of the locations within the park.

[1] ZCRAT and A:Shiwi titles were requested to be used in the following discussion of the cultural resources.

4.1 ZCRAT Study Area Visits

Six appointed ZCRAT members from the Pueblo of Zuni drove to Moab, Utah, to meet with UofA researchers. Over three days, cultural discussions occurred at five selected EOA study areas within the park (Figure 4.2). The locations that were selected allow for the interpretation of many cultural resources. Accessibility was a key factor in place selection. The five EOA study areas selected are: (1) Windows Section, (2) Courthouse Wash, (3) Wolfe Ranch and Ute Panel, (4) Salt Valley Overlook, and (5) Landscape Overlook A. The names of these places do not reflect Native American use or cultural association. The names were assigned either by NPS officials, researchers, or by local non-Indian residents.

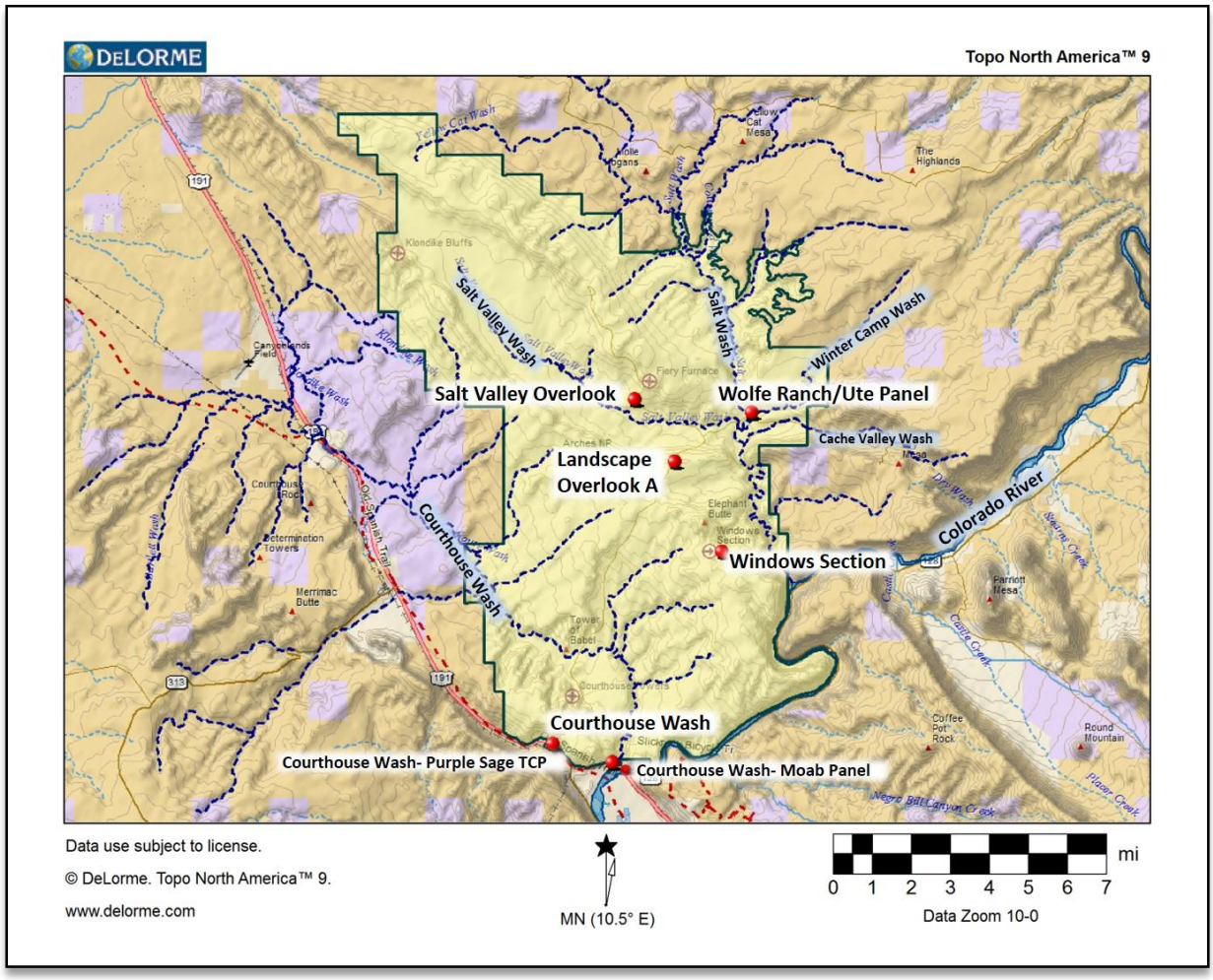


Figure 4.2 Map of Arches NP with Five EOA Areas Visited by ZCRAT Members

The schedule was designed to maximize time by grouping locations that are near one another. On the first day, UofA researchers and ZCRAT members met at the visitor's center for orientation and then began their visit at Courthouse Wash EOA study area (Figure 4.3).



Figure 4.3 UofA Researchers and ZCRAT Members Visiting Arches NP EOA Study Areas

During the second day, Wolfe Ranch and Ute Panel EOA study area and Salt Valley Overlook EOA study area were visited. On the final day, Windows Section EOA study area and Landscape Overlook A were visited. A closing discussion took place after concluding all area visits within the park.

4.2 ZCRAT Data Collection Events

Three types of opportunities for sharing cultural data were provided. Formal data collection events involve semi-structured lists of proposed topics. Formal data collection events were recorded on digital recorders and physically written down on paper forms. There are two types of recording forms, termed here (1) American Indian Ethnographic Resources form and (2) Cultural Landscape data recording form. The EOA study area data recording form is a place-specific inventory of traditional area uses, role in the history of the people, and other cultural resources associated with the place, which can include water, plants, animals, materials, landforms, and archaeological remains. The landscape form provides an opportunity to record tribal perceptions about place and resource-specific information, then translates these into a broader regional and more abstract cultural context. The third type, (3) open-ended data collection events, are defined as recorded and participant guided conversations held between the ethnographer and tribal member that contain information specific to the project.

In Table 4.1, the three types of data collection events have been categorized into two separate fields. The first category involves the structure and focus of the data sharing events: either (1) formal discussions about the EOA study areas and cultural landscapes or (2) informal open-ended discussions. The location of data collection events category, in the left column of the

table, indicates where the data collection event took place. A total of 61 cultural data sharing events occurred and were recorded either with digital tape recorders, via hand written notes, or both.

Location of Data Collection Events	Types of Data Collection Events		Total
	Formal Data Collection Events	Open-Ended Data Collection Events	
Courthouse Wash	6	12	**18**
Wolfe Ranch/Ute Panel	6	2	**18**
Salt Valley Overlook	6	6	**12**
Windows Section	6	1	**7**
Landscape Overlook A	0	6	**6**
Total	**24**	**37**	**61**

Table 4.1 Data Collection Events by Location and Type

Table 4.1 provides the total collected interviews in the November 2014 field session with ZCRAT members. Each member shared cultural data during semi-structured events at EOA study areas 1- 4, providing a total of 24 unique formal data collection events. A total of 37 open-ended and unstructured data sharing events occurred and were recorded. Combined, 61 data sharing events were recorded during the fieldwork.

4.3 EOA Study Area Analysis

Each area description contains a discussion of the environmental setting including geology, ecology, and Zuni comments. It is important to note that the geological and ecological information provided in this chapter is not intended to be an authoritative summary. Instead, the information is meant to orient the reader with regard to the area's location, general ecology, and geology. The ZCRAT members explained the cultural significance of places, areas, and plants while visiting the five selected areas spread throughout the park.

4.4 Windows Section EOA Study Area

The Windows Section was selected because it contains a variety of different arches, hoodoos, and viewscapes occurring close to one another. Likewise, the Windows Section has well developed road, parking, and trail access making it ideal for visitation by the ZCRAT members. The geological formation present at the Windows section resembled distinct cultural items and concepts of visiting ZCRAT members.

The Windows Section is located near the center of Arches NP approximately 3.5 miles from Landscape Overlook A and 11.5 miles from the park headquarters. It is situated at an elevation of 5,290 feet (Figure 4.4). This EOA study area is located southeast of Balanced Rock, within the southeastern corner of a series of unique rock formations that include Garden of Eden and Parade of Elephants.

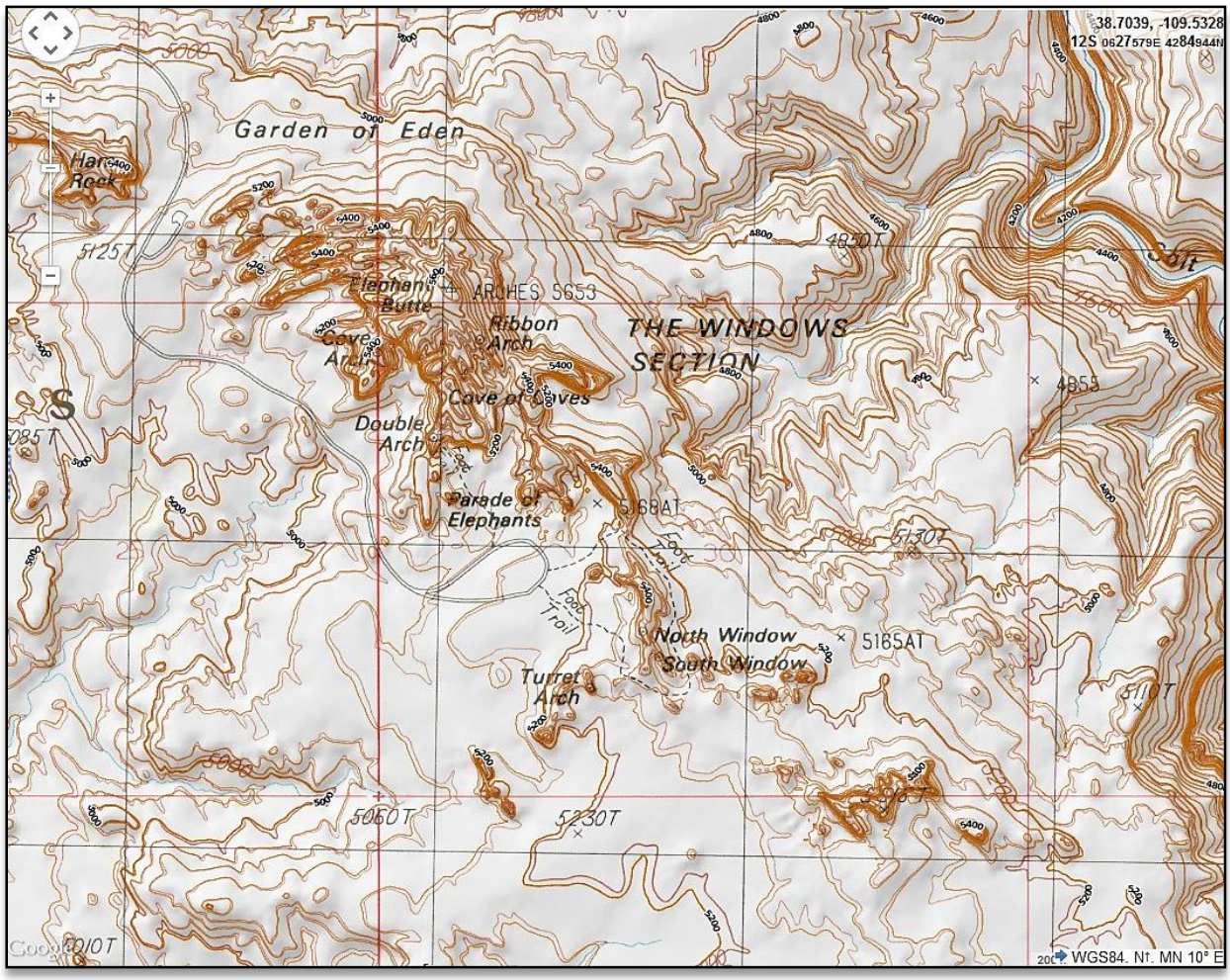


Figure 4.4 Topographic Map of Windows Section EOA Study Area

The selection of the Windows Section as part of the study allows for a cultural perspective on the large sandstone arches and other similar formations located throughout the park. Three large arches are clearly visible from the Windows Section trailhead. These include

North Window and Turret Arch to the south, and Double Arch to the north. A trail begins south of the parking lot extending to North Window and forks between the Windows trail and the Turret Arch trail.

4.4.1 Natural Setting

The Windows Section is made up of unique geological and ecological features. This area contains landscape features, such as the arches, hoodoos, and the nearby La Sal Mountains. An abundance of plant life and other ecological resources are present.

Geology

The geologic features throughout Arches NP reflect millions of years of wind, rain, and glacial activity. Landscape features such as arches, hoodoos, alcoves, and deep grooves in the rock, like those present at the Windows Section, further illustrate over 150 million years of geologic activity.

Differential weathering, defined by Chronic and Chronic (2004) as irregular erosion caused by differences in rock hardness or resistance, is the primary cause of the formation of the arches visible at the Windows Section (Figure 4.5). Over time, the arches continue to weather and erode, eventually leading to the collapse of these geologic features.



Figure 4.5 North Window (L) and South Window (R) as Seen from Turret Arch

The arches are all formed from eroded sandstone, predominately the type known as Entrada Sandstone, deposited during the middle Mesozoic epoch. Entrada Sandstone includes both marine and wind-blown sands (Foos 1999: 4-5). Figure 4.6 illustrates the stages of arch development, providing both a frontal view and side profile.

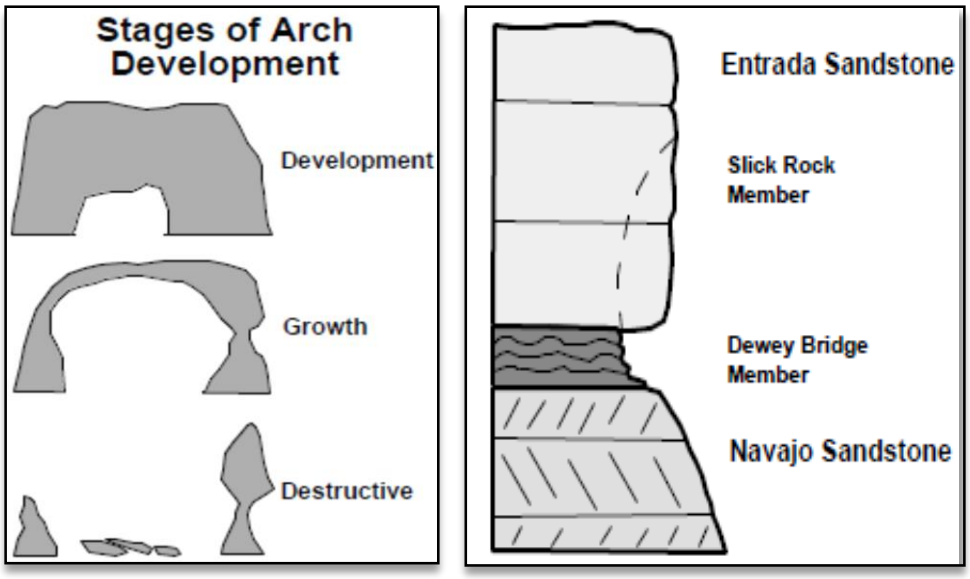


Figure 4.6 Stages of Arch Development (L) and Differential Weathering and Erosion (R) (Foos 1999: 4-5)

Deep canyons formed by the Colorado River and Salt Wash are visible from North Window and Turret Arch. A series of plateaus and mesas surrounding Salt Wash are also visible from the North Window (Figure 4.7). Located approximately two miles southwest from the Windows Section are the Petrified Dunes.



Figure 4.7 View of Salt Wash Canyon Facing Northeast from North Window

The geology of the Windows Section is striking, in height, vibrant color, and agedness. With an understanding of the erosion process and thousands of years required in creating each arch, the Windows section is very impressive.

Ecology

The Windows Section has a diverse ecology. Plant life ranges from microscopic cryptobiotic crust to larger plants, such as juniper (*Juniperus* ssp.). The Windows Section is part of a Salt Desert Scrub ecosystem, which is comprised of arid to semi-arid shrublands on lowland and upland sites usually at elevations between 4,980 and 7,220 feet (Colorado Natural Heritage Program 2005).

Cryptobiotic crust was present throughout the Windows Section, and provides a natural anti-erosion blanket across the landscape (Figure 4.8). The cryptobiotic crust is comprised of cyanobacteria, lichens, mosses, algae, and fungi, which serves as a seedbed for other plants by retaining moisture (Arches NP, Windows Section, Interpretative Panel).



Figure 4.8 Plants and Cryptobiotic Crust near North Window

Woody, low growth bushes, such as Indian tea (*Ephedra* ssp.), saltbush (*Atriplex canescens*), and sagebrush (*Artemisia* ssp.), grow at the Windows Section. Other high desert plants grow in this area as well, such as yucca (*Yucca* ssp.) and prickly pear cactus (*Opuntia* ssp.). The dominant plant community throughout Arches NP is Pinyon-Juniper woodland, due to rocky soils and fractured bedrock.

4.4.2 Special Features

This EOA study area was selected because of the (1) special geologic features, (2) good road and trail access to these features, and (3) a variety of viewscapes. Special views occur at the South Window, North Window, and nearby Turret Arch. North Window provides a clear view of Turret Arch and accompanying hoodoos to the west.

Within this section of the park there is a unique concentration of geologic features especially arches and hoodoos. To the north of the Windows Section is a series of hoodoos called the Parade of Elephants. Further north from that is the Garden of Eden and Balanced Rock (Figure 4.9). Other unique sandstone walls and mountain ranges surround the area.



Figure 4.9 The Garden of Eden

The proximity of a paved parking lot to the trailhead and an easy hike to North Window are additional features that contributed to the selection of this EOA study area. The trail loops around North and South Window and forks to Turret Arch (Figure 4.10), providing a unique view of the Windows. The trails provide guided access to multiple viewscapes around the Windows Section.



Figure 4.10 ZCRAT Members Hiking to Turret Arch

The multiple viewpoints of the arches from the trail contribute to the cultural interpretation of the place. ZCRAT members mentioned the significance of the rock formations (Figure 4.11). The Windows Section, ironically, was explained to be reminiscent of windows used for gazing in to the past, present, and future since time immemorial.



Figure 4.11 ZCRAT Members Discussing Windows Section

ZCRAT members visiting the EOA study area noted the importance of the La Sal Mountains as a feature that enhanced their spiritual connection with this EOA study area. Mountains, windows, and towering stone pillars were explained as special features from a Zuni perspective.

4.4.3 Native American Comments

When ZCRAT members visited the Windows Section with UofA researchers they had many comments about the significance of the area and the meaning of several prominent geological features. Responses from the ZCRAT members regarding this EOA study area are documented below.

ZCRAT members described the geography of this area and/or elements that stood out.

- *We were discussing some of the hoodoos here, and we still have that same practice in Zuni, which our religious leaders actually put stone pillars in places where we need to leave offerings in the village. So looking at these pillars here, this might have been the place where they picked up the pillars to make the shrines, just looking at all of these hoodoos, they are very powerful, so just being*

here gives a person, well for me, gives me a sense of connecting and looking into what our ancestors were doing here.

- *The* [stone] *pillars and all these outcroppings that we see here in the distance reminds me of the shrines that we have in our societies. You can see that they look like our altars. They have windows in them too, and some windows have stars inside of them. In the distance back there, you can see those outcroppings right there, those pillars way back there, they look like shrines, our medicine shrines, which all the medicine societies have, and the hunters society, the sus-keep, they also have an altar which has windows like that, so this might have been a place where they were shown how to construct their altars, because these were medicine men, and this is a very powerful place here.*

ZCRAT members commented on the ways that Indian people would have used this area.

- *We have this place that is called the Lookout in the Grand Canyon. It is a four wall site/structure that has four windows, north, west, south, and east directions, and it has the same use as areas like this. They use that first structure to look into the past, look into the future, looking to the directions where they can go. That structure was built by our ancestors, and when they came to these areas here they had these* [arches], *it has the same power, the same meaning, they use these as windows into the future, to look into the direction they had to go. All the arches here, they all have the same power, the same significance, even if it is a very small arch, that is has that ability for people to look in. We came up, while we were talking, how our ancestors did it, it is tu-na-pi-quai, and it means looking through. If you look into it, it is like looking into a glass, so it has that power, that ability, to give our people the sense of where to go* (Figure 4.12).



Figure 4.12 Turret Arch and Hoodoos

- *The medicine society came up north following the Colorado River. They were searching for the Middle Place. They brought the Sword Swallowers Fetish Bundle and they brought it up here, up north, and we were told that they brought it to a place that is cold, even during May and sometimes in June the mountains are still snowcapped. This is the place of the coldness.*

ZCRAT members explained how this place is connected to others.

- *Visually it is connected, everything is connected. There is not a beginning, or a middle, or an end.*

ZCRAT members explained how Indian people would have used this area and/or artifacts.

- *The place itself is very powerful. What was that word I was using? Ay-yu-chee-ten, which means it is very powerful, very unusual, very strong. This place here, and everything we were talking about yesterday, there are a lot of things here that will sustain people back then and today, so everything they needed, everything they wanted was here.*

ZCRAT members explained how Indian people would have visited or used the geological resources in this area.

- *In our own Zuni history we have arches like that. Remember we told you about the Salt Mother that made its way through, and made a hole like that, which she resides in to this day, and I think when the earth was raw there were spirits roaming around leaving their marks where our ancestors would go, because there was a place where they would make that connection. I think that about the hoodoos as well, we have altars in Zuni, or ka'tsinas that do their ceremonies, so it all ties into our culture and histories.*

ZCRAT members provided comments regarding the area as a whole.

- *It is not a pretty rock. It hosts something very significant for us. Because I mention that, if you look into the past and walk into areas like this, and realizing our great, great, great grandfathers and grandmothers also walked in areas within this place here, it holds a really strong bond with us because of that connection. Even though the sand shifted the footprints you cannot identify, for us they are still here. We consider our ancestors as being a part of this, they never left. The people that passed on, that are making their final journey into the afterworld, were left here. And so with that understanding that we still have a very strong bond to places like this because our ancestors are still here, their remains are still here, so we never want to break the bonds with our ancestors because the more we travel, the more we get that connection everywhere, back together again.*

4.4.4 Ethnographic Comments

The traditions and origin narratives of the A:Shiwi (the preferred term for Zuni people) explain that from the time of their emergence, the clans journeyed throughout Arizona, New Mexico, Colorado, and Utah, until they reached the Middle Place, known today as the Pueblo of Zuni (Ferguson 2007). During this culturally predetermined sacred journey, the A:Shiwi established many homes, camps, trails, shrines, and burial sites. Along the way, they left images on rocks to remind future generations of their journey, and they made use of many other cultural resources along the way. Rock formations located in Arches NP, such as the arches and other cultural resources, assist in connecting the contemporary A:Shiwi with their past and the ancestors (Figure 4.13). Today, these resources occur throughout the areas in which they traveled.



Figure 4.13 ZCRAT Members and UofA Ethnographers at North Window

The Windows Section presents two kinds of culturally significant features for the ZCRAT members who visited the area. First are the arches, which serve as windows into the past, present, and future from a Zuni epistemological view. Second, the ZCRAT members noted the important connection between hoodoos, or large stone pillars, and the prayer sticks that mirror the hoodoos. These geologic features inspired the development of key components identified within Zuni religion and ceremony.

ZCRAT members explained that prayer sticks are used for ceremonial purposes among Zuni religious societies. Prayer sticks are central to Zuni worship and ritual, with thousands of

offerings being made annually (Figure 4.14). Distinguished by the characters attached to the stick with cotton cord, each prayer stick is made as an offering to an individual religious figure. The prayer stick is planted upright over a sweet corn and prayer meal offering (Stevenson 1904).



Figure 4.14 Zuni Prayer Sticks (M. Coxe Stevenson 1904: Plate 21)

Shrines serve as physical places to present prayers and offerings. The location and arrangement of shrines is as diverse as their uses. Shrines are used within homes and kivas of the A:Shiwi, as well as outdoors at powerful points along the landscape, such as waterways, mesa tops, and springs. Figure 4.15 is an artist's recreation of a kiva shrine.

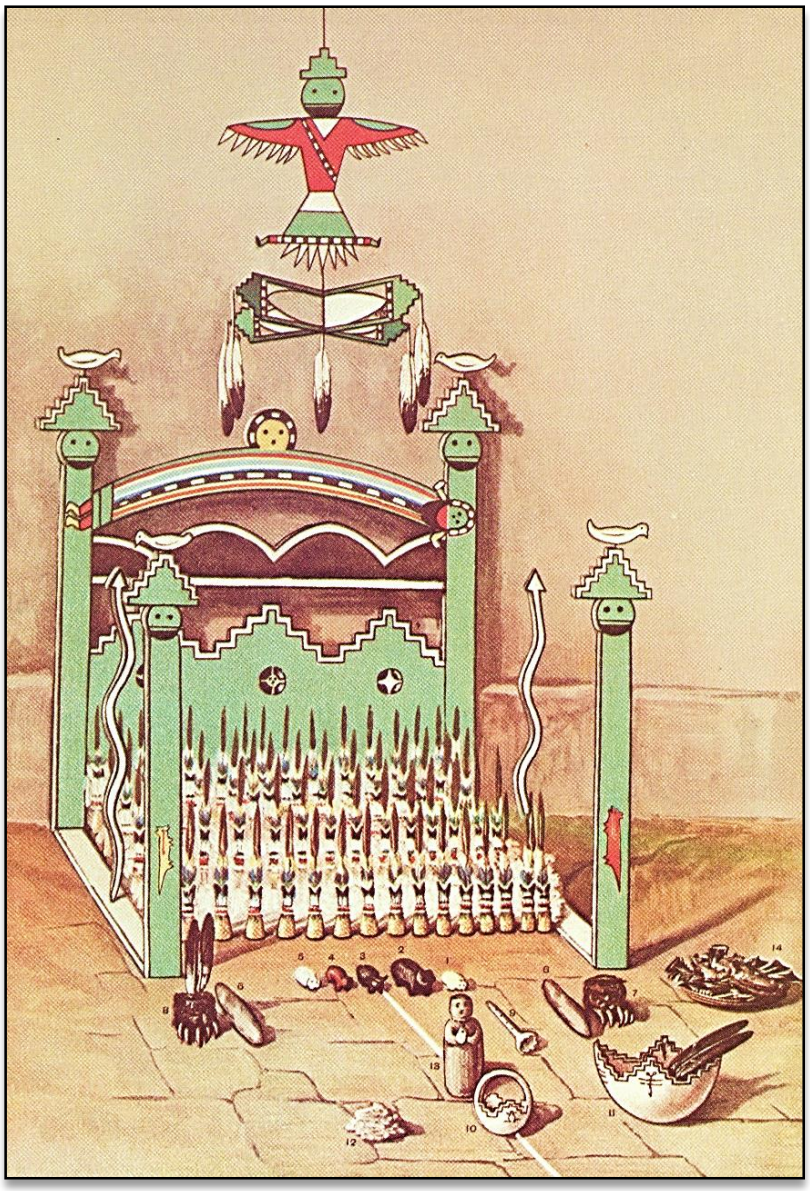


Figure 4.15 Zuni Kiva Shrine (M. Coxe Stevenson 1902: Plate 58)

One interpretation explains that for the Zuni geological form of the arches influenced the structure of shrine features; shrines or prayer altars often include carved openings that mirror these special geological features. ZCRAT members described openings visible in manmade shrines, and those viewed at this EOA study area, as a means of viewing the past, present, and future. A Zuni shrine that resembles the natural arches formed from rock is shown in Figure 4.16. James Stevenson used the Hiller photograph in his 1885 correspondence with John Wesley Powell at the Bureau of American Ethnology, with the following notation written on the back of the photograph itself:

> These shrines are usually situated on the summit of some distant mesa or mountain in some mythic and secluded spot where it is least likely to be molested by intruders. The Zunis are devoted shrine worshippers. Eight of these shrines are

situated at a distance from Zuni [Pueblo], in different directions, and are annually visited by the various religious orders of the tribe when the season arrives for the deposit of a new god. These visits are attended with peculiar ceremonies. When the shrine is thus visited the old god is displaced, removed to the rear, and a new one planted in its stead. As the picture shows, these successive visits have produced quite a large pile of deposed deities (Stevenson 1904: Zuni Shrine Photo by Hillers).



Figure 4.16 Zuni Shrine, Photo by Johannes Karl Hillers 1879 (PRM 1998.173.31.1)

The Windows Section is geologically, ecologically, and culturally significant to Arches NP. The unique rock formations and plant life were integral in the interpretation of this place presented by the ZCRAT members. The explanation of the temporal and ceremonial connections made at this EOA study area by the ZCRAT members were foundational to this study. It contextualizes the A:Shiwi origin narrative and traditional cultural practices and links them to the park.

4.5 Courthouse Wash EOA Study Area

Water is a key cultural feature among A:Shiwi, providing a deep spiritual and utilitarian connection between the people and the land. The Colorado River serves as a religious trail, physically and metaphorically, for the transport of ideas, prayers, and people. It can be thought of as an umbilical cord, providing life in many ways (Ferguson 2007).

Courthouse Wash is a major hydrological system within Arches NP, and is the largest riparian area located in the southern part of the park. The wash trends to the southeast approximately 17 miles, 6.5 miles of which is in the park, and flows into the Colorado River approximately 900 feet south of the park boundary (Figure 4.17). Elevation for the area ranges from approximately 3,970-4,300 feet. The EOA study area runs southeast from the park headquarters, toward the convergence of Courthouse Wash and the Colorado River. The Moab Panel[1] is situated near the convergence point of these two hydrological systems. The panel contains a series of painted and pecked figures on a cliff face just east of Courthouse Wash and north of the Colorado River.

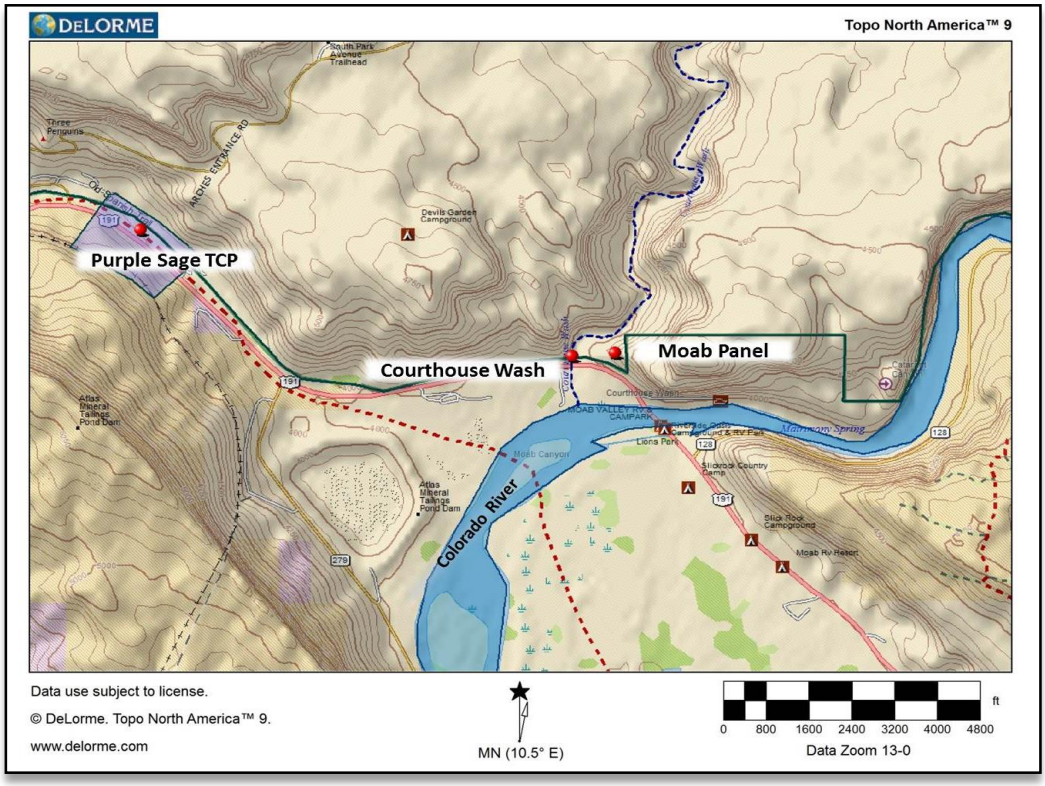


Figure 4.17 Map of Courthouse Wash EOA Study Area

Just south of the Arches NP park headquarters is a large and regionally unique stand of purple sage (*Poliomintha incana*). This sacred plant grows throughout the bottom of the valley to the southeast, extending towards Highway 191. The purple sage area was previously studied and

[1] The Moab Panel is also referred to as the Courthouse Wash Panel feature by Arches NP.

determined by Arches NP and the consulting tribes to be eligible as a Traditional Cultural Property (TCP). In addition to purple sage, other ethnobotanical resources are found along the low hills that form the wash. This EOA study area contains both natural and archaeological resources.

4.5.1 Natural Setting

The geology and ecology of Courthouse Wash and the surrounding area represents a wide variety of resources and places that are essential to the definition of Arches as a park. Diverse plant life in the area is supported by the continuous flow of water from Courthouse Wash. In drier areas large quantities of purple sage, Indian tea, and rabbitbrush (*Chrysothamnus* ssp.) grow.

Geology

Geologic features present within the Courthouse Wash area include two hydrological systems, large sandstone bluffs and outcroppings, and geological traces of the Moab Fault located nearby. The Colorado River is visible from portions of the area. A topographic image of the Courthouse Wash EOA study area illustrates the geological complexity of the landscape, which includes deep and vertical canyons and high flat mesas (Figure 4.18).



Figure 4.18 Topographic Features of Courthouse Wash and Surrounding Area

Courthouse Wash plays an important role in the formation of the geologic features in the area and contributes to the groundwater supply. Snow and rain, in addition to water from Courthouse Wash, contribute to the groundwater recharge within Arches NP.

Ecology

Courthouse Wash is the only perennial, or nearly perennial, stream located in the southwestern part of Arches NP. The park is bordered by the Colorado River and the unique ecological systems sustained by the river. Courthouse Wash supports a stable riparian environment that is critical to the overall ecology of the park and adjacent areas (Hurlow and Bishop 2003: 1). Some of the ethnobotanical resources that grow near the stream include cottonwood (*Populus fremontii*), willow (*Salix* ssp.), sage (*Salvia* ssp.), and fourwing saltbush.

The large sandstone bluffs surrounding Courthouse Wash provide a habitat for drought resistant wild grasses, cacti, and small shrubs. Moisture, dust, and rock debris accumulate in crevices and cracks in the sandstone, providing a place for plants such as sacred datura (*Datura wrightii*), yellow bluestem (*Bothriochloa ischaemum*), prickly pear, and yucca to grow.

Ecological zones surrounding the Courthouse Wash riparian area include sagebrush and saltbush habitats. Alluvial deposits with seasonal access to water and the Colorado River are located south of Courthouse Wash. Plants that grow in this area include purple sage, tall sage (*Artemisia tridentata*), sand sage (*Artemisia filifolia*), Ant Medicine, prince's plumb (*Stanleya pinnata*), and Indian tea.

4.5.2 Special Features

Special features at the Courthouse Wash EOA study area include (1) the Courthouse Wash hydrological system, (2) the Purple Sage TCP eligible area, and (3) the Moab Panel. Each of these features contributed to the decision to visit and interpret these as parts of the EOA study area.

The Courthouse Wash hydrological system is a steep-sided, narrow, flat bottomed canyon that cuts through the surrounding sandstone features (Figure 4.19). The confluence of the Colorado River and Courthouse Wash is 0.2 miles from the point where it passes under Highway 191. During the culturally predetermined sacred journey to the Middle Place, the Zuni followed the Colorado River. The convergence of the Colorado River and Courthouse Wash provided an access point to the resources within the region. The hydrological system, diverse vegetation, and cultural landscape add to the significance of the EOA study area.



Figure 4.19 Steep Canyon Leading Down to Courthouse Wash (Facing North)

Based on previous consultation with various American Indian tribes, the purple sage area was deemed eligible to be a TCP. Other culturally significant resources, such as a bone bead found in an ant hill, were documented during this EOA study (Figure 4.20). These observations by the ZCRAT members contributed to the decision to further discuss and interpret this area.



Figure 4.20 Bead on Ant Hill (L) and Ant Hill with ZCRAT Members at Purple Sage TCP (R)

The Moab Panel is a unique feature near Arches NP. The pictographs and petroglyphs are diverse in pigment and style type, which contributes to the uniqueness of this area (Figure 4.21). The location of the Moab Panel provides a view of the Colorado River and Courthouse Wash from an elevated location.



Figure 4.21 Moab Panel at Courthouse Wash

Features like the Moab Panel, the Colorado River, sacred plants, and cultural landscape contribute to the significance of this area. Abundant cultural resources within this EOA study area echo the importance of the water from Courthouse Wash and the Colorado River.

4.5.3 Native American Comments

When ZCRAT members visited the EOA study area with UofA researchers, they provided comments about the significance of the area and the meaning of several prominent cultural and landscape features. Responses from the ZCRAT members are present under the topic that they discussed with UofA researchers.

ZCRAT members described the geography of this area and/or elements that stood out.

- *The whole area really stands out,* [especially] *the fact that there are two mountains that are within the boundaries of where there might have been a trail that passed.*

ZCRAT members commented on the ways that Indian people would have used this area.

- *There are communities out here and destinations where people might have gone and traded stuff, food, pottery, seeds, what have you. We found a lot of medicinal plants up here. I am sure they were used freely.*
- *They lived off the land and whatever they could get I guess, stay for a while, and then move on. In our Zuni ways they say four days. It is either four days, four years, or four centuries, but it is always four. It is in the prayers. Then you see all these structures, and you say wow. Especially in places where there is really no water, but they still somehow built those structures. People say that we left them, the structures, behind. Yes, we left them, but in a spiritual way, they are still there. They have always been there. We go to places and leave offerings to re-communicate or meet each other again. It is like saying, we are here, we are leaving an offering, and to accept our offering is like we never left or we never forgot them.*

ZCRAT members discussed why or for what purpose Indian people would have used this area.

- *There are a lot of medicinal plants, and there is a water resource. When we were up there on top of the mountain* [overlooking the Purple Sage TCP eligible area], *we could see the plains area. I am sure that those were the farming areas* (Figure 4.22).



Figure 4.22 View from Cliff Overlooking Purples Sage TCP Eligible Area

ZCRAT members explained how this place is connected to others.

- [This place is connected to others] *because of what we found in the ant pile. The sacredness of what we just saw* [means] *it was more than likely a route to another community. Plus, the fact that the river is running across, it is a main source of where to go. It is connected to the Colorado River. It just goes straight to it. There is no other river down here.*

ZCRAT members noted if Indian people would have used water from the area.

- *Water is very important; not only for drinking but also for watering gardens, collecting plants.*
- *This is a main source for water. It is an oasis.*
- *The first important area I noticed is the water. We have water for cultural uses plus personal consumption.*

ZCRAT members explained how Indian people would have used the plants at the area.

- *As I look around here there is cottonwood. Some of our people that are involved in particular societies use this cottonwood for cultural and religious purposes. Another* [traditional] *use* [plant] *that I see over here is the water willow down by the riverbed* (Figure 4.23).



Figure 4.23 Willows and Other Plants Growing near Courthouse Wash

- *The purple sage is used for medicinal* [purposes]. *The person who uses it might also be a hunter* [and uses it] *to cover the scent to blend in with the wildlife instead of just being out in the open.* [It is used] *for hunting, to get close to a game animal. We still use the willow and the cottonwood, which are used for prayer sticks. Those are still used today. The cedar is also a medicinal plant.*

- *We use that for making prayer sticks to ask for longevity of life for our earth, for our people, and people throughout the nations, and for abundance of moisture. We use water willows for that particular purpose year round and during the summer and winter solstice. It is also used for safeguards and protection ways. Some of our people rely on society members to do this type of ceremony for life protection. This is in the family area of responsibility and is also how our clanship comes into play. They become like your extended family for longevity. The willow is used for those other giving ceremonies too.*

- *These grasses right here, the seeds are kow-wow-u-lah-wa, the little tiny seeds. There are several kinds of grasses that grow. It was a staple for our ancestors, but now it is only used in ceremonies. They harvest them and roast them. They are really, really black tiny seeds.*

ZCRAT members explained how Indian people would have used the animals at the area.

- [The paintings and peckings] *were used for ceremonies, or to indicate that there is wildlife out here. That this is a hunting and gathering area.*

ZCRAT members explained how Indian people would have used this area and/or artifacts.

- [The rock peckings] *are a real good indication that they used to travel this* [way] *a lot. If a person were just to stay here for one day they would not make that many rock peckings, but if they stayed longer, that is a pretty good indication of how long people were out here* (Figure 4.24).

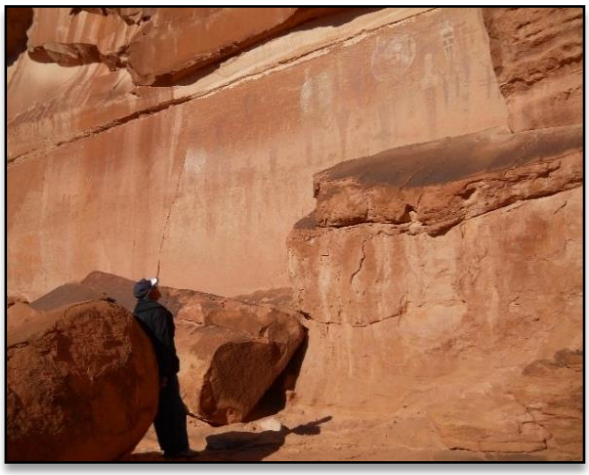




Figure 4.24 ZCRAT Member Examines the Moab Panel L) ZCRAT Members and UofA Researchers Examine an Offering Location in Purple Sage Valley R)

- *I am pretty sure that they lived here because of the petroglyphs. It is a place where they settled and possible a farming community, or hunting. It was either one of two things: a growing or harvesting, like the grasses and so forth. It was just to sustain the people. That is all it was.*

ZCRAT members explained how Indian people would have visited or used the geological resources at the area.

- *The hoodoos, unusual naturally formed places, our people would have marveled at how they were formed or when they were formed or what they are, so they would stop and the religious leaders, or people in charge, would make shrines as offering areas.*

ZCRAT members provided comments regarding the area as a whole.

- *A lot of what you can see here, like etchings on the stone* [rock peckings], *we can pretty well relate, and usually the ones with the hands in the awkward position, it resembles the frog, and that is what we have in our Zuni family society clans* (Figure 4.25).



Figure 4.25 ZCRAT Members Examine Rock Peckings at Moab Panel

- *Once we come back we are making that connection to our ancestors. It is a really good feeling, really heartwarming to make that connection. It has been thousands of years since our ancestors were here and now we are back to make that connection.*

4.5.4 Ethnographic Comments

The Colorado River is visible from the Moab Panel, and plays an important role in connecting the Zuni people with culturally significant areas and landscapes throughout the Southwest (Figure 4.26). In addition to the Colorado River and other water sources serving as spiritual and physical connections among places, water serves as a ceremonial resource among A:Shiwi. It is associated with secular and sacred practices.

Natural water sources like rivers, springs, and aquifers are places of worship; the water is used in ceremonies, and spiritual beings, like *Kolowisi*, guard and protect the water sources (Stevenson 1904). Kolowisi can move around in aquifers, lakes, rivers, or any body of water and takes the form of a water serpent. During the ceremony for the coming of Kolowisi at the Pueblo of Zuni, water and seeds are spilled from a ceramic vessel, demonstrating the serpent's connection to rain, agriculture, and fertility (Aftandilian 2007: 64).

American Indian groups have used the water and natural resources of the Moab valley in various ways for more than ten thousand years, as documented by the presence of Folsom points in and around the area (Hunt and Tanner 1960). The prominent source of water is the Colorado River, which creates floodplains and wetlands as it meanders through the area. Smaller, but in some respect more ecologically productive rivers, such as Courthouse Wash, Pack Creek, and Mill Creek, make special contributions to the Moab valley ecology (Figure 4.26). These water sources all produce special ecosystems that support both plants and animals used by American Indian people. These wet areas served horticultural and agricultural purposes through time.



Figure 4.26 Irrigable Farm Land in Moab Valley near Courthouse Wash

While some less well-known Indian food plants like chenopodium and amaranth were managed in early Indian gardens, the more recognized pattern of growing of corn, beans, and squash (or the corn-complex) came later and probably reflected intensive farming with irrigation. Perhaps the earliest recognized presence of the corn-complex has now been dated in Jackson Flats, on Kanab Creek, in southern Utah at more than a 1,200 BC (Roberts and Ahlstrom 2014). Certainly, this site is considerably south of Moab Valley, but they are potentially connected as are so many of the peoples of the Colorado Plateau, including the Zuni people.

Various European trapping and survey groups passed near the Moab Valley in the early 1800s, but Mormon settlers provide the best description of American Indian agriculture. When Mormon settlers arrived in the Moab Valley in 1855 they found Ute peoples farming along the hydrological systems. The Elk Mountain Mission established a small community, but the Indians who were already farming the fertile Colorado River bottoms regarded them as competition and drove them out after they had been there only a few months. Not until the very late 1870s and 1880s did a few Mormon families find it possible to build permanent homes (Firmage 1996).

Images of Zuni clan animals are visible at the Moab Panel, with a bear displayed in Figure 4.27 and a mountain sheep shown in Figure 4.28. During the culturally predetermined sacred journey, the Zuni people left images on rocks to remind future generations of their journey, who was at this place, and how the people made use of cultural resources along the way.



Figure 4.27 Rock Pecking of Zuni Clan Animal at Moab Panel, Bear



Figure 4.28 Rock Pecking of Zuni Clan Animal at Moab Panel, Mountain Sheep

Rock peckings and other cultural resources located in Arches NP assist in connecting the contemporary A:Shiwi with their ancestors and their past. This EOA study area represents an integral connection over time and space between A:Shiwi and the Arches NP landscape. The convergence of the Colorado River and Courthouse Wash was central to the connection of A:Shiwi and modern day Arches NP during the culturally predetermined sacred journey to the Middle Place.

4.6 Wolfe Ranch and Ute Panel EOA Study Area

Rock peckings depicting anthropomorphic and zoomorphic figures draw visitors to the Ute Panel, but the single rock pecking visible to the left side of the prominent Ute panel was of far greater cultural importance to ZCRAT members. This single rock pecking was interpreted as mankind climbing up a phragmites growing up from the earlier world. The cultural significance of the EOA study area was further increased because this phragmites reed (*Phragmites australis*) was observed growing in the nearby Salt Wash. The ZCRAT members added new interpretations and great complexity to this EOA study area.

The Wolfe Ranch and Ute Panel EOA study area is located along the trail from Wolfe Ranch to Delicate Arch. The elevation of the area ranges from 4,295-5,000 feet, with lower elevation points near the Salt Wash within the basin. The EOA study area is located 2.6 miles northeast from Panorama Point and 6.4 miles north from the Windows Section. The EOA study area is just north of four of the major hydrological systems in the park—Salt Valley Wash, Salt Wash, Winter Camp Wash, and Cache Valley Wash (Figure 4.29). Illustrated in Figure 4.29 are the convergence points of the four washes that come together, joining the Salt Wash south of this EOA study area, which then flows into the Colorado River.

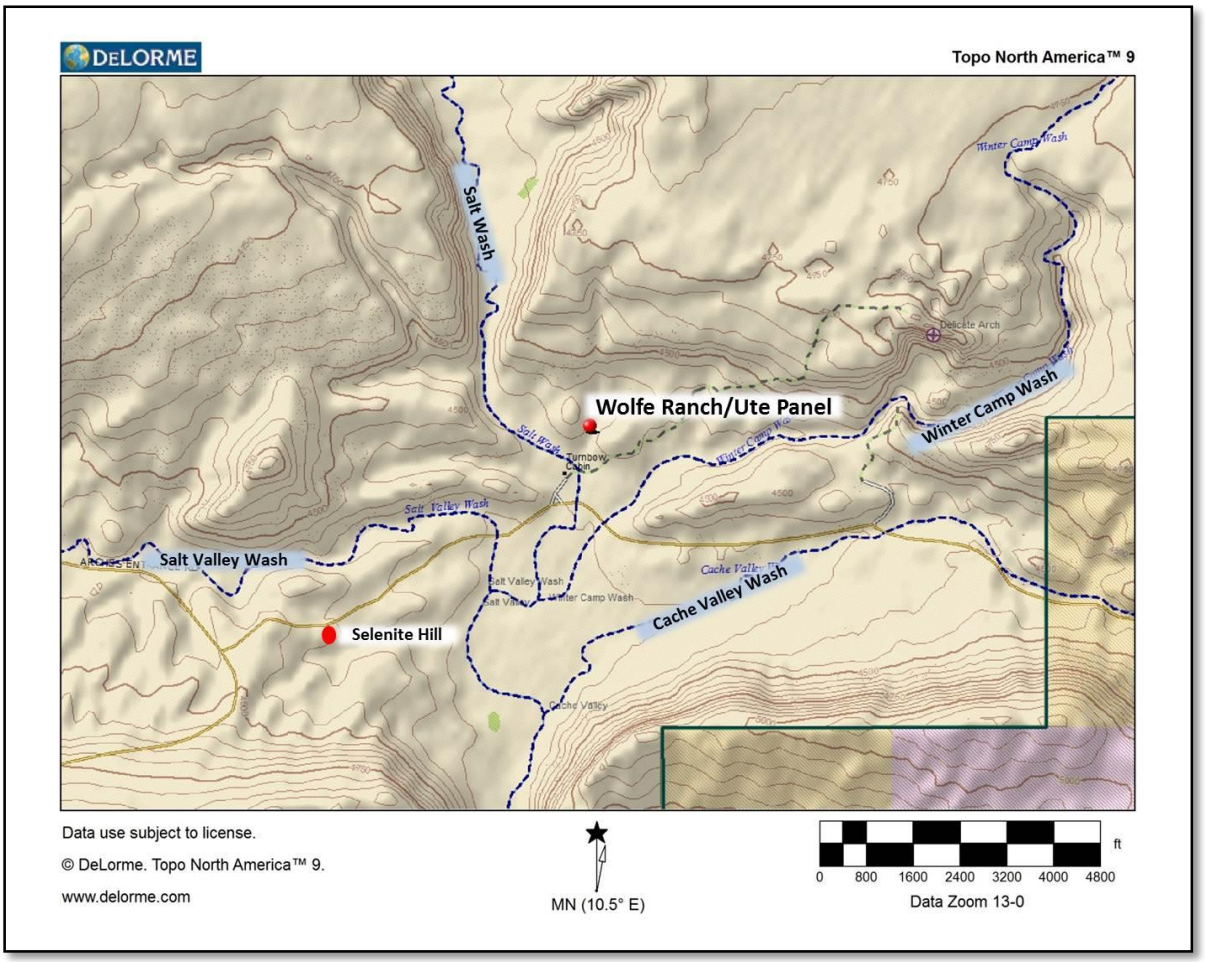


Figure 4.29 The Wolfe Ranch and Ute Panel EOA Study Area

The Ute Panel, comprised of two rock pecking panels, is situated in a wet and enclosed valley on the east side of the park along Salt Wash (Figure 4.30). On the west panel there is a single pecking of a figure (Figure 4.31 (L)), and on the east panel there is a series of zoomorphic and anthropomorphic features (Figure 4.31(R)).



Figure 4.30 Ute Panel Petroglyphs near Wolfe Ranch



Figure 4.31 East (L) and West (R) Sides of the Ute Panel Petroglyphs near Wolfe Ranch

Features at the Wolfe Ranch and Ute Panel EOA study area of special significance included water, hoodoos, peckings, and mineral resources. These natural and cultural resources offered explanations and connections between A:Shiwi in this area, past and present.

4.6.1 Natural Setting

The geology and ecology of the Wolfe Ranch and Ute Panel EOA study area contribute to a diverse range of resources and culturally important places. Abutting landscape features that were discussed include hoodoos, selenite covered hills, hydrological systems, and the view of the La Sal Mountains. There is a continuous flow of water from the Salt Wash that influences the biodiversity and biocomplexity of the EOA study area. A freshwater spring is located nearby, and provides a source of drinking water for the inhabitants of the area.

Geology

The geology of the Wolfe Ranch and Ute Panel EOA study area represents diversity in rock, clay, and soil types, and includes the hydrology of four streams that flow nearby. Selenite deposits are found covering a hill south of Delicate Arch Road, less than a mile west of the Wolfe Ranch and Ute Panel EOA study area. Selenite is frequently found deposited in uranium rich soil. This has an effect on the types of plants that can grow in abundance. The topographic map provides an overview of the geological features and hydrological systems near the Wolfe Ranch and Ute Panel EOA study area (Figure 4.32). This image further illustrates the protection that the large bluffs and canyons offer for communities living within the resource rich basin.

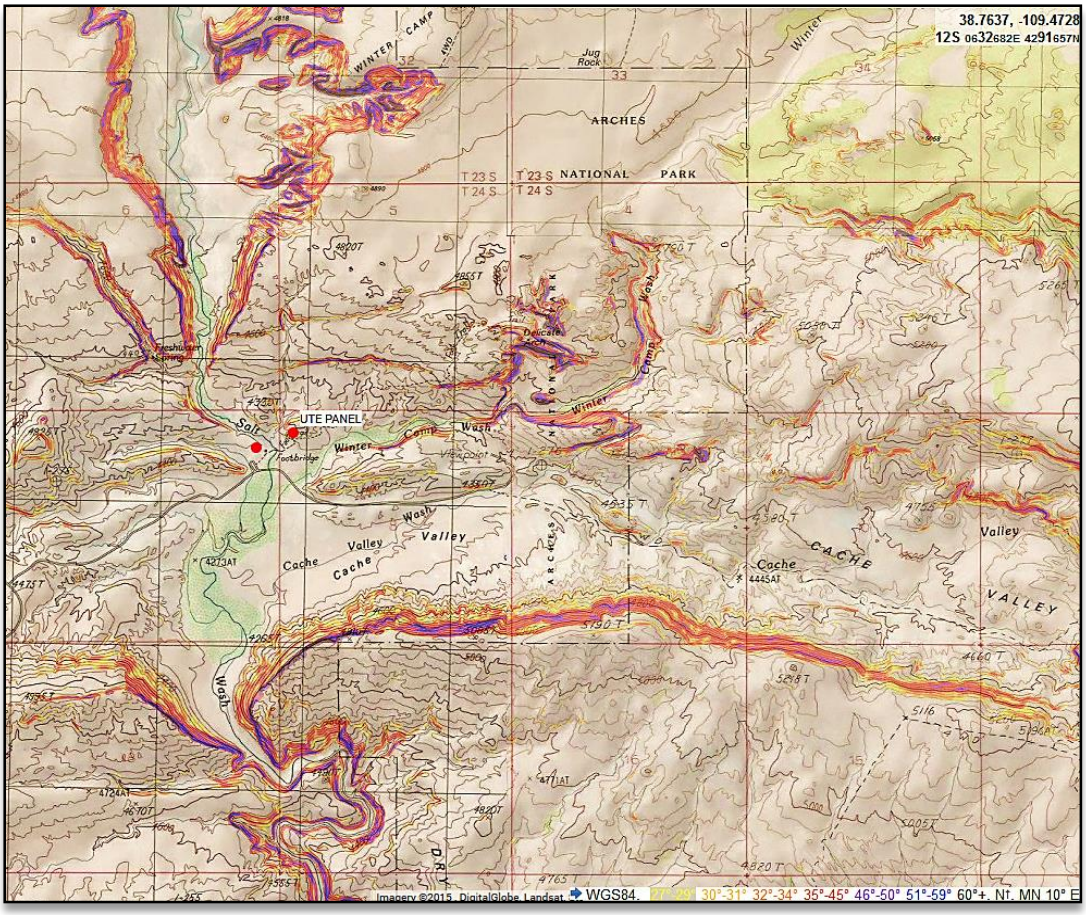


Figure 4.32 Topographic Map of Wolfe Ranch and Ute Panel EOA Study Area

Large Entrada Sandstone hoodoos and arches are visible to the south of the Ute Panel. Large rock outcroppings and limestone boulders frame the northern and western portions of the area. Salt Wash flows through the center of the Wolfe Ranch and Ute Panel EOA study area and joins Winter Camp Wash and Salt Valley Wash less than a mile downstream.

Ecology

From the time that Wolfe settled the area to approximately three decades ago, sheep and cattle grazed the land (Wolfe Ranch Trail Guide 2007). As a result, natural resources were altered; however, the extent to which plants, water, and soil were adversely affected is unclear. Salt Wash enables a diverse number of plant resources to grow within this location. Cottonwoods and willows require significantly more water than the Pinyon-Juniper woodlands in high desert areas, and therefore are only found growing along stream and river corridors where their roots can reach the water table easily (Figure 4.33).



Figure 4.33 Plants Observed Growing Near Salt Wash and Ute Panel

Plant resources associated with riparian ecosystems include phragmites, willows, and cottonwoods. Other plants observed growing within the EOA study area include amaranth (*Amaranthus* ssp.), Indian ricegrass (*Oryzopsis hymenoides*), Ant Medicine plant, greasewood (*Glossopetalon spinescens)*, prince's plume, rabbitbrush, fourwing saltbush, scrub oak (*Quercus* ssp.), Indian tea, sage, yucca, blackbrush (*Coleogyne ramosissima),* buckbrush (*Purshia tridentata)*, fuzzy opuntia, columbine (*Aquilegia* ssp.*)*, locoweed (*Astragalus* ssp.), penstemon (*Penstemon* ssp.*)*, and various grasses (Figure 4.34). This is one of the few areas within Arches NP where amaranth and phragmites were observed.



Figure 4.34 Plants Observed Growing near the Ute Panel

Water is an important feature at this site, as demonstrated by the variety of unique plant resources, and the extensive use of the site by American Indian people. The access to a continuously flowing hydrological system and nearby freshwater spring may be a key reason the people came to this specific area, and continued to stay and utilize the land and resources.

4.6.2 Special Features

The Wolfe Ranch and Ute Panel was selected as an EOA study area because this location has cultural and landscape features different than other areas in and around Arches NP. The special features of this area include (1) the convergence of waterways, (2) wetland vegetation, (3) minerals and clays, and (4) viewscapes of hoodoos and arches to the south from the panel (Figure 4.35).



Figure 4.35 Lush Wetland Vegetation in Salt Wash Facing South

Wolfe Ranch is located along the Salt Wash, a hydrological system that runs south from Lost Spring Canyon to the Colorado River. This waterway also converges with three other systems before it runs into the Colorado River: the Salt Valley Wash, Winter Camp Wash, and Cache Valley Wash. The convergence of multiple hydrological systems creates a unique ecosystem in the high desert.

The hydrological systems foster unique and lush desert plant life (Figure 4.36). ZCRAT members identified many culturally significant species, including phragmites, which was observed within the sole pecking on the west panel. This particular plant has been referenced in the origin narrative of the A:Shiwi, and continues to be used in ceremony. Another plant used in these ceremonies, similar to tobacco, was found in the EOA study area. This plant is inserted into the hollow phragmites and smoked.



Figure 4.36 ZCRAT Member Holding Phragmites Growing at Wolfe Ranch

The Wolfe Ranch and Ute Panel EOA study area had an abundance of minerals and other materials. Within the Salt Wash, ZCRAT members identified a clay that could have been used for making pottery. ZCRAT members spotted reflective minerals on a hillside south of Delicate Arch Road. When ZCRAT members and UofA researchers stopped to examine the hill they located a large concentration of selenite, a special mineral used in ceremony and ritual arts (Figure 4.37). The uranium rich soil that the selenite was formed in encourages the growth of certain medicinal plants.



Figure 4.37 Selenite Crystal Observed at Arches NP

ZCRAT members identified the significance of the viewscape to the south, which the panel is facing. Two arches and a series of hoodoos were seen in the distance, and are considered sacred land formations (Figure 4.38). It was explained that the viewscape could have been used as a place marker to identify the site as plentiful in resources. This was said to play a large role in the reasoning for the location of the peckings.



Figure 4.38 Landscape Facing South from Ute Panel

The Wolfe Ranch and Ute Panel EOA study area represents culturally significant resources and a place for settlement. Occupation of this area occurred long before the Wolfe Ranch was established, as a result of the plentiful resources needed for survival in a harsh environment.

4.6.3 Native American Comments

The ZCRAT representatives who visited the Wolfe Ranch and Ute Panel EOA study area with UofA researchers had many comments about the significance of the area and the meaning of several prominent geological features. The information presented below reflects the thoughts and opinions of the ZCRAT members who commented on this EOA study area.

ZCRAT members described the geography of this area and/or elements that stood out.

- *The arches and the land formation are reminders of people walking in succession; those who made the pilgrimage south, those hoodoos over there look like people walking. They might have been an indication of where to go or how to get there.*

ZCRAT members commented on the ways that Indian people would have used this area.

- *This place was used in the migration for the medicine people. This is a place they would have come to gather the medicine songs, and our medicine groups were instructed by the evening and morning star to go north, but they were not given the exact destination just travel north until you find the place. I am pretty sure that all of the Rio Grande tribes were given that same information because they all ended up in Bandolier at the same time.*

- *Any place, any site that you come up on, you think about how people could survive here. In the olden days, they knew where they were going and how they were going to survive. Here, there are the elements of survival, especially water.*

There is shelter from wind, or when snow comes there is some place you can find shelter to survive.

ZCRAT members explained how this place is connected to others.

- *Yes, visually it is connected, everything is connected. There is not a beginning, or a middle, or an end. I am sure that there are even more places that are hard to get to that have not been identified with other images. It is a reminder of how we got here, how our people survived. We talked about the Colorado River, and water sources, those were a lot of the places where they stopped* (Figure 4.39).



Figure 4.39 Selenite Hills Facing South Toward the La Sal Mountains

- *Every place like this where people find these* [rock peckings], *if a person has knowledge of the migration they will tell you it is connected all the way back. It is not just up here north of the canyon* [Grand Canyon], *there are also some of these down south of the canyon.*

ZCRAT members noted if Indian people would have used water from the area.

- *That is what you see in most places where there are sites, if you look around, you look maybe down in the valley, and there is a spot that is clear, they could easily stop the water and water their fields with it. They were farmers* (Figure 4.40).



Figure 4.40 ZCRAT Members and UofA Researchers Discuss Salt Wash and Farming

- *This is an unusual place. It is a different country, a different landscape, yet a sign like this will tell you what you have already known from the Grand Canyon, and it connects all the way up. The surviving source of it is the water, they knew where it was, and even though this is a desolate area, this is where they stayed. This is where they survived to move on.*

ZCRAT members explained how Indian people would have used the plants at the area.

- *Every* [sacred] *site that you go to, and you see the geographic place, you always see water there, you always see all kinds of plants. Our people were smart enough to not just stay where there is nothing to provide them for their livelihood. There are plains out here where they might have been growing stuff, you know.*

ZCRAT members explained how Indian people would have used the animals at the area.

- [This place has] *rabbits, coyotes, fish, frogs, water snakes, snakes, red-tail hawk*
- *…it might be a game area, for hunting… …the fact that it is already showing here* [the rock pecking] *what they are doing, following the game on horseback.*
- *This is probably a hunting area, because of all the bighorn sheep and men on horseback* [on the panel].

ZCRAT members explained how Indian people would have used this area and/or artifacts.

- *Pictographs like this, we say, wherever they are, those are the markings of where our people went. They put those pictures on the rocks to tell their history of how they came up and to tell us where they were going, and how they were going to get there. That is why we call the rock peckings our history, our library* (Figure 4.41).



Figure 4.41 ZCRAT Members Examining Rock Peckings at Ute Panel

- *There are several reasons why* [the panel would be located here]. *Maybe from a spiritual journey that they had and they rested there, or maybe it is a place of energy, or it could be a directional marker to find their quarry, what they are hunting for. There are several reasons why it could be there.*

- *I am sure they lived here for a while, then moved on like our ancestors did, migrating, maybe to a better area. It might be used for summer/winter migration. Hunting and gathering.*

ZCRAT members explained how Indian people would have visited or used the geological resources at the area.

- *This is one of the examples of our people making shrines, based on those pillars, hoodoos. So those shrines are put in their place once the people plant their prayer sticks. Those rocks are taken back to a protected area where they can be reused time and again.*

- *…in some places* [we have found] *the specular hematite and the mica, but we have never found selenite. Those are the ones that are a lot shinier, has more glitter than the mica and specular hematite. So these selenite are very prized. Selenite is collected wherever we find it. It is very important.*

- *The extending background* [arch to the south] *is a good landmark or indication for, like I said it might be a game area, for hunting. Since this is a high altitude they would just come here to gather. Plus the fact that it is already showing here what they are doing.*

4.6.4 Ethnographic Comments

The defining feature of the Wolfe Ranch and Ute Panel EOA study area is the series of panels with rock peckings referred to as the Ute Panel by Arches NP. The term "Ute Panel" was a source of discussion among ZCRAT members. They felt that one side of the panel is associated with Utes mounted on horses, and is therefore correctly termed, but the other portion of the panel is associated with the Zuni people and serves as a reminder of their origin. One ZCRAT member explained:

> *Lots of people, lots of different tribes were at this location. So just calling it the Ute panel is not the right description. I acknowledge the men on horses are probably Ute, but the other side is all about how our people came out* [of the four underworlds], *it is a reminder for us to never forget how they came out.*
>
> [The Anthropomorphic and Zoomorphic peckings] *are completely separate from this* [lone figurine on the left]. *We have never had petroglyphs of horses, ever. We have never identified with that. The horse has never been very important to the Zuni people, we were always walking, running. Even today we are not like the Navajo, the Utes, the Apaches who were very dependent on the horse.*

ZCRAT members explained that the rock pecking on the west panel at the Ute Panel area display an anthropomorphic figure climbing into the world on a phragmites extending upward. This image is symbolic of the emergence into this world (Figure 4.42). ZCRAT members identified several phragmites growing nearby and explained their cultural importance and ethnobotanical uses. Reeds play an important role in coming into this world within Zuni origin narratives.



Figure 4.42 Petroglyph of Mankind Emerging from an Earlier World by Climbing Phragmites

While visiting this portion of the Ute Panel, one ZCRAT member observed amaranth growing at the base of the rock panel with the Zuni image on it. In addition to the culturally significant petroglyph, the identification of a sacred plant, similar to tobacco, added further importance to the area and this special feature (Figure 4.43).



Figure 4.43 Amaranth at Ute Panel (L), and ZCRAT Member Holding Culturally Significant Plant (R)

Selenite, a crystal form of gypsum, is a reflective material (Figure 4.44). A:Shiwi grind the selenite and mix it with a black pigment as part of ceremonial paint. It is important for other

ceremonial purposes and in the creation of ritual art forms. Likewise, selenite serves several utilitarian functions. Documented Zuni use of selenite goes back to the late 1800s. While observing Cushing and Zuni tribal members, Baxter noted, "he was distinguished with bands of plumed sticks and spots of a kind of plumbago filled with shining particles upon the face within the war paint of the Zuni, and probably representing the twinkling stars which are the gods of war" (Cushing 1998[1882]: 59).



Figure 4.44 ZCRAT Members and UofA Researchers at the Selenite Hills

The abundance of cultural and natural resources identified within the Wolfe Ranch and Ute Panel EOA study area contribute to the extensive history of American Indian use and occupation of this place. Zuni epistemological views interpret rock peckings as a means of recording history for future generations to learn from. The record of the phragmites included within the rock peckings, and the physical presence of the sacred plant growing in the nearby Salt Wash, created a moment of intense connection between the past and present for the visiting A:Shiwi.

4.7 Salt Valley Overlook EOA Study Area

Archaeological resources that are spread across the plateau, referred to as Salt Valley Overlook, are the key components that make this EOA study area distinct. In addition to these cultural footprints of past uses by American Indian people is the Zuni perception that the place itself is visually stunning in terms of culturally significant viewscapes, which occur in all directions.

Salt Valley Overlook EOA study area is located to the west of the Wolfe Ranch and Ute Panel EOA study area and just south of the Fiery Furnace rock formations (Figure 4.45). The EOA study area is situated at an elevation of approximately 4,700 feet.

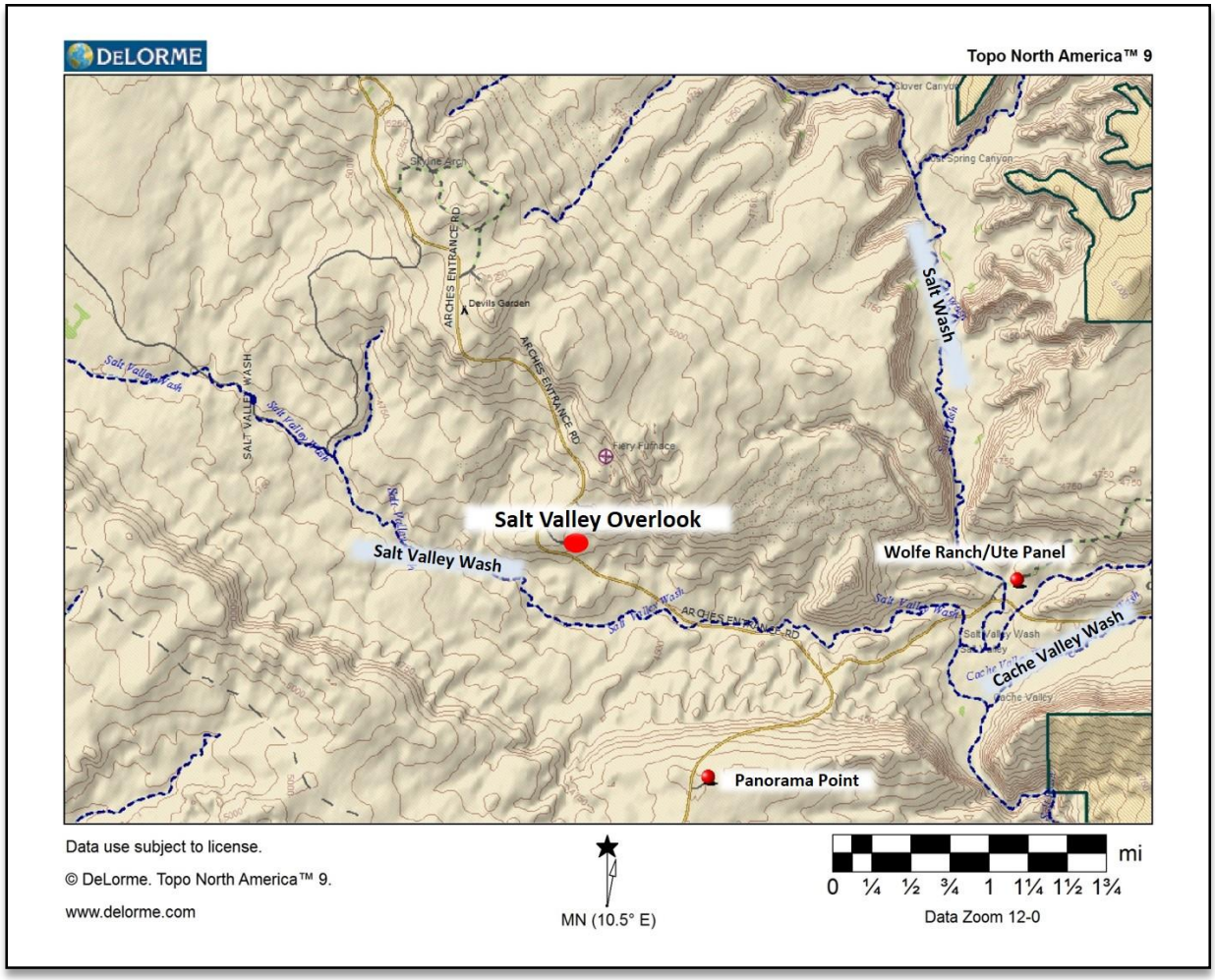


Figure 4.45 Topographic Map of Salt Valley Overlook EOA Study Area

From Salt Valley Overlook, one can see the Fiery Furnace and the Devils Garden to the northwest, the La Sal Mountains and Garden of Eden to the southeast, and Salt Valley to the southwest. The views of the surrounding area contribute to the cultural significance of the site.

4.7.1 Natural Setting

The following section provides the reader with a brief overview of the geology and ecology of the Salt Valley Overlook EOA study area. The landscape features, viewscapes, and ecology of the EOA study area contribute to its unique natural setting according to the Zuni pueblo representatives.

Geology

The Salt Valley Overlook EOA study area is located in the central portion of Arches NP (Figure 4.46). It is bordered by Entrada Sandstone outcrops on the eastern boundary and the western edge slopes into the Salt Valley. The valley floor is approximately 328 feet below the EOA study area's western margin. Salt Valley Overlook is composed of saline and calcareous alkaline soils. It is a large sloping ridge with a series of small Tidwell chalcedony outcrops that overlooks Salt Valley and Salt Valley Wash. The EOA study area is dissected by a series of small run-off channels that flow south and into the wash below.



Figure 4.46 Salt Valley Overlook with a View of the La Sal Mountains

Salt Valley Wash is one of the major hydrological systems in the park. From its headwaters near the Klondike Bluffs section in the northwest corner of the park, the wash flows approximately nine miles before joining Salt Wash and Winter Camp Wash. Once these three washes converge, they flow roughly another four miles before reaching the Colorado River.

Salt Valley contains salt tectonic features, which are common throughout this part of southeastern Utah. Salt Valley is similar to the nearby Moab Valley in that both valleys are collapsed salt anticlines and are examples of salt deformation. The deposits of salt underneath the valley floor are primarily composed of the mineral halite, a form of salt. These deposits

deform plastically and have a low density compared to the surrounding sandstone, shale, and limestone (Foos 1999).

According to Baars and Doelling (1987), overall changes in sediment thickness and the presence of angular unconformities indicate that salt began to rise upwards at the end of the Paleozoic Era and throughout the Mesozoic Era. The upward movement of salt caused the deformation of the overlying sediments, and created a salt dome or salt anticline. Basement faults were later reactivated during the Laramide orogeny and this resulted in the fracture of sedimentary rocks (Baars and Doelling 1987). As groundwater began to percolate along the fault lines and through the fractures during the Tertiary Period, the salt deposits dissolved. This activity left a residual leached gypsum cap and remnant halite. Eventually, the rocks collapsed into a void created by these dissolved deposits, thus creating Salt Valley.

Ecology

Arches NP is located within the Semiarid Benchlands and Canyonlands ecoregion. This region is situated at elevations that range from roughly 5,000 to 7,500 feet. Typically this ecoregion experiences extreme climatic conditions with warm to hot summers and cold winters. This area receives approximately five to thirteen inches of precipitation annually, with most occurring in the mid to late summer and winter. Broad grass, shrub, and woodland covered benches and mesas are common within this ecoregion. The ecological diversity of this ecoregion is influenced by steep canyons, limited water resources, seasonal flooding, unique geological substrates, and large fluctuations in climatic conditions (Figure 4.47).



Figure 4.47 Ecological Diversity at Salt Valley Overlook EOA Study Area

Within the park, there are a variety of vegetation communities that make up the Semiarid Benchlands and Canyonlands Ecoregion. Areas like Salt Valley Overlook EOA study area are part of the Colorado Plateau Mixed Bedrock Canyon and Tableland vegetation community (NPS

2011). The vegetation in this community is characterized as having an open tree canopy or scattered trees and shrubs, with a sparse population of herbaceous plants.

It is common to find pinyon pine (*Pinus edulis*), juniper, and little-leaf mountain mahogany (*Cercocarpus intricatus*). This vegetation community also contains a number of grasses including Indian ricegrass, cacti, yucca, and forbes (West 1982).

4.7.2 Special Features

Salt Valley Overlook EOA study area contains a number of special features: (1) it is one of the largest known archaeology sites in the park, (2) it contains a series of rock alignments and a Zuni shrine, (3) it has medicine plants, and (4) it has culturally important viewscapes.

This EOA study area was initially recorded by Berry (1975) and was later resurveyed by Kramer (1991). They both describe Salt Valley Overlook as a large lithic scatter that is distributed over a series of small ridges and drainages on the eastern edge of Salt Valley. Archaeologists recorded bifacial and unifacial tools, lithics in various stages of production, and ground stone in the area. Initially, archaeologists assumed that the majority of the artifacts would be clustered near the rock outcrops found in this area. Upon surveying it, however, they noted that the artifact assemblage distribution varied across the area with the largest concentrations being located away from the outcroppings.

A high concentration of cultural materials were observed by the ZCRAT members in this study area. These include evidence of stone tool manufacture, and other items such as turquoise, pieces of worked red and yellow jasper (Figures 4.48), and multiple projectile points (Figure 4.49).



Figure 4.48 Artifacts Observed at Salt Valley Overlook



Figure 4.49 A Point Interpreted at Salt Valley Overlook

This EOA study area contains a series of rock alignments and a shrine (Figure 4.50). Specific details about the location and cultural meaning of these features have been withheld at the request of the participating ZCRAT members.



Figure 4.50 Shrine (L) and a Rock Alignment (R)

The plants at this EOA study area also provided insight as to why this place was used by Native Americans. A fairly wide range of plant species grows here (Figure 4.51). Many of the plants observed at this place have ceremonial and medicinal purposes. These plants include as cedar (*Cedrus* ssp.), saltbush, rabbitbrush, big sagebrush, cacti, grasses, and two types of Indian tea.

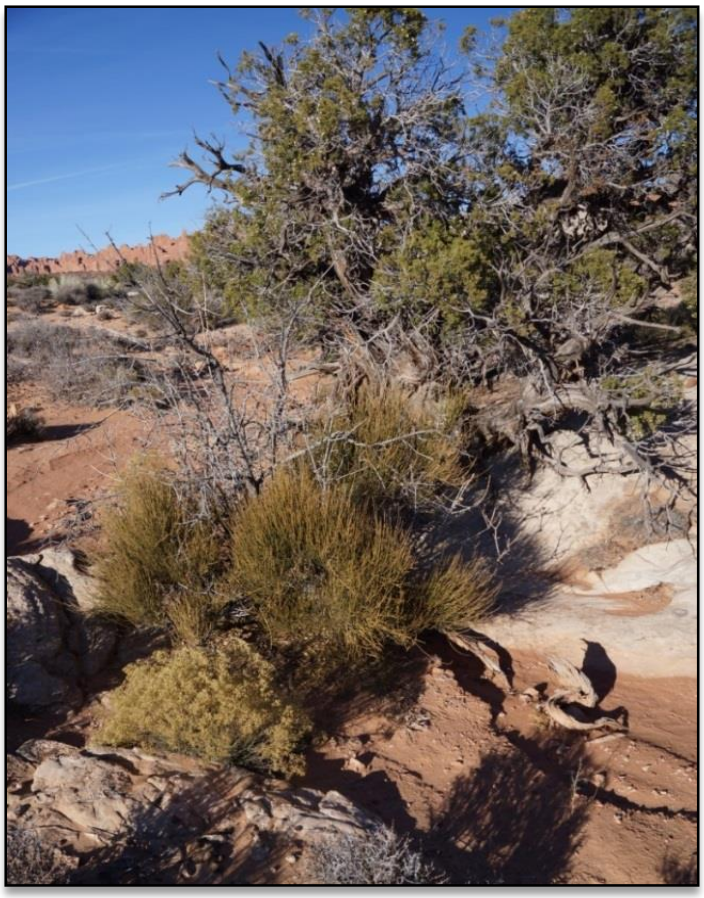


Figure 4.51 Medicinal Plants at Salt Valley Overlook

The archaeological objects and features, the plants, and the viewscapes surrounding the EOA study area provided insight as to why this place would have been used by Native Americans. This place was selected by American Indian people in the past, due to its natural setting. The shrines, rock alignments, and artifacts observed here were placed by American Indian people who were drawn to this location for activities, ceremonies, and personal contemplation. Some of the artifacts identified were prayer offerings.

4.7.3 Native American Comments

The ZCRAT representatives who visited the Salt Valley Overlook EOA study area in November of 2014 with UofA researchers had many comments about the significance of the area and the meaning of several prominent natural and cultural resources. The information presented below reflects the thoughts and opinions of the ZCRAT members who commented on this EOA study area.

ZCRAT members described the geography of this area and/or elements that stood out.

- *The plateau is really beautiful. I do not know how you come upon places like this where all of the surroundings are different. The landscape may be rough, but it is still beautiful* (Figure 4.52).



Figure 4.52 ZCRAT Members and UofA Researchers at Salt Valley Overlook

- *I think it is a good site for the people, for our people, that stopped here and stayed for a while. It has got an overview of all the valley down below, and on the backside you have got the mountains back there for protection. Down below there is a good flow of water where they could come down and get the water source. Do a little bit of farming down there in the flats, and of course there is a lot of vegetation for food. You can look all over and see the mountains on the south side. It is a good place to stay for as long as they want, as long as they hold up. And when they were coming up from the migration from the Grand Canyon, there are a lot of places similar to this place where they stayed for so many years, then moved on. The points that we found just a while ago, that is indicating that there was some hostility among other people while they were up here. Of all the places they came, a similar place like this, where they could be on top of a ridge or a hill, where they could look down in a valley, this is a good place where they stayed.*

ZCRAT members commented on the ways that Indian people would have used this area.

- *To me, this is a place where our ancestors traveled through, searching for the Middle Place, the Middle World. And it is the sword swallower's fetish bundle, the medicine societies that came up to the north, and they traveled this way to search on the north side, and the rest of the people, the rain priests, they traveled eastward which is present day Zuni. And they are the ones who followed the Zuni River into Zuni. We do not call it Zuni, we call it Kiwinaw, place of the people. It is these medicine societies that came up this way who established all the architect that is now a national monument, state parks, and so forth. By working with*

archaeologists and universities it gives us a chance to reconnect to these places where our ancestors traveled through. This was not a place where they settled permanently, like I said, they were searching for the Middle Place and it was a spiritual time where the spirits, the entities, showed them the way, or guided them towards the east after coming up all the way this way, here in Moab, and further up.

- *One of the things that was inspiring was when we found that pile of rocks that pretty well indicated* [the need for] *a prayer offering for food and turquoise and corn meal. All of us, like we have already pointed out, did it for everybody for longevity of life, for nature's generosity of new moisture, and for safe guards and protection for everybody. When a spiritual contact is made, we do not expect our spiritual fathers to bless us immediately, you have to have a lot of patience as the day goes on, but when you receive your blessings you breathe in and compliment yourself that everything was done in heart, mind, and soul, that you have given something back to your ancestors, that you have reunited your thoughts and your prayers with them. I think time and time again, you will hear from us on the migration and the split of our early people, but they reunited, and in a traditional a spiritual way, in this life where you reunited your thoughts with your ancestors. They are here spiritually. When you leave, you give turquoise and corn meal; you return what they have given you.*

- *Like the migration of the people that came up north, it is the medicine society, and they knew what kinds of plants there were out here and they could help them make medicine to cure the illness if they come upon an illness, you know? So this kind of vegetation around here they could easily gather to make the medicine and take care of each other. Our people were smart and they knew how to take care of each other and how to survive in this* [area] *that they came up to. If they were not smart enough we would not be where we are now. They were looking for the Middle Place, and this is how they traveled and this is how they survived, so you could imagine what they came up on and wildlife that they encountered. They took care of that themselves. Our people were smart enough to live long enough to get where they were going, so these kinds of places are significant to any place that you see down the north corridor of the Grand Canyon.*

- *Yeah, because of the beauty of the surrounding area, and the materials they needed to make tools. Not only the rocks, but the natural vegetation that was also used as tools is here. So, in order to keep that within this area for collection, they made a shrine and left offerings, and be coming back during the migration to reconnect, like what we did today.*

- *I did mention that we cannot just leave offerings like that anywhere. We all have to make a decision and come to a consensus stating that it is a shrine, so that we can be confident and doing the right thing of leaving an offering here. This is a good place to sit and get inspiration, maybe for songs or maybe to make points* (Figure 4.53).



Figure 4.53 ZCRAT Member and UofA Ethnographer at Salt Valley Overlook EOA Study Area

- [A ZCRAT member] *was explaining that the linear rock formations that were put all around here were there to give indication that there was a shrine nearby. And so, by following these different rock formations they stumbled upon the shrine that was left for them by the people that were migrating through here previously. The lithic scatter give indication that this place was used for hunting and gathering. The yucca nearby, which is an extremely important plant used for its fruits and crafts, right by the shrine, not all over the landscape, but definitely near the shrine, indicates previous use.*

- *This shrine was left as part of a welcoming, inviting you to come back to it. They wanted you to find it, that is why they led you to it.*

- *There are rivers and oases. They had people coming here. It is a real good resource, plus the fact that we had seen the plants down below, the Indian ricegrass (Kawoolawii*).

- *It is probably just migration. But the rock alignments and the lithics and everything here would be an indication or place they would want to put in the shrine.* [They come back here again and again] *mainly for collection, and also the inspiration. Maybe making songs. Inspiration in doing your work. Found lithics here and came up here to get an inspiration on making points, on building gardens.*

ZCRAT members explained how this place is connected to others.

- *It is connected all the way. The things that we have found here, you also find all the way, all the way up north and all the way to the east and all the way to where they continued to Bandelier. That is where they stayed and divided up people, giving each medicine clan a name. They divided the medicine clans and gave them names to carry on. After that they just traveled south and then they turned back somewhere in the Sandia Mountains east of here, and the turned back and headed back west where they came upon the Middle Place.*

- *This is a bigger place with a flat area where people would live and be satisfied, because on each side you could look all the way into the valleys, all over. It is a good point where you could stand up and see the whole valley. This is a significant place for them to stay* (Figure 4.54).



Figure 4.54 Viewscape from Salt Valley Overlook EOA Study Area

- *Our people were a really protective type of people. They take care of themselves and their elders or their own people. They were really overprotective, but they were protecting each other. They gave them a destination to where they were going to go and stay there forever, and that's why they protected each other so good, so they could keep on going. These people that came up this way, they call them Magical People, because they were taking care of their own sickness and producing medicine to take care of each other. They were inventing it to take care of themselves all the time. They weren't asking anyone for help; they were what you call smart people, survivors.*

- *Probably for a short while they lived over here. They must have made flint knives and points. This is where you see those chips of arrowheads that were made, and also spear points. For the most part, early Native Americans would inhabit a*

given place and, like in the Grand Canyon and Havasupai, have their ceremonial place up in the canyons. They would probably live here for the summer as a gathering place and then go back to their original place of living. Areas that we visited, we never saw any kind of old traditional houses. We saw a good cabin made by Wolfe. He was probably there longer than most of the early Native Americans. He probably made good contact with the Utes.

- *People's way of thinking or looking at things, it is not just one thing here and one thing there, everything is connected. So with that thought that, they came and thought this was a place to leave an offering so they made a shrine. We went out yesterday and did not find anything, and happened to find those alignments, which led right to the shrine.*

- *Absolutely. I think it is connected to all of its surroundings, and there should be some more sites within this area.*

ZCRAT members noted if Indian people would have used water from the area.

- *The wash is the main source of water. The most important element on earth is water. Without water we would not have any plants. Without any water we would not survive. Every living thing needs water.*

ZCRAT members explained how Indian people would have used the plants at the area.

- *Yucca is one of the food plants that they used to, we were told that the yucca plants that we have now days, the roots they would boil and then dry it out like spaghetti and they would fry it up again. They would cook it and eat it, and that is how we were told that they we used the yucca plant. Also for medicine though. They kind of heat it up on the fire place. They would stand it up and the yucca plants get kind of sticky. They drain the sap out of it and they use it if you cut yourself someplace you put that sap on your wound and it will heal it right away.*

- *There was a lot of* [Indian tea] *down at home. There was a farming area about 15 miles southwest of our village and we had a lot them growing. We would pick it out and roll it up in a bundle and then when you want to drink tea you just put it in there and boil it and drink tea. It is just a beverage, not medicine.*

- *These cedar trees you see around here are medicine for our people. Now days, modern days, I do not think anybody uses it anymore. In our days when I was born and raised, women give birth to a baby and they put her in the sand right by the fire place, and they lay her down and they heat up some rocks and rap them up in a cloth and put it on her stomach while she lays on the warm sand. They boil the cedar branches, they boil it up and they let them* [mother giving birth] *drink it in order to wash their body out when the baby was born. They clean their insides out. Those trees* [cedar] *are used for medicine. Yucca plants are almost the same thing, and sage too also.*

- *There used to be a lot of remedies with the natural environment that are never done, but we do sometimes carry it on in the traditional way.*

ZCRAT members explained how Indian people would have used the animals at the area.

- *Deer passed through here, and the place where we were doing our offering a little bird came.*

- *This is a perfect hunting and gathering area for seasonal living.*

ZCRAT members explained how Indian people would have used this area and/or artifacts.

- *The sacred place* [shrine] *that we found, I imagine they had some ceremonies there. There was some yucca growing around there. We have some use for that in our medicine society, and in our religious practices. That is one plant that showed us they had stayed here longer than had to or they wanted to. That indicates, the points that we found and the yucca that we saw and the rock alignment that we saw, that indicates that they were here longer than stayed someplace else. You just come up on a site you know, and there are a lot of rock alignments that you find. That means that they were here for a long time and made some living quarters. It was not just a temporary stay.*

- *The point was probably for hunting or for protection, a weapon you know. They use some of it for weapons and some of it for hunting. Usually you find a lot of those points in a place like this, they were used for everything: for hunting, for weapon protection, and stuff like that. To prepare themselves.*

ZCRAT members explained how Indian people would have visited or used the geological resources at the area.

- *This is a good place for a dwelling. It is mostly flat in this area, and when you look down its all rugged, rugged terrain. It is a lookout. I am sure if they had seen wildlife, they would have tried to sneak up on it.*

ZCRAT members provided comments regarding the area as a whole.

- *The surrounding area itself connects a message that it is good that we made this spiritual connection with this site, and I think with the prayer offerings that we provided back to them* [the ancestors] *made it more meaningful that the altar and our prayers were waiting to be said to our earlier people. In identical ways, both have the same meaning and also we feel that we have given back the corn meal and the turquoise as our appreciation and thankfulness.*

4.7.4 Ethnographic Comments

The Salt Valley Overlook EOA study area contains a large array of archaeological materials. These objects served a variety of purposes and their functions were directly linked to how American Indian people used and interacted with this area. According to ZCRAT members, Salt Valley Overlook was primarily a place used for ceremony and prayer. Many of the artifacts found at this place were purposely brought here and ritually deposited as offerings.

These culturally significant objects, along with water, ceremonial and medicinal plants, animals, and minerals, were left by the ancestors of the Zuni people today at places to form long-term ceremonial and spiritual connections to places. The interactions with the place itself, the landforms, the rocks, the animals, the plants, and other natural elements are part of the ceremony, the pilgrimage, and of multi-generational relationship. These complex interactions are critical aspects of ceremony.

Christopher Tilley (2004) has argued that the connections people have to objects (offerings) are constructed in both thought and action, and objects must be experienced in the same manner socially and culturally that places and people are experienced. Tilley also notes that when examining how materials or objects are used *in place* is fundamental, since objects exert their agency or authority in relation to how people use and engage them (Tilley 2004).

When Cushing visited Zuni during the late 1800s, he was initiated into the Bow Priesthood and twice accompanied Zuni Bow Priests on pilgrimages to ceremonial areas and shrines. During these journeys, he noted the presence of offerings at various locations. He wrote:

> Since my admission to the Priesthood of the Bow, I have been elected to the office of guardian to these gods; have twice accompanied them to their distant lofty shrines, where with many prayers, chants, and invocations, they were placed in front of their predecessors of centuries of accumulations (Cushing 1998[1882]: 31).

Cushing's description and contemporary discussion of this study area by ZCRAT members demonstrates how with every visit and every interaction, offerings were placed at ceremonial locations. As the offerings accumulate over time, they continue to serve as physical linkages between the place, the past, and current ceremonial interactions. Repeated offerings and prayers strengthen the relationships between the people and the place. The offerings and the places where they were ritually deposited contain memories, songs, and prayers occurring over thousands of years of interaction between people and place.

4.8 Landscape Overlook A and B

Landscape Overlook A and B is comprised of two locations. ZCRAT members visited Landscape Overlook A, which provides a clear view of the La Sal Mountains, Fiery Furnace, Salt Valley Wash, and the Widows Section. In contrast, Landscape Overlook B allows for views of the Henry Mountains, as well as the same areas visible at Landscape Overlook A. The view of the park is important for this study because it provides an opportunity for reflection on Arches NP and the experience of visiting various EOA study areas. Unlike other places visited and interpreted by ZCRAT members, Landscape Overlook A allows for discussion on landscapes and connections between culturally significant places, some existing in the park and others located far beyond. It is also an opportunity in the EOA to revisit earlier experiences in the park and add thoughts not formerly shared. Landscape Overlook Sites A and B are less of a destination to be interpreted, and more of a high and open place for discussion and reflection (Figure 4.55).

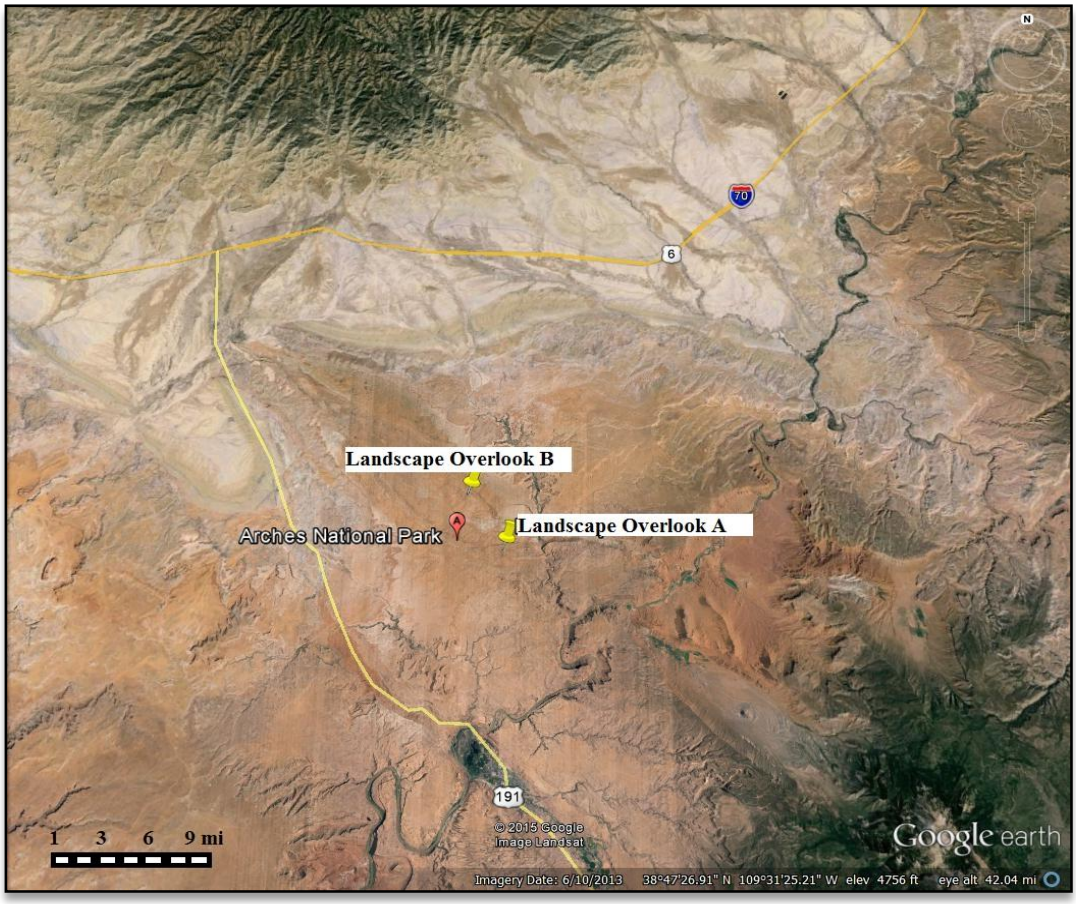


Figure 4.55 Topographic Map of Landscape Overlook Sites A and B

Landscape Overlook A is located at about 4,925 feet in elevation, and overlooks much of the park. Landscape Overlook A is approximately three miles northwest from the Windows Section, and two miles southwest from the Wolfe Ranch and Ute Panel EOA study area (Figure 4.55). A designated pullout for Panorama Point is located near the center of the park, along the main road, just between Delicate Arch Road and the Windows Road.

4.8.1 Natural Setting

The following section provides the reader with a brief overview of the geology and ecology of Landscape Overlook A. The information provided below is designed to help frame comments made by ZCRAT members during data collection events.

Geology

Landscape Overlook A is located on top of a large mesa in the central portion of the park. This mesa is covered with surface deposits of red sand (Foos 1999). The deposits are likely a result of the eroding Navajo sandstone features that surround the EOA study area. Fiery Furnace is one large red sandstone feature (Figure 4.56).



Figure 4.56 Landscape Overlook A Facing Northeast Towards the Fiery Furnace Section

Salt Valley can be seen to the northwest from Landscape Overlook A. Rising up from the north side of Salt Valley are the red sandstone components of the Fiery Furnace Section. The Fiery Furnace is network of canyons cut into sandstone, which extends into the Devils Garden to the northwest (Figure 4.57). These intricate sandstone features span nearly seven miles, and were formed through extensive wind and water abrasion.

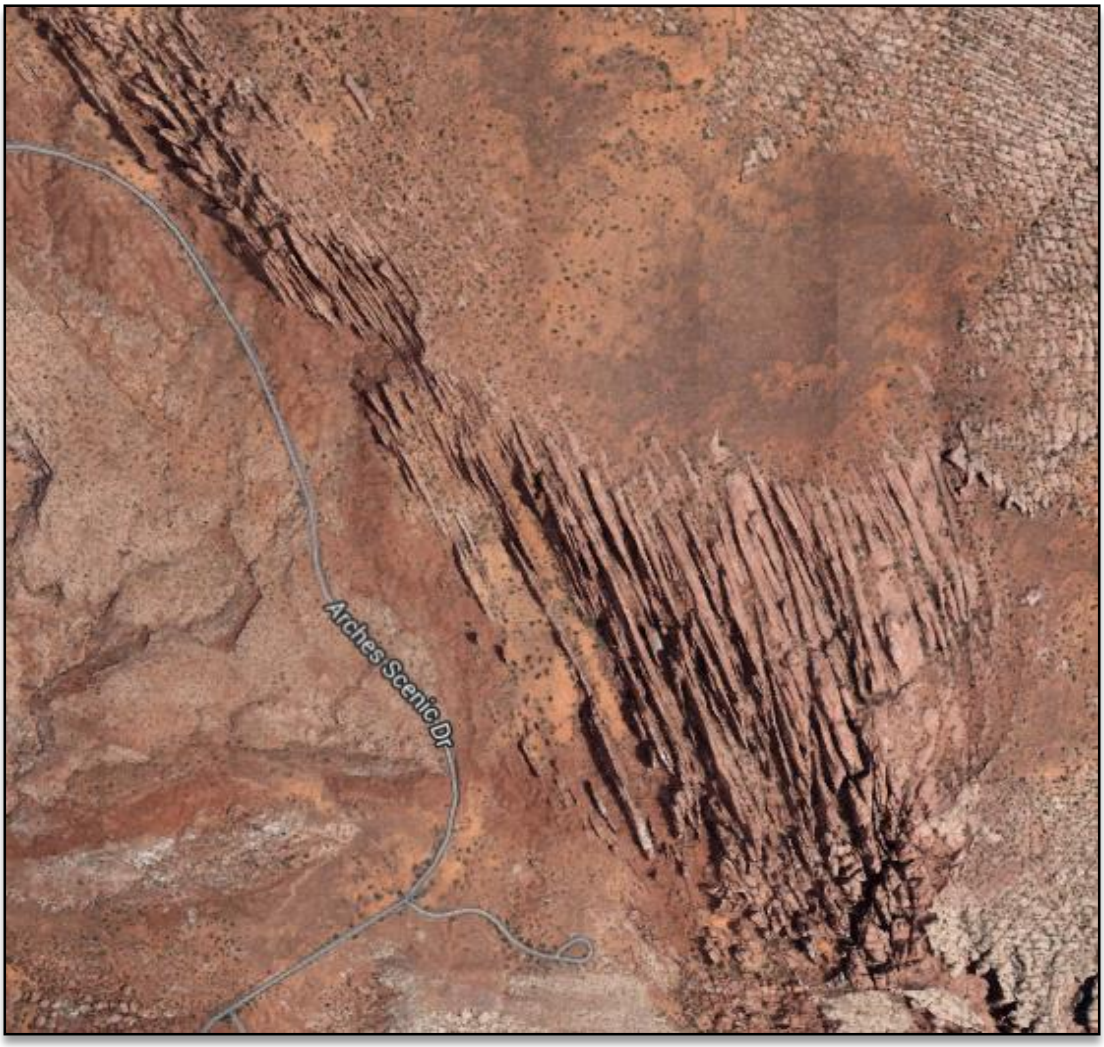


Figure 4.57 Aerial View of Fiery Furnace from Google Maps

Other unique sandstone formations are visible to the south. Southwest of Landscape Overlook A is Balanced Rock, which is a sandstone hoodoo that stands at nearly 130 feet tall (Figure 4.58). Directly to the east of Balanced Rock is the Garden of Eden (Figure 4.59), which is another series of hoodoos and arches. Similarly, a canyon rim near the Colorado River is visible to the east of Balanced Rock. The La Sal Mountains can be seen to the southeast of Landscape Overlook A.



Figure 4.58 Balanced Rock



Figure 4.59 The Garden of Eden with the La Sal Mountains in the Background

Surrounded by snowcapped mountains and towering sandstone features, Landscape Overlook A offers views of many unique formations. Brilliant red, tan, and orange hues visible in the petrified soils that comprise the sandstone edifices further contribute to the uniqueness of the area.

Ecology

Landscape Overlook A is part of the Inter-Mountain Basins Mixed Salt Desert Scrub vegetation community (Colorado Natural Heritage Program 2005). This community is an open-canopied shrubland typical of saline desert basins and alluvial slopes of the Colorado Plateau (Figure 4.60).



Figure 4.60 Plants and Viewscape to East of Landscape Overlook A

A variety of plants grow within this EOA study area. The soils in this vegetation community are often saline and calcareous alkaline rich soils, which are the preferred habitats for one or more species of saltbush, rabbitbrush, big sagebrush, Indian tea, wolfberry (*Lycium* ssp.), Indian ricegrass, and yucca (West 1982).

4.8.2 Special Features

Landscape Overlook A was selected as an EOA study area because it has a clear view of many other areas located in and around Arches NP. From Landscape Overlook A, many of the EOA study areas are visible, as well as the La Sal Mountains (Figure 4.61). This mountain range provides water to the Moab Valley.

These 365 degree viewscapes serve as an important component in the integrated cultural landscape discussions. This location was the last to be visited during the EOA study, in order to provide ZCRAT members an opportunity to discuss the park and its key cultural features; the visible features in the surrounding region, especially mountains and rivers; and how they are all culturally interconnected.



Figure 4.61 Landscape Overlook A Looking Southeast Towards the La Sal Mountains

The location and elevation of Landscape Overlook A provides viewcapes of many of the geologic features present within Arches NP. Hoodoos and arches are visible to the southeast and north, and large sandstone walls are visible to the south.

4.8.3 Native American Comments

ZCRAT members visited Landscape Overlook A in November 2014. The information presented below reflects the thoughts and opinions of the ZCRAT members who commented on the viewscapes from Landscape Overlook A. Some of the comments are relevant to multiple EOA study areas, and so they are repeated here because they especially contribute to this synthesis and overview of the park.

ZCRAT members discussed Native American villages in the area.

- *Every spot, every place that you find, is always connected back to the Middle Place.*

ZCRAT members mentioned how these villages were connected to villages elsewhere.

- *In Nevada, where our ancestors went looking for the Middle Place, our sister tribe, the Paiutes, also knew Zunis. Their ancestors talked about us, or our ancestors, going through there to trade corn seeds, or beans, or even material, probably hides, baskets, and pottery.*

ZCRAT members discussed seasonal Indian camps in this area.

- *I am sure they lived here for a while, then moved on like our ancestors did, migrating, maybe to better area. It might be used for summer-winter migration. Hunting and gathering.*

- *It is not a camping place; it is a place where they stayed for a while. The sacred place that we found* [shows] *they had been here for a long time to originate whatever they were doing as they moved along.*

- *This is a bigger place with a flat area where people would live and be satisfied, because on each side you could look all the way into the valleys, all over. It is a good point where you could stand up and see the whole valley. This is a significant place for them to stay.*

ZCRAT members talked about how Native Americans would have used this area.

- *I think it is a good site for the people, for our people, that stopped here and stayed for a while. It has got a view of all the valley down below… Down below there is a good flow of water where they could come down and get the water source. Do a little bit of farming down there in the flats, and of course there is a lot of vegetation for food.*

ZCRAT members discussed ceremonies associated with the EOA study area.

- *They were searching for the Middle Place. At that time, it was a spiritual would, and things were shown to them by the spirits. Spirits were the ones telling them where to go. They made it up this far and they said, no this is not the way, and they told them to go towards the east. That is what they did; they went towards to east into present day Colorado, and then down into Bandelier. Then following the Rio Grande, the Jemez Mountains, and Mount Taylor, the Zuni Mountains, and eventually meeting up with the rest of our people in present day Zuni.*

- *Every place like this where people find these* [rock peckings], *if a person has knowledge of the migration they will tell you it is connected all the way back. It is not just up here north of the canyon* [Grand Canyon], *there are also some of these down south of the canyon. There was a third party of people that went down south, and they had the knowledge of writing their history all the way down. There is a lot of it all over the country, where our people went. This history of Zuni, there are a lot of connections, not just one place, but all over.*

ZCRAT members shared their knowledge of any other creation places of their people.

- *The medicine society came up north following the Colorado River. They were searching for the Middle Place. They brought the Sword Swallowers Fetish Bundle and they brought it up here, up north, and we were told that they brought*

it to a place that is cold, even during May and sometimes in June the mountains are still snowcapped. This is the place of the coldness.

ZCRAT members talked about connections between the EOA study area and the surrounding rivers, creeks, springs and washes.

- *It is almost similar to the Grand Canyon. Just being here talking and seeing what is given for us serves a very meaningful visit. The whole environment becomes part of the whole works of Mother Nature. It has a very peaceful and very spiritual significance to the type of work we continue to do.*
- [This place is connected to others] *because of what we found in the ant pile. The sacredness of what we just saw* [means] *it was more than likely a route to another community. Plus the fact that the river is running across, it is a main source of where to go. It is connected to the Colorado River. It just goes straight to it. There is no other river down here.*

ZCRAT members discussed Indian trails connected to the EOA study area.

- *It is connected all the way. The things that we have found here, you also find all the way, all the way up north and all the way to the east and all the way to where they continued to Bandelier. That is where they stayed and divided up people, giving each medicine clan a name. They divided the medicine clans and gave them names to carry on. After that they just traveled south and then they turned back somewhere in the Sandia Mountains east of here, and the turned back and headed back west where they came upon the Middle Place.*

ZCRAT members mentioned connections between this EOA study area and any other place or events that had not been previously discussed.

- *My feelings are that, I have been going down to Grand Canyon, and the places that we see down there are the same as we see along the way of where our people traveled. There is no place that is different than what is down there. These places are connected together, and these people that came up this way, they call them magical people, and I guess that is why they had a lot of knowledge about using Mother Nature's creation to make medicine and stuff like that to cure and heal their families along the way. And what they carried here they carried all the way to the Middle Place, and we have been using all of the remedies still, some of those teachings and remedies are kind of extinct, but we are still trying to carry on what our people have taught us on the way up*
- *I am in the medicine clan, but our clan is not that powerful, we are not the clan to heal people and stuff like that. We have some of the medicines that our ancestors been carrying on, but now-a-days our group does not know that much about what that medicine clan used to be doing for the people. So places like this are no different. The scenery may be different, but it is still the same place where our*

ancestors settled for so long, and then moved on. Probably one day, when looking into these windows, they were told to stay here for a while then move on, go look for that middle place. So that was the purpose of all of our people who traveled from the migration going out into the world. That was the one purpose, go look for the middle place where we can settle, and that is where our world began, us, that is how we started out. So the purpose of this site and places that we see, going back and connecting to our ancestors saying a-nah-wa-neh [have a good day, have a good night]. *This is how we have been coming around all these years of getting reconnected with our ancestors at these places. It is like* [another ZCRAT member] *was saying, it gives you a great feeling when you come to a site like this. Our granddads used to tell us, it brings back the memories of what has been told of our history. You think back so hard. So this is what they were trying to tell us of our future. And this is why I am really grateful that I go along these trips and realized that there are more places our ancestors have traveled. It is a great honor to be invited to these kinds of places. It is not just to go see a nice rock, it is a beautiful rock, but it means a lot to us. So, this is how my feelings are when I go to places like this.*

- *When the earth was raw, we were told that spirits were roaming the earth, and as well as our ancestors coming out from the fourth world looking for the middle place, and I think these arches, these windows were there for a purpose, for a reason, to look for the middle place, as well as the hoodoos, that there is a place of cultural significance from our village where we are now. Therefore this is a wondrous land which we came out to, and like my brother said as well as the medicine clans that came through here doing gatherings and their ceremonies as well as looking for the middle place, it has been told from our history that it is still carried on as of this day, so it is a nice view as well as a good way of knowing our history, that our people roamed these parts of these lands.*

- *They came back here time and time again to reconnect, and like the vision quest, these windows are your vision quest, to look towards the future, and to find a direction to the middle place, and this is quite amazing to be here and to reconnect with our ancestors. We found that shrine and we left our offerings there, and our ancestors are accepting our prayers and we are going to have snow here in the next couple of days. That is really good, that makes me feel good in my heart, knowing they have accepted our prayers, our offerings, and they are on their way to receive the offerings, the food offerings, the cornmeal and the turquoise, which they have been longing for all this time. That is what we are all told, they are waiting. They are waiting for us to come back and make our offerings. Every morning we do our prayers, give our cornmeal offerings, and during meal time we take a piece off and offer it to our ancestors and our relative that have passed on, and it is not, no break in our lineage, we offer our cornmeal and our food offerings, our turquoise offerings, to the first people that walked on this earth. It is not just our relatives that have passed on, but the first people to nourish themselves, nourish their souls, their heart, replenish their heart, and they have accepted our prayers. Like I said, they are on their way, we will have*

snow in the next couple of days, and hopefully that they will go to the Middle Place, which is Zuni, and we do not call it Zuni any more we call is A:Shiwi now, the place of our people. But this is really amazing to be here and to experience where our ancestors walked.

- *Well to me, this place is a sacred site, and they said there is a window, we have Kokko, a kachina, which looks into the future every year around New Years, and then it goes looking through the window within the village, it puts prayer feathers through it and then looks into the future. It is like what they both said, medicine men do that too, but they are crystal gazing, looking into the future, see what is coming, and to me coming up here and looking through there you can see the vegetation on the other side, that it is going to be a good year next coming year, because of how the landscape is now, plus we gave offerings to ask mother nature to bring us rain, snow, meaning that it is accepted like he said, and it is going to snow like he said, but to me it really gives me a good feeling just to be here, and just the fact that those windows are very sacred, and how those hoodoos are like shines to us, and like they said that is why we have those shrines, to give offerings, and to have them accepted, and to give us back what we were asking for. And to reconnect with spirits, and ancestors that have passed through here.*

- *Because they walked this land, they were within this valley, they had their ceremonies, their practices here, and now we are a part of it now because we made that connection yesterday* [at the altar]. *It is a very powerful place, for not only, we were discussing it was the medicine people here, but they had to have brought their families with them, so it was not just the medicine societies, it was the extended families that made the pilgrimage with their fathers, with their grandfathers, their uncles, and their grandmothers too because medicine society is not just for men but for women, young ladies that are also a part of the medicine societies, so this place is very important, it has a very powerful meaning for us to come here. It is one of the things that is talked about because you have to have the, remember I was talking yesterday about having the heart? Because you cannot venture into places like this without having that peace, that good heart to come into an area where you know it is a powerful place. So that was what we were discussing, but I am sure they also have some comments, but we wanted to make this last interview here as a group because we wanted to have that one voice of what we feel for this place, the power, the energy we are getting from here.*

4.8.4 Ethnographic Comments

Landscape Overlook A is a uniquely high and open landscape that provides 365 degrees of special views of mountains, valleys, sand dunes, arches, and hoodoos. From this place, many natural and cultural features and their cultural connections were discussed. Significant features located at EOA study areas within the park are visually linked to this point, and cultural connections have been made over time through offerings and prayers (Figure 4.62).



Figure 4.62 Landscape Overlook A Facing Southwest

Due to the open landscape, animals are easily observed. During the visit to Landscape Overlook A, a lone buck approached the group, and the ZCRAT members were moved by the encounter. As the ZCRAT members and UofA researchers experienced this place, the weather changed and it began to snow in the distance. ZCRAT members interpreted this as their ancestors accepting their recent offerings in the park, answering their prayers, and thanking them for reconnecting spiritually.

Landscape Overlook A is a confluence of geology, ecology, and viewscapes. These features make it culturally significant according to ZCRAT members who discussed the landscapes that can be seen from this place and their relation to Arches NP as a whole.

CHAPTER FIVE
HOPI EOA STUDY AREA ANALYSIS

This chapter presents the Hopi interpretation and the ethnographic analysis of the places visited during the Ethnographic Overview and Assessment (EOA) for Arches National Park (Arches NP) in Moab, Utah. Tribal representatives from the Hopi tribe visited five areas within the park, which are outlined in the following section (Figure 5.1).



Figure 5.1 Hopi Representatives and UofA Researchers at Moab Panel near Courthouse Wash

Since this EOA focuses on understanding a range of cultural resources that include water types, plants, landscapes, arches, and archaeology, the University of Arizona (UofA) researchers worked to select a range of EOA study areas that represented these various resources.

5.1 Hopi Study Area Visits

Four tribally selected Hopi representatives drove to Moab, Utah, to meet with the UofA researchers. Over three days, cultural discussions occurred at five selected EOA study areas within the park (Figure 5.2). The locations that were selected allowed for the interpretation of many cultural resources. Accessibility was a key factor in place selection. The five EOA study areas selected include: (1) Windows Section, (2) Courthouse Wash, (3) Wolfe Ranch Area and Ute Panel, (4) Salt Valley Overlook, and (5) Landscape Overlooks. The names of these places do not reflect Native American use or cultural association. The names were assigned either by NPS officials, researchers, or by local non-Indian residents.

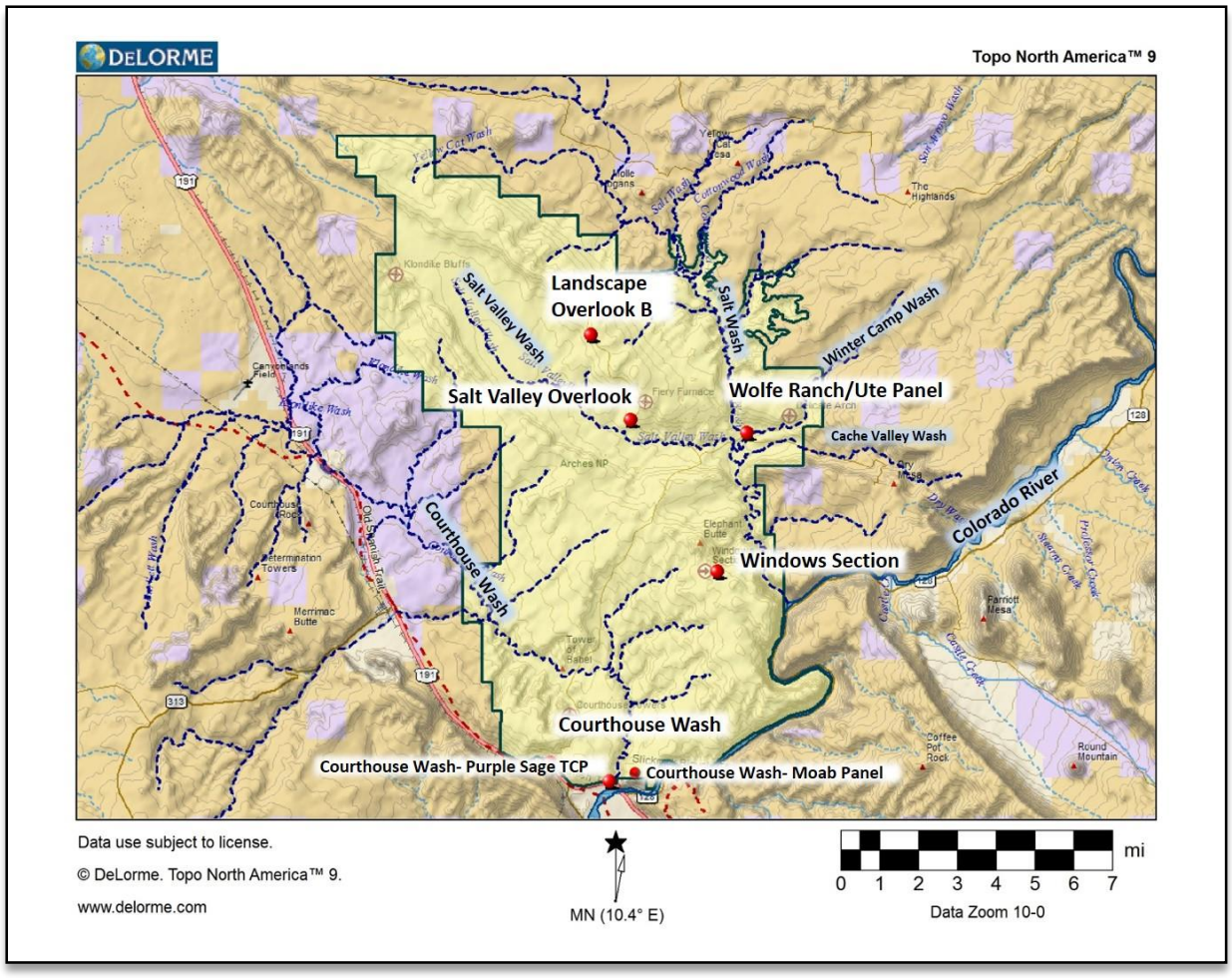


Figure 5.2 Map of Arches NP with Five EOA Study Areas Visited by Hopi Representatives

From the Hopi perspective, they wish to refer to Arch NP as *Pavayoykasi*, meaning Place of the Rainbows (see also Hopi Dictionary 1998). The red Entrada Sandstone arches within the park are reminiscent of rainbows in shape, silhouetting the sky and clouds behind them as true rainbows do (Figure 5.3). Mineral resources in the park were also a key point of interest for the Hopi representatives, especially the blue colored deposits of Mancos Shale.

Many of the plants that are native to the region were mentioned as culturally important in the construction of *pahos*, or prayer feathers, which are constructed from greasewood (*Sarcobatus* ssp.), willow (*Salix* ssp.), and numerous other plant species. The nearby Henry and La Sal mountain ranges were of further interest to the Hopi representatives, who found their snowcapped peaks to be of great importance based on the presence of moisture and low hanging clouds.



Figure 5.3 UofA Researcher and Hopi Representative at the Windows Section Discuss the Landscape

The schedule was designed to maximize time by grouping locations that are near one another. On the first day, UofA researchers and Hopi representatives met at the visitor center for orientation and then began their visit at Courthouse Wash EOA study area. During the second day, Wolfe Ranch and Ute Panel EOA study area and Salt Valley Overlook EOA study area were visited, with Windows Section EOA study areas and Landscape Overlook B visited on the final day. A closing discussion took place at Landscape Overlook B after concluding all EOA study area visits within the park.

5.2 Hopi Data Collection Events

Three types of opportunities for sharing cultural data were provided. Formal data collection events involve semi-structured lists of proposed topics. Formal data collection events were both tape recorded and physically written down on paper forms. There are two types of recording forms, termed here (1) American Indian Ethnographic Recording form and (2) Cultural Landscape data recording form. The EOA study area data recording form is a place-specific inventory of traditional area uses, role in the history of the people, and other cultural resources associated with the place, which can include water, plants, animals, materials, landforms, and archaeological remains. The landscape form records tribal perceptions about place and resource-specific information, then translates these into a broader regional and more abstract cultural context. The third type, (3) open-ended data collection events, are defined as recorded and informal participant guided conversations held between the researcher and tribal member that contain information specific to the project (Figure 5.4).



Figure 5.4 UofA Researchers and Hopi Representatives during Data Collection Event

In Table 5.1 below, the three types of data collection events have been categorized into two separate fields. The first category involves the structure and focus of the data collection events: either (1) formal discussions about the EOA study areas and cultural landscapes or (2) informal open-ended discussions. The location of data collection events category, in the left column of the table, indicates where the data collection event took place. A total of 32 data collection events occurred and were recorded either with digital tape recorders, via hand written notes, or both.

Location of Data Collection Events	**Types of Data Collection Events**		**Total**
	Formal Data Collection Events	**Open-Ended Data Collection Events**	
Courthouse Wash	4	7	**11**
Wolfe Ranch/Ute Panel	4	3	**7**
Salt Valley Overlook	4	1	**5**
Windows Section	4	0	**4**
Landscape Overlook B	4	1	**5**
Total	**20**	**12**	**32**

Table 5.1 Data Collection Events by Location and Type

Table 5.1 provides the total collected interviews in the March field session with Hopi representatives. Each member shared cultural data during semi-structured data collection events at EOA study areas 1-5, providing a total of 20 unique formal data collection events. A total of 12 open-ended and unstructured data collection events occurred and were recorded. A total of 32 semi-structured and unstructured data collection events were recorded during the fieldwork.

5.3 EOA Study Area Analysis

Each area description contains a discussion of the environmental setting including geology, ecology, Hopi comments, and ethnography (Figure 5.5). It is important to note that the geological and ecological information provided in this chapter is not intended to be an authoritative summary. Instead, the information is meant to orient the reader with regard to the area's location, general geology, and ecology.



Figure 5.5 Landscape Overlook with La Sal Mountains Behind Arches NP

The Hopi representatives explained the cultural significance of places, areas, and plants while visiting the five selected EOA areas spread throughout the park. The following sections provide a site by site analysis, with discussions detailing these specific features and other points of cultural significance.

5.4 Windows Section EOA Study Area

The Windows Section was selected as part of the EOA study areas based on its diverse geological features and the viewscape of the surrounding area. Likewise, the Windows Section has well developed roads, parking, and trail access making it ideal for visitation with tribal elders. Numerous medicinal plants and the unique arches, which resemble rainbows from a Hopi perspective, increased the cultural value of this popular visitation spot within Arches NP.

This EOA study area is located near the center of Arches NP, approximately 3.5 miles from Panorama Point and 11.5 miles from the park headquarters. It is situated at an elevation of 5,290 feet (Figure 5.6). The Windows Section is located southeast of Balanced Rock, within the southeastern corner of a series of unique rock formations that include Garden of Eden and Parade of Elephants.

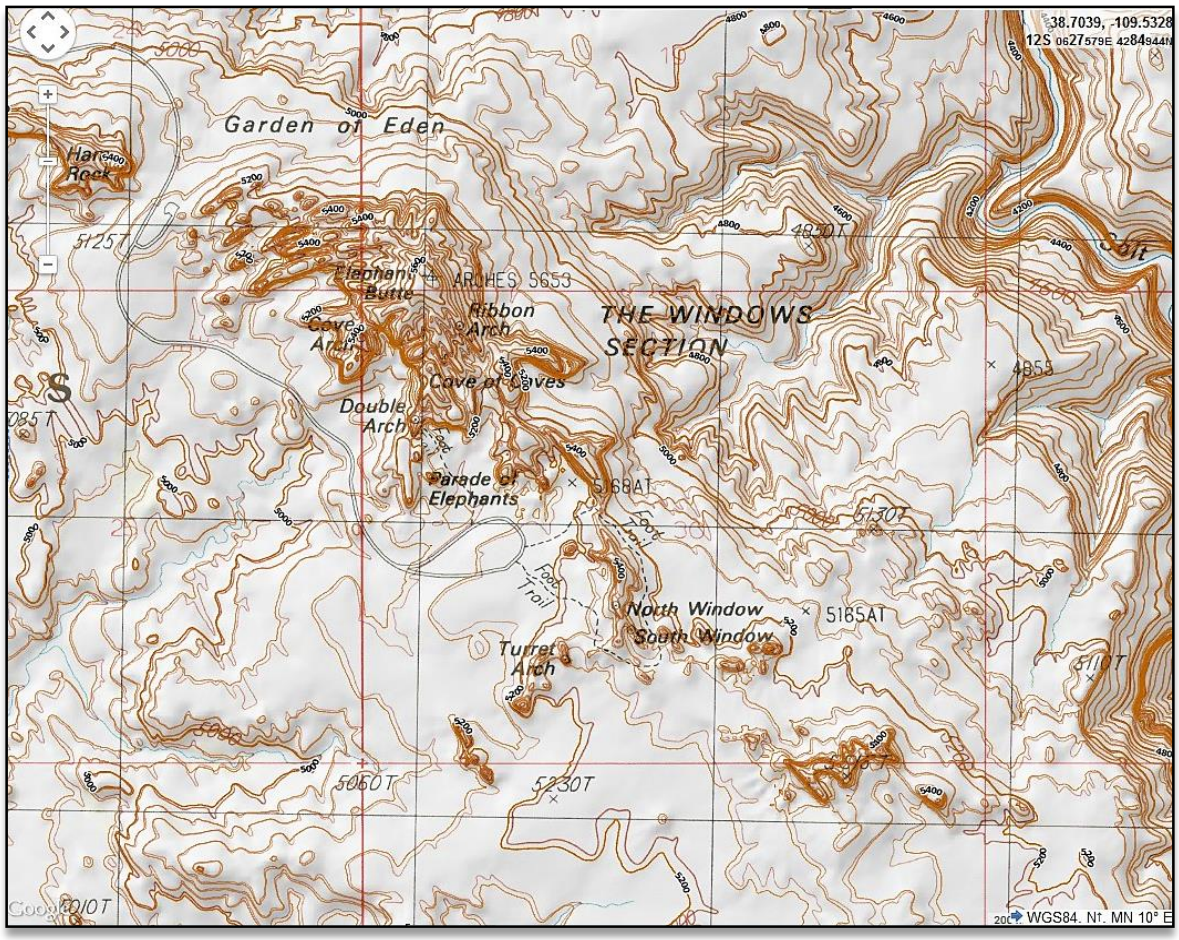


Figure 5.6 Topographic Map of Windows Section EOA Study Area

The selection of the Windows Section as part of the study allows for a cultural perspective on arches and other similar formations located throughout the park. Three large arches are clearly visible from the Windows Section trailhead. These include North Window and Turret Arch to the south, and Double Arch to the north. A trail begins south of the parking lot extending to North Window and forks between the Windows trail and the Turret Arch trail.

5.4.1 Natural Setting

The Windows Section is made up of unique geological and ecological features. This area contains landscape features, such as the arches, hoodoos, and the nearby La Sal Mountains. An abundance of plant life and other ecological resources are present.

Geology

The geologic features throughout Arches NP reflect millions of years of wind, rain, and glacial activity. Landscape features such as arches, pierced rocks, and smooth rock pillars like those present at the Windows Section further illustrate over 150 million years of geologic activity.

Differential weathering, defined by Chronic and Chronic (2004) as irregular erosion caused by differences in rock hardness or resistance, is the primary cause of the formation of the arches visible at the Windows Section (Figure 5.7). Over time, the arches continue to weather and erode, eventually leading to the collapse of these unique geologic features.



Figure 5.7 North Window (L) and South Window (R) as Seen from Turret Arch

The arches are predominantly formed from eroded Entrada Sandstone, deposited during the middle Mesozoic epoch. Entrada Sandstone includes both marine and wind-blown sands (Foos 1999: 4-5). Figure 5.8 illustrates the stages of arch development, providing both a frontal view and side profile.

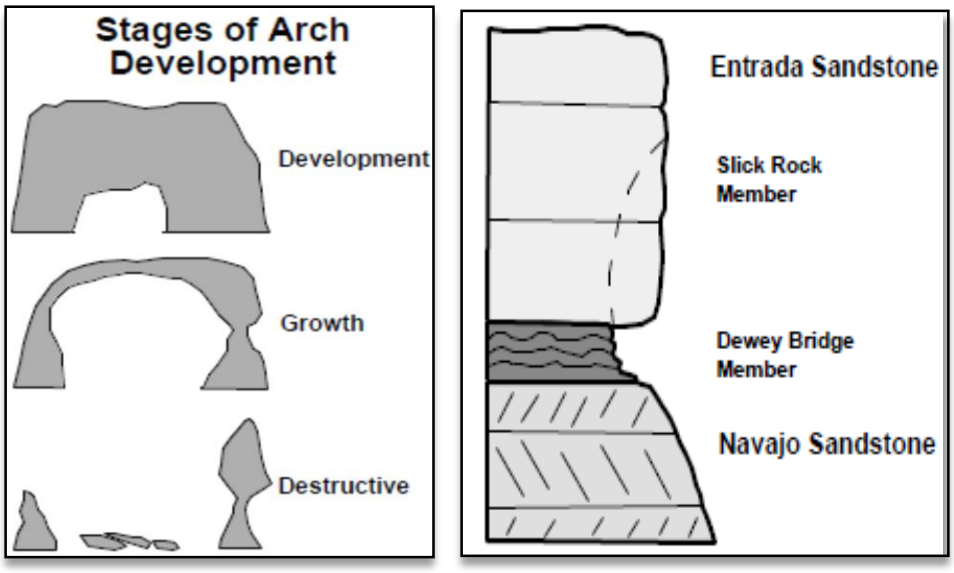


Figure 5.8 Stages of Arch Development (L) and Differential Weathering and Erosion (R) (Foos 1999: 4-5)

Deep canyons formed by the Colorado River and Salt Wash are visible from the North Window and Turret Arch portions of the Windows Section. A series of plateaus and mesas surrounding Salt Wash are visible from the North Window (Figure 5.9). Located approximately two miles southwest from the Windows Section are the Petrified Dunes.



Figure 5.9 View of Salt Wash Canyon Facing North from North Window

The landscape within Arches NP is continuously changing. Physical changes in the shape of the rocks occur with each gust of wind, snow storm, and rain shower. The viewscape changes constantly as well; mountains visible at a distance spread into desert valleys and washes, which rise up to plateaus containing towering Entrada sandstone formations.

Ecology

The Windows Section has a diverse ecology. Plant life ranges from microscopic cryptobiotic crust to larger plants, such as juniper (*Juniperus* ssp.). The Windows Section of Arches NP is a Salt Desert Scrub ecosystem, comprised of arid to semi-arid shrublands on lowland and upland sites usually at elevations between 4,980 and 7,220 feet (Colorado Natural Heritage Program 2005).

Cryptobiotic crust was present throughout the Windows Section, providing a natural anti-erosion blanket across the landscape (Figure 5.10). The cryptobiotic crust is comprised of cyanobacteria, lichens, mosses, algae, and fungi, which serve as a seedbed for other plants by retaining moisture (Arches NP, Windows Section Interpretative Panel).



Figure 5.10 Plants and Cryptobiotic Crust near North Window

Woody, low growth bushes, such as Indian tea (*Ephedra* ssp.), fourwing saltbush (*Atriplex canescens*), and sagebrush (*Artemisia* ssp.), grow at the Windows Section. Other high desert plants grow in this area as well, such as yucca (*Yucca* ssp.) and prickly pear cactus (*Opuntia* ssp.). The dominant plant community throughout Arches NP is Pinyon-Juniper woodland due to rocky soils and fractured bedrock.

5.4.2 Special Features

This EOA study area was selected because of the (1) special geologic features, (2) good roads and trail access to these features, and (3) a variety of viewscapes. Special views occur at the North Window, South Window, and nearby Turret Arch. North Window and South Window provide a clear view of Turret Arch and accompanying hoodoos to the west. From Turret Arch, one has a clear view of North Window and South Window.

Within this section of the park, there is a unique concentration of geologic features, especially arches and hoodoos. To the north of the Windows Section is a series of hoodoos called the Parade of Elephants. Further north from that is the Garden of Eden and Balanced Rock (Figure 5.11). Other unique sandstone walls and mountain ranges surround the area.



Figure 5.11 The Garden of Eden

The proximity of a paved parking lot to the trailhead and an easy hike to North Window are additional features that contributed to the selection of this EOA study area. The trail loops around North Window and South Window and forks to Turret Arch providing a unique view of the Windows. The trails offer guided access to multiple viewscapes around the Windows Section (Figure 5.12).



Figure 5.12 UofA Researcher and Hopi Representative Discuss the Landscape

Visual observations of the unique landscape and rock formations at the Windows Section EOA study area contribute to the cultural interpretation of the place. Hopi representatives pointed out distinct features that have cultural significance, like the arches that resemble rainbows. The surrounding landscape features, like the La Sal mountain range, contribute to the powerful viewscape and enhance the spiritual connection felt by Hopi representatives to this place.

5.4.3 Native American Comments

The Hopi representatives that visited the Windows Section with UofA researchers had many comments about the significance of the area and the meaning of several prominent geological features. Responses from the Hopi representatives regarding this EOA study area are documented below.

Hopi representatives described the geography of this area and/or elements that stood out.

- *Have you heard of the Twin Warriors? Well, in our culture we think that they made all of these things that were made out here, the holes in the rocks, yeah. They are just boys, very mischievous, just like other young boys. They slid and moved the rocks and mountains because they were playing. Moved things around.*

- *Every big mountain like that* [La Sal] *is where the big heavy rains come from. Maybe because it is higher, or more green. The more green trees, the more they pull the rain down. We call the mountains around Flagstaff* [refers to San Francisco Peaks] *Rain Cloud House, that is where the rain clouds form first and then move around from there. Ómawki* [Cloud House]. *So those mountains bring rain to this place, and I bet it goes down to the Colorado River over there.*

- *That little rock looks good for different kinds of reasons like a ka'tsina standing against the rainbow. The ka'tsina dance against the rainbow. But that rock right there looks like a ka'tsina and the rainbow is behind him. Head there, and he is standing, holding the rainbow up. There are all kinds of rocks shaped like a human or bird, but I saw one yesterday that looked like a bird sitting on top of a big rock. As far as I can see he is the shape sitting there. It looks like a human standing up, or ka'tsina that shaped wearing all their clothes. The ka'tsinas were probably up through here, they made the shape. It is really nice here. That's a lady wearing all of her mantas and hair done up right there as the ka'tsina.*

- *The wind is going through here. When wind travels back and forth here, it is important.*

- *I can tell it has a powerful feeling here. You can sense it. Like some kind of spiritual place that was probably used.*

Hopi representatives commented on the ways that Indian people would have used this area.

- *The acoustics here are nice* [good for singing] (Figure 5.13).



Figure 5.13 Hopi Representative Explains Previous Uses of the Windows Section to UofA Researcher

- *They probably had songs that they sang while they were hunting, but like our songs right now always happen inside the communities, you know, inside the villages. But like when we do go hunt we sing out there, whatever people want to sing instead of actually having ceremonies and dances. They may have had all that when they got back just like we do.*

- *The windows can be used as markers, looking into something, the future or the past. This is probably a good area where we are at, this clearing. You can see the sun rise, or see the sun set to mark certain seasons. Maybe hunting season or when they can get up and leave. Kind of like the area that we have in our village, there is a certain rock where one person is designated to watch for sun rises and sun sets, depending on where the horizon is, where it rises and sets gives us an idea of when to do certain things.*

- *They would hunt, use the river, farm and live down there* [below in the valley].

- *Hopi is always doing something, always an event or ceremony, feeding people just about once a month. That would have been the same a long time ago.*

Hopi representatives explained how this place is connected to others.

- *Without your history, knowing your history, then you are kind of a nobody. You have lost your identity without this understanding. Being here we see evidence of our people moving through here, but before I came out here I had no idea we*

were up this far. This evidence is for some of the clans that are still existing back home.

- [Hopi people] *have shrines closer to the village that are made for these areas, so in a sense they go that short distance but in the spiritual world they are going greater distances to where places actually are, they are just closer to the village but they are placing offerings there for these places out here.*

Hopi representatives explained how Indian people would have used the animals in this area.

- *This was probably used for hunting. They are only going to be able to dig down so far here for farming, because of the rock all underneath, nothing would really grow. So they probably would just hunt up here.*
- *I am sure there was a lot of game here back then. We saw a deer yesterday. She came out, this big doe, to see one of the guys because that is his clan, and we were all surprised.*
- *Down below where Moab is, it is a good farming area. Up here, up higher, is where the animals were. I am certain they went there to go hunting, and the rivers supplied fish for them, or small ponds provided different types of animals that come to drink to the water sources. Smaller game.*
- *I know people would hunt here, but that is all that I can say.*
- *That is also where big game live, up on those mountains, because they like the cooler weather. So the game is up in higher areas. The people traveled to the mountains and hunted, that is what people did back then.*

Hopi representatives explained how Indian people would have used the plants in this area.

- *The ladies like these dead juniper trees for making the piki bread back home. They burn more evenly.*
- *See over there, the piñon, when it starts to rain the piñons close, when it is warm they open. Crack it, roast it, and eat the inside.*
- *You can chew on the ends of those cedar branches, you can boil it, and then you drink it. Helps your lungs clear, a tea it is a good medicine. Swallow the juice if you have a cold in the wintertime. Then you can burn it. The old ones were buried with cedar things* [masks, objects] *and white people dug it up or stole it and that is bad luck. So if you are near it you can burn the cedar and you turn yourself around in the smoke, and then you are safe* [protected]. *Lots of long time ago medicines here.*
- *We use this* [greasewood] *for paho, prayer feather for rain or life, and the clouds. So you pray to it, then take it to the shrine, there is probably a shrine near here,*

where they can go pray for rain, clouds, the plants. They go pray for the corn to make it grow.

Hopi representatives explained how Indian people would have visited or used the geological resources in this area.

- *They probably did* [have ceremonies here], *this place, the rocks, it is unlike anywhere else in the world.*
- *There is one set of rocks down there they look like they have heads on them, like sculptures. They make ka'tsina dolls like that at home that are straight, with the head attached like that. It reminded me of those.*
- *Ball head rock towers like that we call Koyemsi, or Mudheads, like the ka'tsina. Well, back in Kayenta* [Arizona] *we have a lot of these and we call them that.*
- *These* [hoodoos] *look kind of similar to Koyemsi, like how the Mudheads look, that same reddish color.*

Hopi representatives provided comments regarding the area as a whole.

- *Our culture will always be here, we are just visitors so we have to make sure to see it, respect it, and then move on.*
- *If the kids were to come back up here, to check these places out and return, we would have them do a rainbow dance, where the boys and the girls wear different colors. Since we know this as the place of the rainbows, that would be appropriate since that is what it is pertaining too. The mist is of course what gives the rainbow the color, so maybe the name for this place has something to do with the* [Colorado] *river too. You know how it curves right here? The angles, maybe there were lots of rainbows, but definitely the rock arches remind us of rainbows.*
- *They talk about where people came from, how we migrated, and we come here and ask questions, and as I get older I think we have to keep that history going with the young ones.*
- *It is bad that people are climbing all over these arches. Hopi say that our job is to protect the land, so I think they should be preserved the way they are. It is not good to destroy any of these things, or take things home. Just like the petroglyphs need a fence around them.*

5.4.4 Ethnographic Comments

Among the dry, arid lands of the park, surrounded by giant Entrada Sandstone boulders, the participating Hopi representatives began to explain the name of this park as the Place of the Rainbows, or *Pavayoykasi* in the Hopi language. The association of rock arches with rainbows is an interesting comparison. Entrada Sandstone formations and arches, or rainbows, were visible

throughout all areas of the Windows Section. These rock formations were of particular interest to Hopi representatives at the site. While several tribes referred to free standing sandstone towers as hoodoos, the Hopi described them as Koyemsi, or Mudhead Ka'tsinas (Figure 5.14).



Figure 5.14 Entrada Sandstone Pillar Reminiscent of Mudhead Ka'tsina as Noted by Hopi Representatives

It is not surprising that the topic of farming, moisture, and clouds would surface during data collection events with Hopi representatives as they visited sites within Arches NP since their livelihood is centered on agriculture. The clear view of the snowcapped La Sal Mountains to the east of the Windows Section prompted the Hopi representatives to explain the connection between the mountains and the valley below (Figure 5.15). As the source of water for the creeks, streams, and washes in the area, melting snow from the mountain holds spiritual connections for the Hopi people. The ancient ones or ancestral Hopi living in the Arches NP vicinity would have depended greatly on prayers to the spirit beings who reside in the clouds, *ómawki* [cloud house], above the mountains to bring rain and runoff to water their fields in the nearby Pack Creek flood plains, Moab Valley, Salt Wash, Cache Wash, Courthouse Wash, and Salt Valley.



Figure 5.15 The La Sal Mountains Behind Turret Arch at the Windows Section

The Entrada Sandstone formations that are reminiscent of corn, rainbows, and ka'tsina beings were an important feature of this site for the Hopi representatives. Likewise, the view of the ómawki from the Windows Section contributes to the importance of the area by providing a connection with other places in the Moab region. The viewscape provides spiritual ties between the land and the Hopi people.

5.5 Courthouse Wash EOA Study Area

Within the Courthouse Wash EOA study area, the location of the Colorado River and the surrounding floodplain and the Purple Sage Traditional Cultural Property (TCP) eligible area were points of intrigue for the Hopi representatives (Figure 5.16). Agricultural pursuits and small camps would have flourished below on the fertile floodplain of the Colorado River. Spiritual connections with the ka'tsina depictions on the Moab Panel[1] and the cottonwood trees along the Courthouse Wash were noted as other important components of this site for the Hopi. The viewscape of the snowcapped La Sal Mountains from the Moab Panel contributed to the selection of this location for the placement of sacred images associated with bringing moisture to the people and their crops. The combination of these elements and views made the Courthouse Wash EOA study area a point of interest for the Hopi.

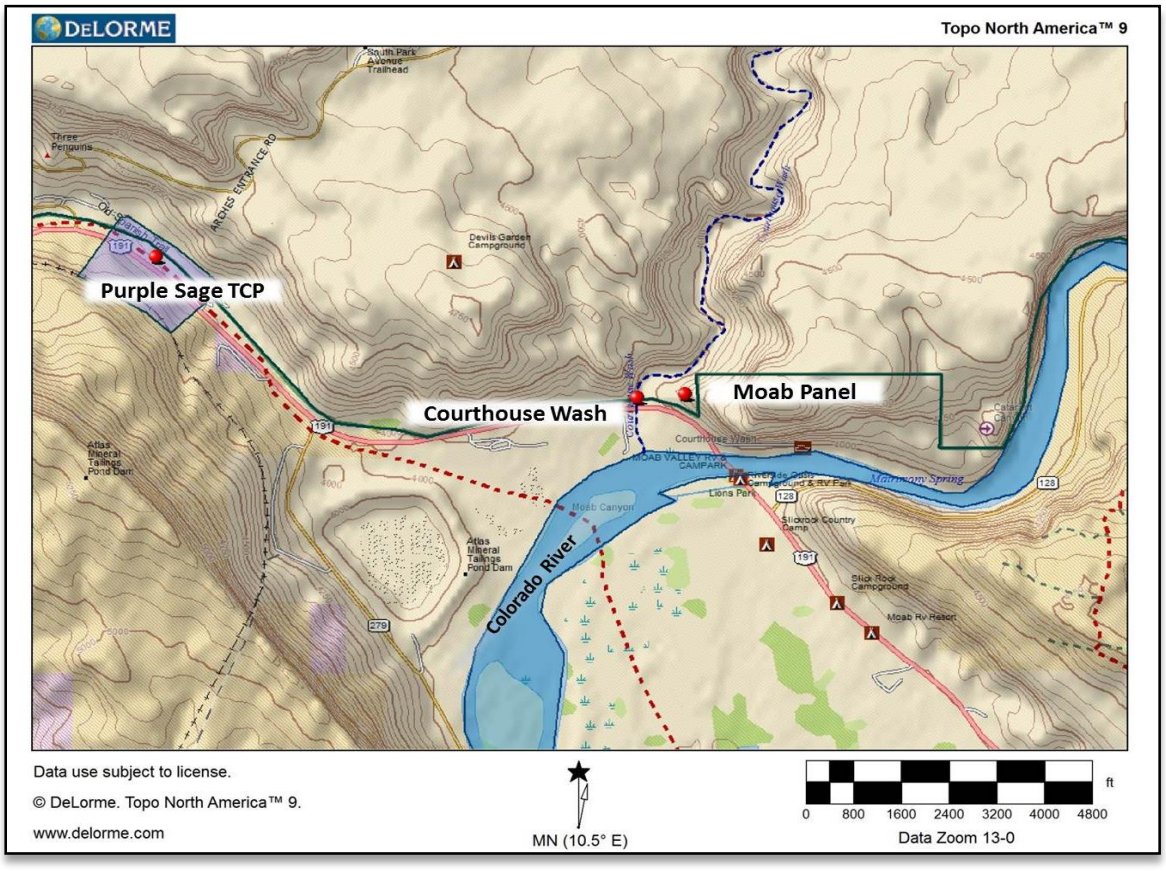


Figure 5.16 Map of Courthouse Wash EOA Study Area

Courthouse Wash is a major hydrological system within Arches NP, and is the largest riparian area located in the southern part of the park. The wash trends to the southeast approximately 17 miles, 6.5 miles of which is in the park, and flows into the Colorado River approximately 900 feet south of the park boundary (see earlier map in the Introduction, which has the wash fully illustrated). Elevation for the area ranges from approximately 3,970-4,300 feet. The EOA study area runs southeast from the park headquarters. The Moab Panel is situated

[1] The Moab Panel is also referred to as the Courthouse Wash Panel by Arches NP.

near the convergence point of these two hydrological systems. The panel contains a series of painted and pecked figures on a cliff face just east of Courthouse Wash and north of the Colorado River.

Just south of the Arches NP park headquarters is a large and regionally unique stand of Purple Sage (*Poliomintha incana*). This sacred plant grows throughout the bottom of the valley to the southeast, extending towards Highway 191. The purple sage area was previously studied and determined by Arches NP and the consulting tribes to be eligible as a TCP. In addition to purple sage, other ethnobotanical resources are found along the low hills that form the wash. This EOA study area contains an abundance of both natural and archaeological resources.

5.5.1 Natural Setting

The geology and ecology of the Courthouse Wash EOA study area, and the surrounding area, represents a wide variety of resources and places that are essential to the definition of Arches as a park. Diverse plant life in the area is supported by the continuous flow of water from Courthouse Wash. In drier areas, large quantities of purple sage, Indian tea, and rabbitbrush (*Chrysothamnus* ssp.) grow.

Geology

Geologic features present within the Courthouse Wash area include two hydrological systems, large sandstone bluffs and outcroppings, and geological traces of the Moab Fault located nearby. The Colorado River is visible from portions of the area. A topographic image of the Courthouse Wash EOA study area illustrates the geological complexity of the landscape, which includes deep and vertical canyons, and high flat mesas (Figure 5.17).



Figure 5.17 Topographic Features of Courthouse Wash and Surrounding Area

Courthouse Wash plays an important role in the formation of the geologic features in the area and contributes to the groundwater supply. Snow and rain, in addition to water from Courthouse Wash, contribute to the groundwater recharge within Arches NP.

Ecology

Courthouse Wash is the only perennial, or nearly perennial, stream located in the southwestern part of Arches NP. The park is bordered by the Colorado River and the unique ecological systems sustained by the river. Courthouse Wash supports a stable riparian environment that is critical to the overall ecology of the park and adjacent areas (Hurlow and Bishop 2003: 1). Some of the ethnobotanical resources that grow near the stream include cottonwood (*Populus fremontii*), greasewood, willow, sage (*Salvia* ssp.), and fourwing saltbush (Figure 5.18).



Figure 5.18 Greasewood Growing Near Courthouse Wash

The large sandstone bluffs surrounding Courthouse Wash provide a habitat for drought resistant wild grasses, cacti, and small shrubs. Moisture, dust, and rock debris accumulate in crevices and cracks in the sandstone, providing a place for plants to grow such as sacred datura (*Datura wrightii*), yellow bluestem (*Bothriochloa ischaemum*), prickly pear, and yucca.

Ecological zones outside of the Courthouse Wash riparian area include sagebrush and saltbush habitats. Alluvial deposits with seasonal access to water and the Colorado River are located south of Courthouse Wash. Plants that grow in this area include purple sage, tall sage (*Artemisia tridentate*), sand sage (*Artemisia filifolia*), prince's plume (*Stanleya pinnata*), and Indian tea.

5.5.2 Special Features

Special features at the Courthouse Wash EOA study area include (1) the Courthouse Wash hydrological system, (2) the Purple Sage TCP eligible area, and (3) the Moab Panel. Each of these features contributed to the decision to visit and interpret these as parts of the EOA study area.

Hopi representatives identified a wide variety of ethnobotanical resources at Courthouse Wash and the Purple Sage TCP eligible area including medicinal, ceremonial, and food plants (Figure 5.19). Greasewood and skunkbush (*Rhus trilobata*) were two of the plants that were emphasized as culturally important for many purposes including use as tools, food, firewood, arrow shafts, stirring sticks for cooking, and ceremonial functions, such as the construction of *pahos* (prayer feathers).



Figure 5.19 Hopi Representative and UofA Researcher Discussing Skunkbush

The Courthouse Wash hydrological system is a steep-sided, narrow, flat bottomed canyon that cuts through the surrounding sandstone features. The confluence of the Colorado River and Courthouse Wash is 0.2 miles from the point where it passes under Highway 191. The

convergence of the Colorado River and Courthouse Wash provided an access point to the resources within the region. The hydrological system, diverse vegetation, and cultural landscape add to the significance of this EOA study area.

The Moab Panel is a unique feature within the Courthouse Wash EOA study area. The pictographs and petroglyphs are diverse in pigment and style type, which contributes to the uniqueness of this area (Figure 5.20). The location of the Moab Panel provides a view of the Colorado River and Courthouse Wash from an elevated location.



Figure 5.20 Moab Panel

Natural and cultural resources are connected to one another. The Moab Panel's proximity to the Colorado River and abundance of important traditional plants nearby is an example of this connection. Hopi representatives noted their cultural connection to this place based on markings made by their ancestors.

5.5.3 Native American Comments

Hopi representatives visited the Courthouse Wash EOA study area with UofA researchers during the March 2015 field session. They provided comments about the significance of the area and the meaning of several prominent cultural and landscape features. Responses from the Hopi representatives are presented under the topic that they discussed with UofA researchers.

Hopi representatives described the geography of this area and/or elements that stood out.

- *The Ka'tsina Clan, they put their symbol up there. This would be a good place for the scene* [Moab Panel] *because you can see it* [from] *far away. See it from below.*
- *The farms would have been down below, near the water* [Colorado River] *and the people would have traveled to the mountains to hunt deer, big horns, and elk. They would have grown food and gathered plants, enough to last them as they traveled on to their next place during the migration.*

Hopi representatives commented on the ways that Indian people would have used this area.

- *The people* [from] *below would come up here, pray* [to the ka'tsinas on the wall], *because they were praying for them to bring water.*
- *These figures on the wall are what Hopi say or call footprints because they tell where other people have gone. They follow these wherever they lead them, wherever they go.*
- *Oh, a spiral! That means the Hopi came here. When you see a spiral like that it means that this place belongs to Hopi people. This is what I hear from the older people. Sure enough that is ours, here, now. That is left to remind us the Hopi were here, where we are now.*

Hopi representatives discussed why or for what purpose Indian people would have used this area.

- *This might be an important place, because when Hopi go on their pilgrimage they go to different areas, and they stop to make their marking in certain places. When they get there they make their clan symbol so that other people will know what clans have passed through there. This may be something similar to that because of how well preserved the paintings are.*
- *This might also be an important stopping place where they would renew the paint and mark it over and over so it will show more because we are right along the Colorado River and this canyon here is pretty fertile for farming so this would probably be one area they would go to for a purpose, like vision questing or something.*

Hopi representatives explained how this place is connected to others.

- *It is a good sign that we saw the migration symbol, which is what tells us that Hopi clans came through this area. They always tell us to look for the spiral. If we see one then we know it is the Hopi people that came through. Solstice, this is what it represents, the stars, our migration.*

- *From what I know, the Hopi followed the Colorado River up and out of that canyon. The people, the Bear, and Spider clans, these are medicinal people and they were up north this way. They can climb anything and go anywhere. They can go to areas where other people cannot go. But those people that I mentioned, those are the ones who came up through this area, and that is all I can say about that.*

- *Hopi leave behind our tracks, our footprints, so we know our people were here. Spider clan, Bearstrap, Sand, Bamboo clan. They were all here* (Figure 5.21).

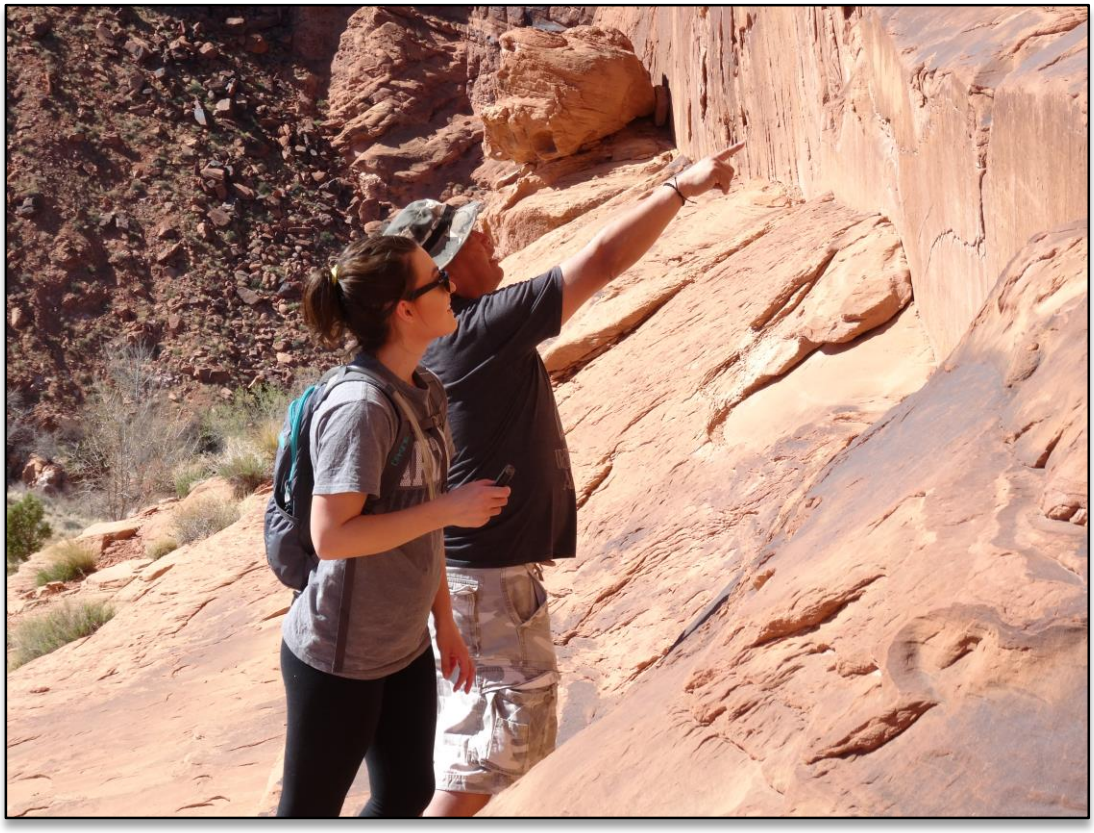


Figure 5.21 Hopi Representative and UofA Researcher Discuss Moab Panel

- *This may lead to other settlements, be connected with other places because we know this area all along the river was used for farming.*

Hopi representatives noted if Indian people would have used water from the area.

- *This site has a source for water at Courthouse and the* [Colorado] *River. They would also have used it for irrigation of crops. There may have been places nearby where springs were available for fresh drinking water.*

- *The dips, we say paklii, here in the rock, they fill with rainwater and you can drink that.*

- *They probably had dams for channeling the melting snow from the mountains down to the farms.*

Hopi representatives explained how Indian people would have used the plants at the area.

- *So they would gather plants for medicine, and take them along to the next place that they were going. They would store it in a place where they could use it later. Some people that they bury will have corn or melon seeds with them.*

- *Wherever the migrating people settled for any amount of time they had to be near to the water. What they plant they knew they would need enough* [of] *to take part of the harvest with them, they knew they would continue to move on. Where they stopped along the way, they needed water to grow corn and other crops to take with them later. At the same time they would go out and hunt, and they learned about plants what is good for you to eat and what is for medicine. If they ever get sick they learn to cure with those.*

- *They stocked up on food before they continued on from here. They grew food and collected plants.*

- *Cottonwoods, sőhővi, we carve ka'tsina* [figurines] *out from this.*

Hopi representatives explained how Indian people would have used the animals in this area.

- *The river would have been a place for hunting animals because they come down to get a drink, and then you could hunt pretty easily.*

- *Up in the* [La Sal Mountains] *over there, the people from these farms down by the river would go hunting for elk or deer up in the mountains.*

Hopi representatives explained how Indian people would have used this area and/or artifacts.

- *I am sure down below in the floodplain area there were settlements, agriculture and farming, with farm houses. They are made of sticks and logs, ta-kut-skey, man houses or temporary houses, just to cover us while we rest and get our energy back.*

- *The Miti'isi'nom, the ancient ones, lived here. All of their history is in the ground.*

- *Water is very important to us, it is a good sign, so when we come across a water source we usually pray to it, then splash ourselves with it so that it will follow us back to our home because we need the water. We sometimes take a little water back with us so that the whole family can have a little sip.*

- *Miti'isi'nom* [the ancient ones], *were here, but I cannot recognize what they left behind because they came through so much earlier than our group. The blue star falling was the signal to come back home, turn around.*

Hopi representatives explained how Indian people would have visited or used the geological resources at the area.

- *Each clan had their own migration route, so each clan has their own stories. They were not all the same* [not everyone was here]. *Just the Bear and Spider clan came this way. The bear is on the panel.*

Hopi representatives provided comments regarding the area as a whole.

- *Everything has a story to tell, and it is our duty to keep those stories alive from generation to generation by bringing the youths out, it keeps our story strong, it ties us to the land, the area.*

- *Yes this is a place where we would want to come and spend time. That spiral that we found over here* [by the Moab Panel] *explains that we have been here before.*

5.5.4 Ethnographic Comments

The Colorado River is visible from the Moab Panel, and plays an important role in connecting the Hopi people with culturally significant areas and landscapes throughout the Southwest (Figure 5.22).



Figure 5.22 Hopi Representatives and UofA Researchers Visiting the Moab Panel at Courthouse Wash

American Indian groups have used the water and natural resources of the Moab Valley in various ways for more than ten thousand years, as documented by the presence of Folsom points in and around the area (Hunt and Tanner 1960). The prominent source of water is of course the Colorado River, which creates floodplains and wetlands as it meanders through the area. Smaller, but in some respect more ecologically productive rivers, such as Courthouse Wash, Pack Creek, and Mill Creek make special contributions to the Moab Valley ecology (Figure 5.23). These water sources all produce special ecosystems that support both plants and animals used by American Indian people. Likewise, these wet areas served horticultural and agricultural purposes through time. While some less well-known American Indian food plants like chenopodium and amaranth were managed in early Indian gardens, the more recognized pattern of growing of corn, bean, and squash (or the corn-complex) came later and probably reflected intensive farming with irrigation. Perhaps the earliest recognized presence of the corn-complex has now been dated in Jackson Flats, on Kanab Creek, in southern Utah at 1,200 BC (Roberts and Ahlstrom 2014). Certainly, this site is considerably south of the Moab Valley, but they are potentially connected as are so many of the peoples of the Colorado Plateau, including the Hopi people.



Figure 5.23 Irrigable Farm Land in Moab Valley near Courthouse Wash

Various European trapping and survey groups passed near the Moab Valley in the early 1800s, but early Mormon settlers provide the best description of Indian agriculture. When Mormon settlers arrived in the Moab Valley in 1855, they found Ute people farming along the river. The Elk Mountain Mission established a small community, but the Indians who were

already farming the fertile *Pisisvaya* (Colorado River) bottoms regarded them as competition and drove them out after they had been there only a few months. Not until the very late 1870s and 1880s did a few Mormon families find it possible to build permanent homes (Firmage 1996; Pioneer 2014).

Several of the peckings and paintings at the Moab Panel were identified by the Hopi representatives as very special and indicative of previous Hopi occupation in the region. The spirals and footprints found on boulders near the Moab Panel were especially important, symbolizing the journeys of the Miti'isi'nom (the ancient ones) through the area, noted Hopi representatives (Figure 5.24).



Figure 5.24 Moab Panel Images Including a Spiral (L) and Footprint (R)

Barrier Canyon Style (BCS), first applied by Polly Schaafsma (1971), describes a distinctive style of rock art which appears mostly in Utah, with the largest concentration of sites located along Barrier Creek in Horseshoe Canyon and around the San Rafael Swell and Canyonlands National Park. BCS rock art panels are mostly paintings but there are also several peckings in the style. These panels are believed to have been created during the late archaic period (1,900 BC-AD 300) and they have been carbon-14 dated to be somewhere in the range of 1,500 to 4,000 years old, possibly older, placing them in a pre-ceramic time in Southeastern Utah (Tipps 1994).

This EOA study area represents an integral connection that transcends time and space between the Hopi people and the Arches NP landscape. The Miti'isi'nom came to this area long ago, leaving markings on the rocks to remind other travelers of their journey through the region. Today, their descendants, the Hopi, revisit the areas where their ancestors walked and are reminded of their long-standing connections with the land, rocks, and sacred waters.

5.6 Wolfe Ranch and Ute Panel EOA Study Area

Rock peckings draw visitors to the Ute Panel located in the Wolfe Ranch area. The single pecked image on the west side of the rock panel demonstrates stylistic differences from the cluster of anthropomorphic and zoomorphic on the east side. Hopi representatives interpreted the pecked images, as well as provided an interpretation as to who may have placed them there. The Hopi representatives added new interpretations and great complexity to this EOA study area.

The Wolfe Ranch and Ute Panel EOA study area is located along the trail from Wolfe Ranch to Delicate Arch. The elevation of the area ranges from 4,295-5,000 feet, with lower elevation points near the Salt Wash within the basin. The EOA study area is located 2.6 miles northeast from Panorama Point and 6.4 miles north from the Windows Section. The EOA study area is just north of four of the major hydrological systems in the park—Salt Valley Wash, Salt Wash, Winter Camp Wash, and Cache Valley Wash (Figure 5.25). Illustrated in Figure 5.25 are the convergence points of the four washes that come together, joining the Salt Wash south of this EOA study area, which then flows into the Colorado River.

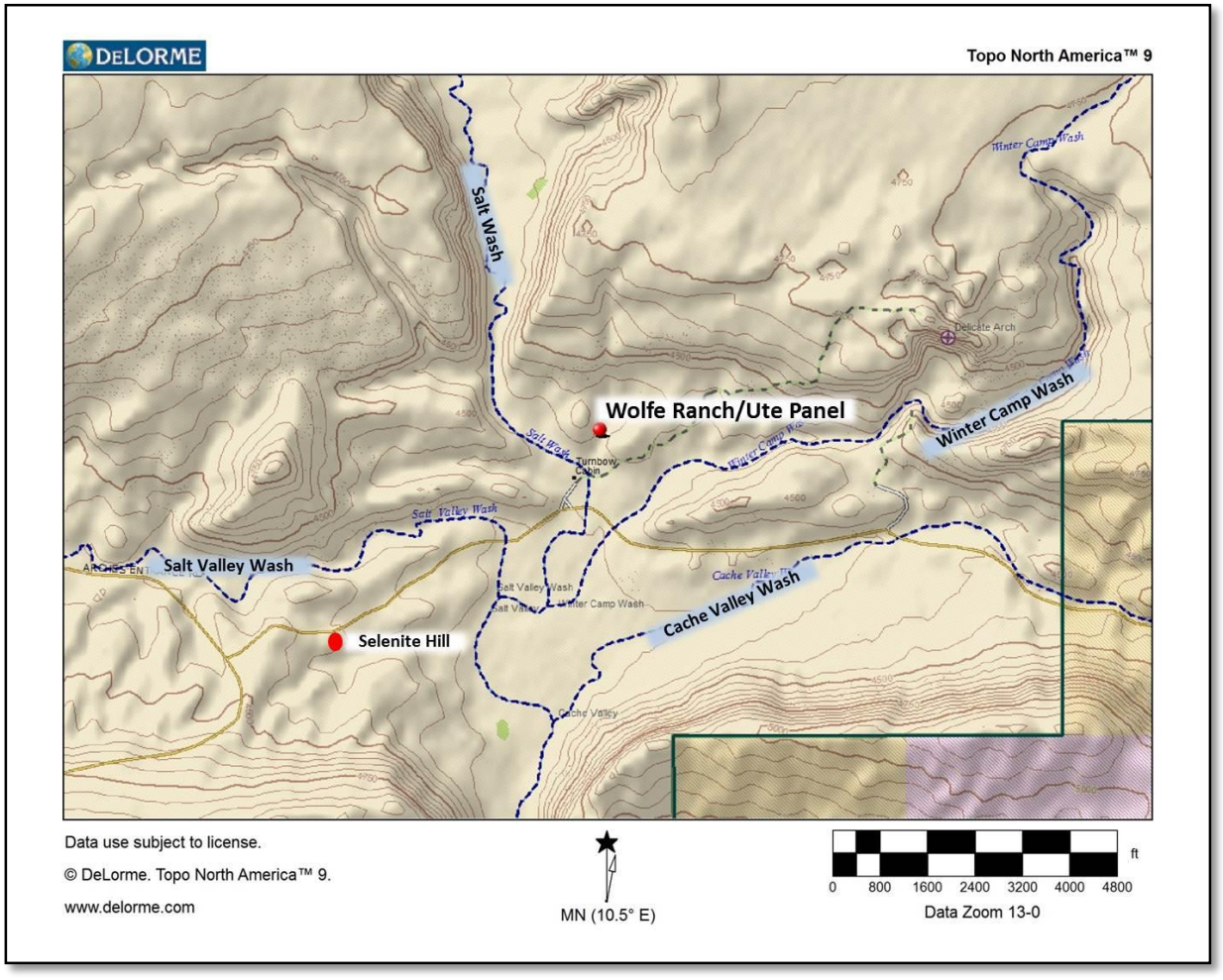


Figure 5.25 Ute Panel EOA Study Area

The Ute Panel, comprised of two rock pecking panels, is situated in a wet and enclosed valley on the east side of the park along Salt Wash (Figure 5.26). On the west panel, Hopi representatives noted a single pecking of a beetle with corn fringe on its head (Figure 5.27 (L)). On the east panel, Hopi representatives interpreted the image as a hunting scene with a series of zoomorphic and anthropomorphic features (Figure 5.27 (R)).



Figure 5.26 Hopi Representatives at Ute Panel Petroglyphs near Wolfe Ranch



Figure 5.27 East (L) and West (R) Sides of the Ute Panel Petroglyphs near Wolfe Ranch

There are several cultural and natural resources that contribute to the interpretation provided by Hopi representatives at the Wolfe Ranch and Ute Panel EOA study area. These features indicate how Hopi people would have utilized this place in the past, and create a connection to the present and future.

5.6.1 Natural Setting

The geology and ecology of the Wolfe Ranch and Ute Panel EOA study area represent a diverse number of resources and culturally important places. Abutting landscape features that were discussed include hoodoos, selenite covered hills, hydrological systems, mineral resources, and the view of the La Sal Mountains. There is a continuous flow of water from the Salt Wash that influences the biodiversity and biocomplexity of the EOA study area. A freshwater spring is located nearby, and may have provided a source of drinking water for the inhabitants of the area.

Geology

The geology of the Wolfe Ranch and Ute Panel EOA study area represents diversity in rock, clay, and soil types, and includes the hydrology of four streams that flow nearby. Selenite deposits are found covering a hill south of Delicate Arch Road, less than a mile west of the Wolfe Ranch area and Ute Panel EOA study area. The topographic map provides an overview of the geological features and hydrological systems near the Wolfe Ranch area and Ute Panel EOA study area (Figure 5.28). This image further illustrates the protection that the large bluffs and canyons offer for communities living within this resource rich basin.

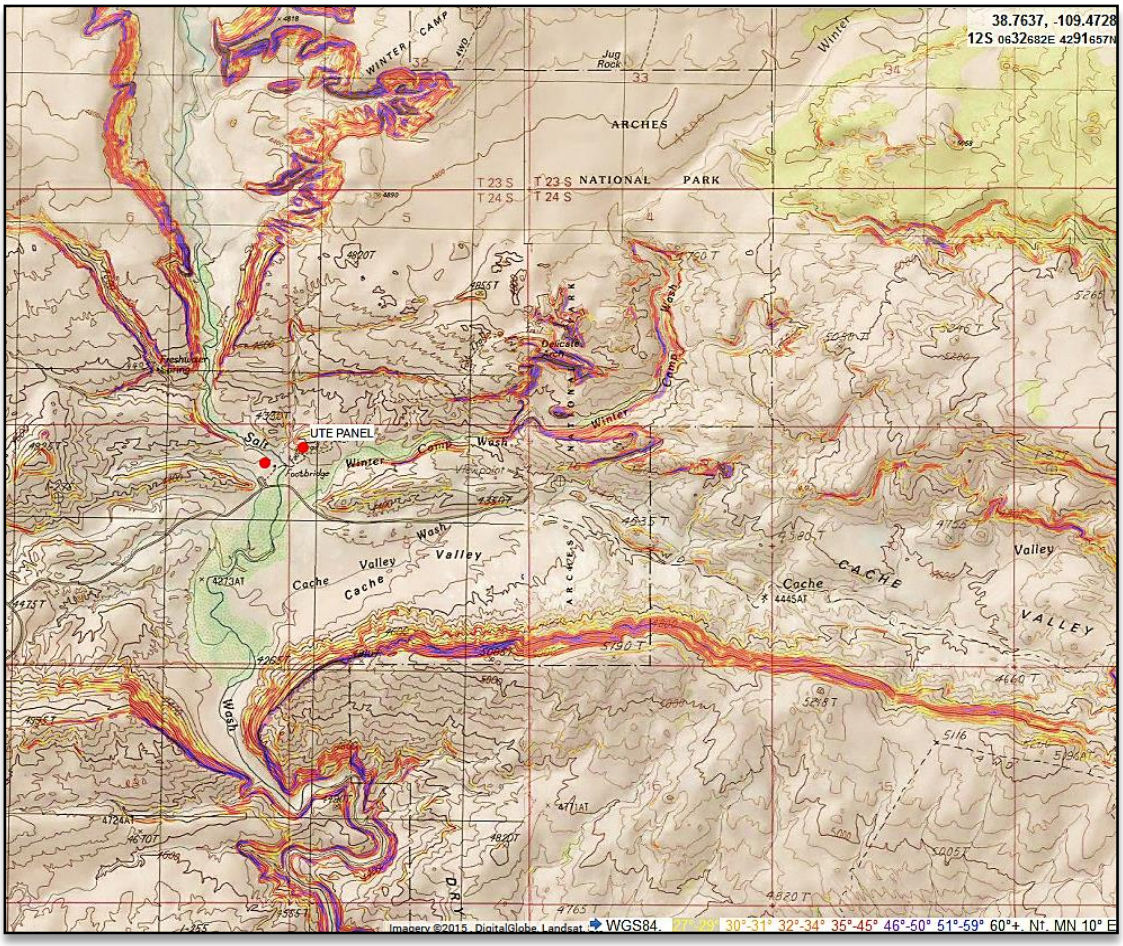


Figure 5.28 Topographic Map of Wolfe Ranch Area and Ute Panel EOA Study Area

Large Entrada Sandstone hoodoos and arches are visible to the south and southeast of the Ute Panel. Large rock outcroppings and boulders of limestone frame the northern and western portions of the area. Salt Wash flows through the center of the Wolfe Ranch area and Ute Panel EOA study area, joining Winter Camp Wash and Salt Valley Wash less than a mile downstream.

The Wolfe Ranch and Ute Panel EOA study area is rich in mineral resources. On a nearby hill, there are large deposits of selenite. Selenite is frequently found deposited in uranium rich soil. This has an effect on the types of plants that can grow in abundance.

Ecology

From the time that Wolfe settled the area to approximately three decades ago, sheep and cattle grazed the land (Wolfe Ranch Trail Guide 2007). As a result, natural resources were altered; however, the extent to which plants, water, and soil were adversely affected is unclear. Salt Wash enables a diverse number of plant resources to grow within this location. Cottonwoods and willows require significantly more water than the Pinyon-Juniper woodlands in high desert areas, and therefore are only found growing along stream and river corridors where their roots can reach the water table easily (Figure 5.29).



Figure 5.29 Plants Observed Growing Near Salt Wash and Ute Panel

Plant resources associated with riparian ecosystems include phragmites species, willows, and cottonwood. Other plants observed growing within the EOA study area include amaranth

(*Amaranthus* ssp.), Indian ricegrass (*Oryzopsis hymenoides*), greasewood, prince's plume, rabbitbrush, fourwing saltbush, scrub oak (*Quercus* ssp.), Indian tea, sage (*Salvia* ssp.), yucca, blackbrush (*Coleogyne ramosissima),* buckbrush (*Purshia tridentate),* fuzzy opuntia (*Opuntia phaeacantha),* columbine (*Aquilegia* ssp.*),* locoweed (*Astragalus* ssp.), penstemon (*Penstemon* ssp.*),* willow and various grasses (Figure 5.30). This is one of the few areas within Arches NP where amaranth and phragmites were observed.



Figure 5.30 Plants Observed Growing near the Ute Panel

Water is an important feature at this site, as demonstrated by the variety of unique plant resources, and the extensive use of the site by American Indian people. The access to a continuously flowing hydrological system and nearby freshwater spring may be key reasons that the first humans came to this specific area, and continued to stay and utilize the land and resources.

5.6.2 Special Features

The Wolfe Ranch and Ute Panel EOA study area was selected as a point of interest because of the cultural and landscape features that are different from those located at other areas in and around Arches NP. The special features of this area include (1) year-round water source, (2) vegetation, (3) minerals and clays, and (4) the panel (Figure 5.31).



Figure 5.31 Lush Wetland Vegetation in Salt Wash Facing South

The Wolfe Ranch area is unique because it is located near a year-round water source. Wolfe Ranch is located along the Salt Wash, a hydrological system that runs south from the Lost Spring Canyon to the Colorado River. This waterway also converges with three other systems before it runs into the Colorado River: the Salt Valley Wash, Winter Camp Wash, and Cache Valley Wash. The convergence of multiple hydrological systems creates a unique ecosystem in the high desert. Hopi representatives noted that the springs surrounding the Wolfe Ranch and Ute Panel EOA study area provide a reliable water source that would support a temporary settlement with small-scale farming and attract game that could be hunted.

The year-round availability of water in this area promotes lush desert plant life (Figure 5.32). Hopi representatives identified many culturally significant species, such as greasewood. This plant has many utilitarian and ceremonial uses. Hopi representatives noted the quality and abundance of greasewood in the Wolfe Ranch and Ute Panel EOA study area. One way in which greasewood is used by Hopi people is in arrow making. The stems must be strong and straight in order to make good arrows. The greasewood bushes growing at the Wolfe Ranch and Ute Panel EOA study area were abundant.



Figure 5.32 Hopi Representiatives Describing the Uses for Greasewood to a UofA Researcher

The Wolfe Ranch and Ute Panel EOA study area is a source for culturally significant minerals. Hopi representatives identified a Mancos Shale, which is a chalky blue green colored mineral deposit. It is used as a body paint in ceremony, and can also be used in pottery making. This rare and culturally significant minerals are present in Arches NP due to the unique natural and geologic past.

The rock panel is a key feature of the Wolfe Ranch and Ute Panel EOA study area. Hopi representatives indicated that there were significant differences in the east and west peckings, and that these differences could be associated with time. One Hopi representative interpreted the image on the left-hand side as a beetle with corn fringe on the top, while another representatives said the pecking was made by the people who came through this region long ago, and he was not able to interpret its meaning. He also noted that it had been placed here during one of the very early migrations by the Miti'isi'nom (the ancient ones). The series of pecked anthropomorphic and zoomorphic figures on the right-hand side is thought to have been made at a later date, and was interpreted as a hunting scene that includes men on horseback among a group of bighorn sheep with a coyote following closely behind. To the far right within the scene, there is a figure mounted on horseback with a long stick. One Hopi representative referred to this figure as the "keeper of the game," and said he often incorporates this design into his own artwork as a way to honor the past and hunting.

Hopi representatives noted an abundance of resources at the Wolfe Ranch and Ute Panel EOA study area that would have supported human occupation for an extended time before the Wolfe Ranch was actually established. Fertile soil, lush plant life, thriving wildlife, and fresh water made this a place that provided sustenance to Hopi people and contributed to the cultural significance of the area.

5.6.3 Native American Comments

The Hopi representatives who visited the Wolfe Ranch and Ute Panel EOA study area with UofA researchers had many comments about the significance of the area and the meaning of several prominent geological features. The information presented below reflects the thoughts and opinions of the Hopi representatives who commented on this EOA study area.

Hopi representatives described the geography of this area and/or elements that stood out.

- *The name that we have for the park is The Place of Rainbows, Pavayoykasi. We think that all these arches around here were* [reminiscent of] *the rainbows.*

Hopi representatives commented on the ways that Indian people would have used this area.

- *They probably did plant, like maybe for a few years, and they got everything together for when they journeyed they had that stored to move so many miles, and maybe they would plant for a whole year, so that they could keep moving. So they made these stops in here to use that and then when the next people that came through they could see that you could farm here and they would use it too. Same community, same fields. They probably sang about these areas and what they saw* (Figure 5.33).



Figure 5.33 Hopi Representatives and UofA Researchers Discuss Uses of the EOA Study Site

- *During their migration they were heading to the wet areas where they would farm and then move again. That is all they were doing. They were also heading to those wet areas, the wet places, where they would settle and get enough food together and then go move on again. That is the reason why I think they settled around here, because there are more wetlands and more rain where they can raise what they needed, and when they had harvested enough, they would move on again.*

Hopi representatives explained how this place is connected to others.

- *My thinking is that they are praying for the moisture, so it probably will come back in a sense, it evaporates and become the clouds and then come back and water the animals, plants, people, water everything.*

- *There is a blue star that tells them it was time for the Hopi to quit their migration* [some clans migrated through Arches NP] *and gather here and there and wait for that little cloud up there, it would be clear but with a little could up there that was pointing down to the center of earth, that is why we are where we are now* [Hopi].

Hopi representatives noted if Indian people would have used water from the area.

- *This little bridge here, when I looked in there I just asked for it to go our way too, even if it is just a little puddle to just go to are area too. There is a lot* [of water] *around here so I pray to it like that, and for all the living in there, the bugs and the fish, to have happy healthy lives. That is why I wanted to stop at the river to so we can go there and pray. A lot of the moisture comes from the Colorado River at home, so out of that canyon it will head out that way to head to the reservation. At home we have the springs, so that is where we go to pray directly to the water with the homa* [corn meal offering] *so that is where we go to pray at home.*

- *Sitting here right now I am just think about the rain. You always have to think about the rain. If your strong enough to bring all the clouds and everything. You will not forget the water. Always think about it. I wish it would rain right now, especially when it is hot.*

- *In the mountains, all the waters come down, or if it snowed through here and went down giving them a chance to come back up and let the moisture go as far as it can go.*

- *All of our ceremonies are based around moisture. Asking for moisture whether it be rain or snow for fields or crops or all living things. We need that water to survive, so that was that all our ceremonies are pretty much based on; the coming of moisture and to live a good healthy life.*

- *If the river is going to take you somewhere, ask that river to take you to your destiny safely, and to give me some water too if I need it. Every day you have to pray to it. Every day, sometimes I forget, but then always make it up the next day. Just keep doing that.*

- *That is where there tracks are. They followed the water holes where they can have some water so they can build their homes and stay a few years. They have to stay somewhere where they can have some water. They moved along water sites. They learned a lot on their migration. That is where they learned everything like clothing, food, and medicine.*

Hopi representatives explained how Indian people would have used the plants at the area.

- *When its long and straight you can get a whole bunch of the prayer feather sticks out of one* [greasewood], *but now they are like this where they are shorter and they are getting branches. There, there is one that is long and pretty straight by itself. Those are the ones that you try to look for. When they are wet, this will just peel right off, this first skin and it gets down to the white part and then you dry it again and you get them all tied up so they will stay straight, of course some of them will bend and stuff but you try to keep them straight.*

- *We saw some of willows growing on the road. Dark green ones. Those are good. The young ones, straight ones like that, are what you get for the prayer feathers. As they receive them, and other feathers, you put them on that too. So there are a whole bunch of feathers on one. You try to find them longer, like these, straight with no branches coming out yet.*

Hopi representatives explained how Indian people would have used the animals at the area.

- *During their migration they found animals like elk, deer, and they would make Ka'tsina dolls out of it. Similar to the way we use it in a dance, Ka'tsina dance, and they would make it similar looking to that animal. They moved around and they would see it somewhere, and that is telling of how they travelled.*

- *Spiritually, in the hunt they* [the animals] *are giving themselves up for that meat, but then through song it is a prayer for the rain to come for the crops in that that they are dressing up as, the deer the pronghorn. Through them we ask for rain. What they say is we all become spirits and move on and become the clouds so the moisture comes back. It is a big cycle.*

- *When they pray, they ask for this animals that they have seen. Let us all get together and pray so we can have some rain. They ask them please help us bring some rain, all together.*

Hopi representatives explained how Indian people would have used this area and/or artifacts.

- *The figure on horseback holding a stick* [like a shepherd] *the being that keeps the animals together, no face, no hair, just stands their and watches the game. I call him the "Keeper of the Game".*

- *Coyote at the bottom of the panel, is always around the animals, like cows too. When I would see the coyote behind I thought they were going to hurt them*

[animals], *but I learned that they are not there just there waiting for something, like if a baby is born and they drop what is left* [afterbirth] *they eat it, but they are there to protect them too from other animals that would eat them. That is what I learned about being a cattleman. I would watch them and watch them and they would always be around them. They eat a little bit of what they drop down, but protect them still at the same time. When they get hungry that is when they would kill, but otherwise they were just there to watch.*

- *It is like a beetle* [pecking on the left-hand panel], *pertaining to the water. The top looks like tassels of corn. Then there are arms and the body with the big shell to the back. Something like this must have been around at the time, just like the rams* [right-hand panel], *this was around too.*

Hopi representatives explained how Indian people would have visited or used the geological resources at the area.

- *Rainbows have an arch too; they have the same form.* [The Windows Section in visible due south of the Ute Panel].

- [Rainbows are part of ceremony] *the rainbow that I see in kivas is* [in the form of] *prisms. They use all the colors. Maybe* [around the arches they would have used] *the mist, how the light passes through to make the colors. They use those colors and the prisms to make those colors, so that is what they use in the kiva if they need to.*

5.6.4 Ethnographic Comments

The availability of water at the Wolfe Ranch and Ute Panel EOA study area supports a complex ecosystem, which makes this site a notable place with Arches NP. Agriculture is a key feature within Hopi culture, and is incorporated throughout many facets of Hopi life. Similarly, ethnobotanical knowledge is prevalent, and is thought to have developed during the migration by Hopi representatives. The Wolfe Ranch and Ute Panel EOA study area ecosystem includes several plants and minerals of cultural significance to Hopi people. The Hopi representatives provided explanations for the many ways in which greasewood is used in Hopi culture (Figure 5.34). Likewise, the site was noted for its large deposits of Mancos Shale, another culturally significant resource.



Figure 5.34 Greasewood Plant at Wolfe Ranch area and Ute Panel EOA study area

The greasewood plant is used for ceremonial fires because it burns slowly (Figure 5.34). It is also used for cooking and heating because it burn consistently at a high temperature. Greasewood leaves can be made into an antibacterial treatment for wounds. It is also sought after for making arrows or planting/digging sticks. Greasewood is utilized in a range of ways by both men and women. Plant knowledge, of both domesticated and non-domesticated plants, has been developed by the Hopi people for thousands of years, and is a foundation of their culture and livelihoods.

The Wolfe Ranch and Ute Panel EOA study area has a unique geological past with deposits of Mancos Shale distributed across the landscape. Mancos Shale is used for pottery decoration and for body paint. As body paint it is laid down thick layers. Mancos Shale is a culturally significant geologic feature of the Wolfe Ranch and Ute Panel EOA study area. Hopi

representatives described how this chalky green mineral is collected and used for making pottery. The striking color also adds to the unique visual elements of the landscape. Hopi representatives described how the blue colored Mancos Shale is ground, and used as a body paint in certain ceremonies. Roediger (1991: 213) provides a description of how blue body paint is incorporated into one ceremony (Figure 5.35).

> His [the Blue Tungwüp] body, like that of the Oraibi Aholi, is painted in three colors: yellow on the left shoulder, the right forearm, and the left lower leg; blue on the right shoulder, the left forearm, and the right lower leg; and red on the torso, the upper arms, and the upper legs. The hands are white. Around the waist is the usual embroidered white kilt, many-colored brocaded sash, and red woven belt with a pendent of fox skin. Red-brown moccasins with fringed anklets are on the feet, and strands of blue yarn are around the legs. Above the elbow are turquoise blue arm bands, and the costume is completed with a wristlet of yarn and a bow guard. He carries smooth, slender yucca leaves. The mask, similar to that of the Black Tungwüp, is painted turquoise blue with the same designs traced along the black horns, and the same eagle feathers and brilliant topknot.



Figure 5.35 The Blue Tungwüp Ka'tsina (Roediger 1991)

The blue color is significant for many reasons and incorporated into various ceremonies and paintings, and therefore the Hopi representatives noted that the mineral was a key feature of the Wolfe Ranch and Ute Panel EOA study area (Figure 5.36).



Figure 5.36 Hopi Representatives Looking at a Mancos Shale Deposit from the Bridge at Wolfe Ranch

At the Wolfe Ranch and Ute Panel EOA study area, Hopi representatives pointed out a variety of natural resources that are culturally important. Some plants and water would have supported temporary camps, while other plants and special minerals would have been utilized during ceremony. The representatives also stated that the images pecked into the rock panel were very old and were significant to Hopi culture. This EOA study area provides all of the natural and cultural resources necessary for daily life and spiritual practices. Hopi representatives felt a strong connection to this place, and requested permission to camp for a few days with restricted access.

5.7 Salt Valley Overlook EOA Study Area

The ground at Salt Valley Overlook EOA study area is covered in archaeological resources, spread across the plateau (Figure 5.37). These resources are a key component that this EOA study area, making it distinct from others visited during fieldwork with Hopi representatives. The dense lithic scatter, along with special viewscapes in all directions, made this EOA study area a remarkable spot within Arches NP to visiting Hopi representatives.

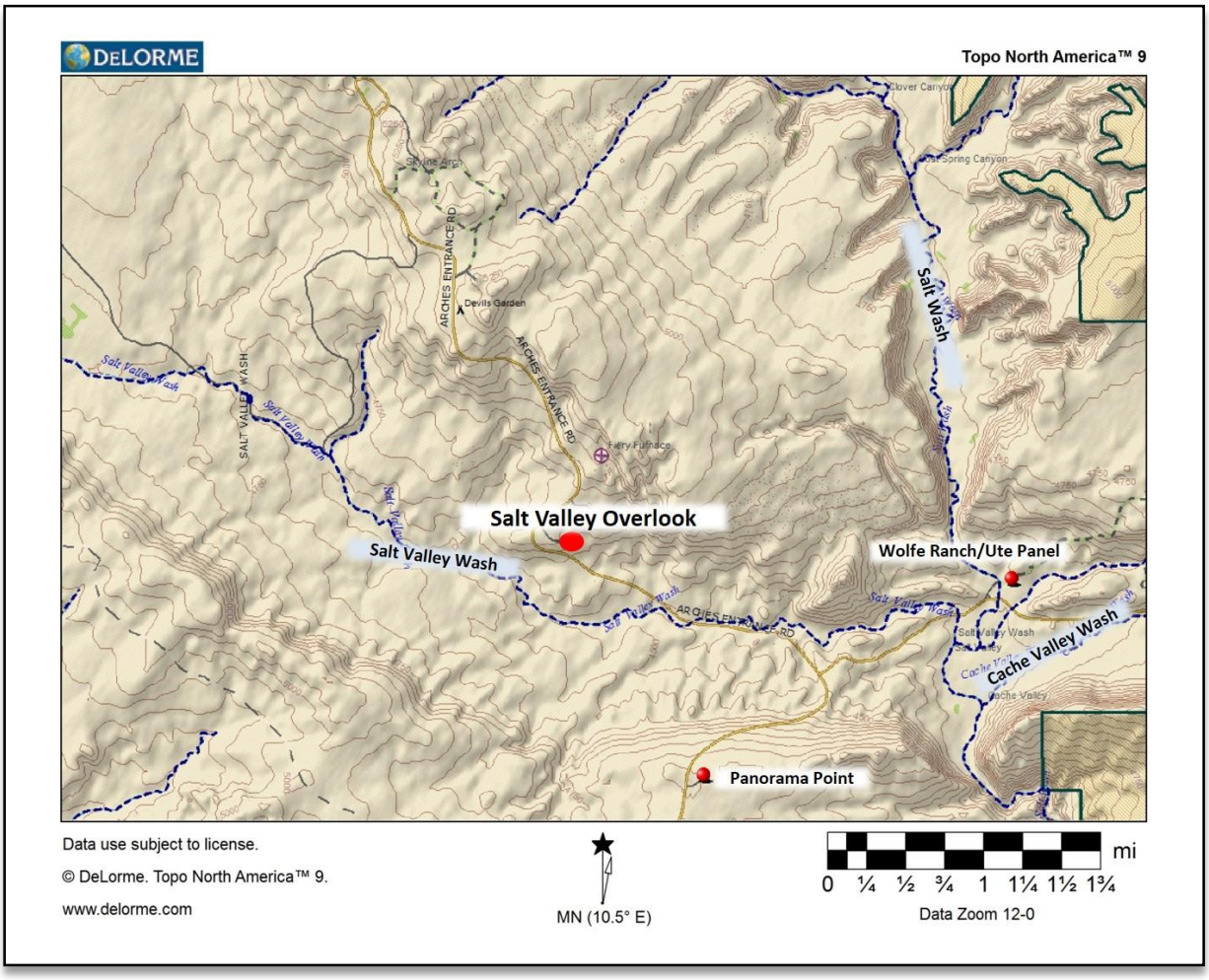


Figure 5.37 Topographic Map of Salt Valley Overlook

Salt Valley Overlook is located to the west of the Wolfe Ranch and Ute Panel EOA study area and just south of the Fiery Furnace rock formations (Figure 5.37). The EOA study area is situated at an elevation of approximately 4,700 feet. From this area, one can see the Fiery Furnace and the Devils Garden to the northwest, the La Sal Mountains and Garden of Eden to the southeast, and Salt Valley to the southwest.

5.7.1 Natural Setting

The following section provides the reader with a brief overview of the geology and ecology of Salt Valley Overlook. According to the Hopi representatives, the landscape features, viewscapes, and ecology of Salt Valley Overlook contribute to its unique natural setting.

Geology

Salt Valley Overlook (Figure 5.38) is located in the central portion of Arches NP. Salt Valley Overlook is bordered by Entrada Sandstone outcrops on the eastern boundary and the western edge slopes into the Salt Valley. The valley floor is approximately 328 feet below the EOA study area's western margin. Salt Valley Overlook is composed of saline and calcareous alkaline soils. It is a large sloping ridge with a series of small Tidwell chalcedony outcrops that overlooks Salt Valley and Salt Valley Wash. The EOA study area is dissected by a series of small run-off channels that flow south and into the wash below.



Figure 5.38 Salt Valley Overlook with a View of the La Sal Mountains

Salt Valley Wash is one of the major hydrological systems in the park. From its headwaters near the Klondike Bluffs section in the northwest corner of the park, the wash flows approximately nine miles before joining Salt Wash and Winter Camp Wash. Once these three washes converge, they flow roughly another four miles before reaching the Colorado River.

Salt Valley contains salt tectonic features, which are common throughout this part of southeastern Utah. Salt Valley is similar to the nearby Moab Valley in that both valleys are collapsed salt anticlines and are examples of salt deformation. The deposits of salt underneath the valley floor are primarily composed of the mineral halite, a form of salt. These deposits

deform plastically and have a low density compared to the surrounding sandstone, shale, and limestone (Foos 1999).

According to Baars and Doelling (1987), overall changes in sediment thickness and the presence of angular unconformities indicate that salt began to rise upwards at the end of the Paleozoic Era and throughout the Mesozoic Era. The upward movement of salt caused the deformation of the overlying sediments, and created a salt dome or salt anticline. Basement faults were later reactivated during the Laramide orogeny and this resulted in the fracture of sedimentary rocks (Baars and Doelling 1987). As groundwater began to percolate along the fault lines and through the fractures during the Tertiary Period, the salt deposits dissolved. This activity left a residual leached gypsum cap and remnant halite. Eventually, the rocks collapsed into a void created by these dissolved deposits, thus creating Salt Valley.

Ecology

Arches NP is located within the Semiarid Benchlands and Canyonlands ecoregion. This region is situated at elevations that range from roughly 5,000 to 7,500 feet. Typically this ecoregion experiences extreme climatic conditions with warm to hot summers and cold winters. This area receives approximately five to thirteen inches of precipitation annually, with most occurring in the mid-to-late summer and winter. Within this ecoregion broad grass, shrub covered benches and mesas are common. The ecological diversity of this ecoregion is influenced by steep canyons, limited water resources, seasonal flooding, unique geological substrates, and large fluctuations in climatic conditions (Figure 5.39).



Figure 5.39 Ecological Diversity at Salt Valley Overlook

Within the park, there are a variety of vegetation communities that make up the Semiarid Benchlands and Canyonlands Ecoregion. Areas like Salt Valley Overlook are part of the Colorado Plateau Mixed Bedrock Canyon and Tableland vegetation community (NPS 2011). The vegetation in this community is characterized as having an open tree canopy or scattered trees and shrubs with a sparse population of herbaceous plants.

It is common to find pinyon pine (*Pinus edulis*), juniper, and little-leaf mountain mahogany (*Cercocarpus intricatus*). This vegetation community also contains a number of grasses including Indian ricegrass, cacti, yucca, and forbs (West 1982).

5.7.2 Special Features

Salt Valley Overlook contains a number of special features (1) many traditional plants grow in this area, (2) would have been used as a place to make tools, (3) would have been used as a place to lookout for game to hunt, and (4) it has culturally important viewscapes.

The ecology of Salt Valley Overlook includes many Hopi traditional use plants. The characteristics of these plants include a wide range of uses. Some plants, like Indian tea, have a medicinal use, while others, like cedar, have utilitarian uses. One Hopi representative pointed out a low-growing woody shrub that is used to direct the flow of water for irrigation. He described how this plant is arranged to form wall like structures along elevated plains to focus the draining water to the crops. In Hopi, this plant is known as *mal-al-veh*. Agriculture is very important to the Hopi way of life, so this plant is very significant.

This EOA study area was initially recorded by Berry (1975) and was later resurveyed by Kramer (1991). They both describe Salt Valley Overlook as a large lithic scatter that is distributed over a series of small ridges and drainages on the eastern edge of Salt Valley. Archaeologists recorded bifacial and unifacial tools, lithics in various stages of production, and ground stone in the area. Initially, archaeologists assumed that the majority of the artifacts would be clustered near the rock outcrops found in this area. Upon surveying it, however, they noted that the artifact assemblage distribution varied across the area with the largest concentrations being located away from the outcrops.

An abundance of cultural materials were observed by visiting Hopi representatives. As evident by the remains, Hopi representatives explained that this location would have been a place for tool making. Among the archaeological resources were evidence of stone tool manufacture and worked pieces of red and yellow jasper (Figure 5.40). The types of rocks chippings scattered across the overlook were noted as being special and of high quality (Figure 5.41). Hopi representatives interpreted this EOA study area as a place where their ancestors would have come to camp temporarily and to make tools before hunting and returning to the Moab area. They would have brought other natural resources with them, like water or greasewood for the arrow shafts. While making stone tools, they would have watched for game and prepared themselves physically, mentally, and spiritually for the hunt.



Figure 5.40 Artifacts Observed at Salt Valley Overlook



Figure 5.41 Hopi Representative Describing Artifacts at Salt Valley Overlook

Salt Valley Overlook is a flat high point that provides a wide visual range of the landscape including grasslands and washes. According to Hopi representatives, this viewpoint would be ideal for scouting deer herds or other animals to hunt. The geographical locations and geological formation of this place, as well as the natural resources that are present, make it special and contribute to the ways in which American Indians would have previously used this landscape.

The view from Salt Valley Overlook is also culturally significant. From this EOA study area, there is a clear view of the La Sal Mountains. Mountain ranges, like the La Sal's, are important to Hopi people because they provide water and the ka'tsina's are thought to live high up on the mountain tops. Therefore, the viewscape from Salt Valley Overlook is not only important for hunting and sustenance, but also for spiritual or ceremonial reasons.

The plants, archeological resources, and surrounding viewscapes helped Hopi representatives understand how this site would have been used by in the past. American Indian people selected this place for its natural setting. The resources left behind are a reminder of the previous activities and ceremonies that took place at Salt Valley Overlook.

5.7.3 Native American Comments

The Hopi representatives who visited the Salt Valley Overlook EOA study area with UofA researchers had many comments about the significance of the area and the meaning of several prominent natural and cultural resources. The information presented below reflects the thoughts and opinions of the Hopi representatives who commented on this EOA study area.

Hopi representatives described the geography of this area and/or elements that stood out.

- *Maybe they stood up here to look for game. You can see a long ways from here.*

- *Well it is a pretty big mountain with a lot of snow. They probably had little dams around here to irrigate their gardens or fields that they had at the bottom* (Figure 5.42).



Figure 5.42 Hopi Representative and UofA Researcher at Salt Valley Overlook Facing La Sal Mountains

- *I do not know if that is a fault or what, see like the ones behind it and then right there with the higher walls, but something happened here. Maybe that fault was from the salt thing you know coming up and going back down.*

- *Right now, the mountains because there is a lot of snow up there. It looks like a pretty nice view from here. That, and then the mesas or rock outcrops across from us like pillars. To me those stand out.*

- *You can see from right here where we are looking, you can see over a wide area. And what I was telling Richard earlier was that since there is a lot of chert or lithics here found that I am thinking that area was used as a manufacturing area. You can see over a great distance from here, and we are not too far from where we were this morning with the rock panel and the animals. I am thinking they would make their tools here, maybe come up round this mesa behind us down into the valley and then that is where they did their hunting. Myself, getting into hunting, that is kind of what I look for too. I go to high areas so I can see for a great distance. See what I can find, if I find something I figure out a way of how I can get close enough to it without the animal seeing me. This here is a good area to look out from. With the water source in the next canyon over, I am sure with them making all their noise making their tools they made it here, because this next mesa next to us would kind of shield the noise from them until they are ready to go. That is when they would start their hunt. With the tracks along through here, they would know where they crossed from, so once they finished making their tools they can follow their tracks after them.*

- *All those hills and everything. Some places are flat where they can build a home or maybe a corn field.*

- *It looks nice. It looks really nice here. On the reservation we do not have any of the rocks like this* [arches and hoodoos]. *All kind of rocks are shaped just like human or something that you know, or shaped like windows. They are like a rainbow or something like that.*

Hopi representatives commented on the ways that Indian people would have used this area.

- *My first thought when I saw the bigger pieces* [of lithic chippings] *laying around here so it looked like a nice little area to kick back and make arrowheads. That is the first impression I got. They had to sit somewhere to make them and I am pretty sure they did not do things by themselves. You make your own weapon. It is yours and you know how to use it versus somebody giving you one and it is not going to hold or you are not satisfied with their work. They probably brought in big pieces and broke them down. It is a good spot from here. You can see a long ways. Water they probably would have had to bring up themselves because it is a ways down.*

- *But if this is where they made their arrows, what did they make their bows out of. What material did they use? Nowadays we use oak, but I do not know what they would have used then, but I do not know what they used before. The oak here is too little, they would have to be long ones. This root too, out of the cedar, my uncle used to make them. My home we were having it built and it exposed them. It was like hey I can use this to make my awtas. The awtas are the bows. That is*

what he took apart, and they were a good size, good size diameter and shaved it down. They worked pretty well, so maybe they used these. There was that pussy willow down there [Wolfe Ranch Area] *maybe tied a few of them together and strung them up. The greasewood was growing down there where we were talking about the younger bushes growing straighter, so they probably used those as their arrows. Birds, birds I do not know for the fletching's. I do not know what they would have used. Maybe what they just found, wild game or small birds, blue jays… I do not know what was around back then, but they had to have some fletching back then too I assume. I do not know, maybe the ducks.*

- *They might be coming from down below, from Moab where there were living, they would come up here and spend a few days here, a week or so, just hunting. When they had enough they would go back down again.*

- *It would be a temporary hunting camp. Based on what I know and what we see right now, I would consider this just a temporary place where they prepared themselves and the equipment they were going to need, and then physically and spiritually as well. They would prepare themselves to get ready.*

- *I am pretty sure there was ceremony similar to what we do. Back in Hopi we always have to smoke, make our offerings to the animals hoping that they show themselves to us and we can be successful and bring back the meat, back home to the families to feed. I am sure there was some ceremony that was done here. For us too, we have to fast and stay away from the ladies because to us if we are wanting to go hunt and we have wives and we are still sleeping with them and stuff the deer can smell that. They say that the woman has a certain smell that the animals can pick up real fast, so they tell us to either sleep elsewhere or go to the next room and sleep. That is something that we go through and we have to make our prayer feathers as well. Once we are successful, there is still another ceremony that needs to be done in order to go back and get into the village. To us these animals have a lot of power too. They heal us with their meat they offer us so we can get strong and go about our lives. There is another way too because they can also be meal to us by making us for crazy. We have to purify ourselves before we can go back into the village.*

- *There has got to be a shrine around here somewhere. Those old-time people that came through had to make a prayer feather or shrine somewhere around here.*

- *That is a good place to build a home, so they probably did.*

- *Well this is, there is not much water here to irrigate your fields, but you can find a lower spot you can find run-offs. That is what Hopi did a long time ago. They use run-off water, they did not have any shovels or anything, so they used these run-offs. They would make a ditch near an arroyo where the water would run and then stop there, and then they would make another one that would run-off this way and then another one here. You know Hopis did a lot of hard work to keep the fields*

moist. That is why you never stop working, because if you do not work you are not going to eat. That is what we learned from our old elders, never really sit down. This here it is really not a very good farming area, but down below [Moab] *would be good. They can live there and they can go out and hunt. I think that is what most of them did around here* [Salt Valley Overlook], *because you do not really see any pottery here, but you see a lot of arrow head making here, so I know they did a lot of hunting around here and I think there where a lot of animals and wildlife here then a long time ago.*

Hopi representatives explained how this place is connected to others.

- *I am trying to remember where the river is, like how far it is from here? They must have settled here for a while to have all this stuff. They must have been here for a while to have all these pieces here. As far as being tied in, there has to be some kind of connection somewhere. It is all connected. The clans did move through here and now they are at Hopi, through their traveling's and migrations.*

- *Since this area is right along the Colorado River, I am sure that the people here had connections upstream and downstream from the river, because it is a year-round water source. The only way crops can grow is water. They need water. I am sure a lot of these tributaries into the Colorado River were occupied back then because of the flood plains. That is where I would plant too. Some people do plant still in the flood plains. With that mountain right there too, I bet they when there to hunt the big game animals.*

Hopi representatives noted if Indian people would have used water from the area.

- *There is no water up here. I did not see anything anywhere, but a rock will have little dips and when it rains it will fill that up. Dips in the rocks that would collect the rain. We have them at home too. Some of them look like they are manmade, like they were chipped into the rock, maybe square or rectangle, and kind of deep. Some of them are natural. So when we would go hunt as kids we would find them and just lay down and suck that water up. That is how we got our water. I do not think there is enough water up here for people to live, but maybe to travel from up here to there to look up that way.*

- *Like the area we were at earlier, Wolfe Ranch, that is a permanent water source all year round. I am sure that upstream some more there might be alcoves where springs are or where the water is seeping. Those might have been used. Plus the main river itself* [Colorado River] *would have been used too. They could kind of have a similar irrigation system like what was found in Phoenix* [Arizona]. *How they would use the water there.*

- *Around here there might have been a spring that is used just for ceremonial use. Like this summer when the Flute Dance is coming up they go to a certain spring*

to perform their ceremony. That is kind of the same thing that might have happened here a long time ago.

- *They would pray for water* [since it is dry up here]. *They would probably look for a spring or something like that.*

Hopi representatives explained how Indian people would have used the plants at the area.

- *There is a lot of plants around here that we are looking at, like the juniper. There is two different varieties, the male and the female one. Those can be used for healing or different things. We just now found some kunya. I do not know that the common name is for that. It is used in prayer offerings. The Indian tea, there are two types of that too, the gray one and the green one. That can be used for different things as well, for medicine and for a tea. The yucca has many uses. There was that and another plant too that has a lot of uses. The sumac bush can be used for different things. The greasewood can also be used for many things* (Figure 5.43).



Figure 5.43 Hopi Representative and UofA Researcher Discussing Plants at Salt Valley Overlook

- *The oak, they are very small. Maybe it is because this is a rocky area and that is why they are not growing big. It is in a group and I did not really recognize it until I found the leaves. That is what they make their bows from. It is flexible so it will not break.*

- *It is all the same still; the cedars and the ones that we saw on the first stop. There is that one again that I was talking about that they make the prayer feather out of, that yellow the yellowish one* [rabbit brush]. *There is the one that they make the tea from. Pretty much the vegetation is the same from here to there, to the visitor center. The wash has the little sage* [purple sage].

- *They probably planted corn, there could be good fields.*

- *They would farm below somewhere. Unless there was some other big place where they would use the run-off, like I told you how they would use the run off to irrigate their farms lands. Up here it is not that hot, but it gets a lot of rain, so that is how they did their farming. They had to know how early they hard to plant in order to harvest. You got to learn when to plant and when it harvests. You get to know the weather conditions. When it gets cold and when it gets warm, and you have to know how to take care of your plants in order to make them grow, not to have it freeze, or wind burned if there is any wind. I do not know if there is any wind up here, not like down below. It is a cool country. I do not know how it is now, but they say it getting hot and it is going to get hot here. I would say that this is a cool country and that you would have to plant early if you wanted to plant the corn or any melons, or beans. Beans it takes a long time for it to mature to be harvested, so you have to plant that early. Well it is the same way with watermelon. You have to take care of watermelon really good because they can freeze right away. They are a delicate plant, watermelons are. Sometimes you have to cover them up, and then when it starts getting warm you uncover them, and then do the same thing the next day. If you want to eat watermelon you have to do a lot of hard work.*

- *It is more of a cold grass area here. Nothing that I know that grows around my area. This is altogether different because of the weather conditions that you have around here.*

Hopi representatives explained how Indian people would have used the animals at the area.

- *I see a lot of deer tracks, so this could have been a spot where they waited for them to come around to hunt. Same with rabbits, and probably birds to use their feathers for certain things.*

- *I have seen some deer tracks, and deer this morning. That can be a source for meat. The hide can be used for different things as well. I saw a hawk too. That can be used for prayer feathers or other stuff for the arrows. I have seen duck too. Duck can be used for a source of food and the feathers can be used for different things as well. If there is turkey in the area, turkey can be used for a lot of things too. Other small birds, blue birds, yellow birds, yesterday we saw a meadowlark. Those can be used for prayer feathers also.*

- *Mountain sheep is another source of meat and the hide can be used for different things as well, clothes, blankets, or whatever you can make from it. Rabbits can be used for a source of meat and the hide can be woven into blankets or shoes for the babies.*

- *There are probably deer, there are a lot of tracks. All those deer tracks, rabbit.*

- *Probably a long time ago there probably was elk because of the mountains around here. They like cold weather. They know how to survive.*

- *The Hopi a long time ago, were very conservative. When they kill a rabbit or any game, they skin it up, bake it, or dry it up real good and save it for winter. You do not just eat it right then you save it for winter time.*

Hopi representatives explained how Indian people would have used this area and/or artifacts.

- *It kind of feels good to hold these* [lithic chippings] *to just think that they were out here making their own tools and weapons.*

- *Just by walking around here we have seen a lot of god sized core pieces that can be used. I am sure that they made their tools there with the monoflakes we have been finding. Down below in the valley, we found the greasewood that can be used for the arrow shafts, and turkey can be used for the fletching, or hawk feathers can be used for the fletching. Oak is something that can be used to make the bows from. The sinew from the animals can be used for the bow string. You can also use it to tie the feathers onto the feather shaft. From what we saw on the panel* [Ute Panel] *with the animals, they showed me maybe what that hunting group killed. Maybe how many rams they killed in that hunt, so they marked it into the rock afterwards saying this is how many we killed and maybe at what location they were in the area.*

- *They made an arrowhead. They would use it for a bow and arrow when they go hunt.*

- *Arrowhead chips. Yeah they use it for hunting. That is what they are. Even to protect themselves with their bow and arrow when an enemy comes. They use that to protect themselves. I was looking for any rock shape that you would tie that to a handle, a wooden handle to use that for protection.*

- *I did not see anything like a club here. I have seen it before but I did not see anything here. I believe that there was no or not many enemies around here. They were very peaceful here. Those people went through here a long time ago. Those petroglyphs were telling me it is not the Hisat'sinom, it is the Miti'isi'nom that were here a long time ago.*

- *Yeah that is out teaching. Hopis say when you find something out in the open, do not bring it back, and just leave it there. They say that everything has protection. They say that some people get sick from doing that, some get a disease. They Hopis say that it is a kick back or strike back at you. Everything knows how to kick back at you and they do not like you taking me. Everything is alive. They are telling us that because they heard it from the other people, the older ones. That is what all that migration brought us. When they did something wrong they learned and that is why they are telling us not to do that. Always listen to the older people, because they have gone through life longer than we did. Always listen to an older person.*

Hopi representatives explained how Indian people would have visited or used the geological resources at the area.

- *I guess maybe they sat around here, looked out, and make things their tools or arrowheads or their knives, while just looking out. I would, if you are doing something like that, preparing for the hunt, or things like that you would be looking out for them already, scouting while making your arrows. How many people did come through here? Maybe certain ones, like the canyon way back there, maybe some came through that and some came through this one. They did not exactly follow each other's paths so maybe there are even more petroglyphs on that side. As far as food and stuff, it was around here. You have got deer tracks all over the place up here. Maybe there was a whole lot more back then. We saw that duck fly out so there has got to be a big pond out there.*

- *We have something similar to these red rocks behind us called Koyemsi out on the reservation in the Blue Canyon. It is another watershed that kind of has a year round water source. It has kind of similar things. One of our ka'tsina is a mud head and it has that kind of reddish color. It is something like how those look behind us.*

- *The San Francisco Peaks are the home of the ka'tsina and we make our offerings there to them. I am sure they did the same thing here. Some ceremony might happen learned from the mountains too. There is snow and snow has moisture. I am sure there is some shrines up there or springs that were used for certain ceremonies, and gathering areas for plants that were used in ceremonies. What they say is people long ago, they had a lot of powers based on the ceremonies that they had, so I am sure they had a lot of uses for the plants, animals, mountains, water. The water sources around here. They used some of the rock outcroppings for markers too. That is what I kind of look out for too when I visit places is rock cairns. Those are indications that the area might have a trail nearby or a village nearby or some sort of maybe a spring too. It can mark a spring source. That is kind of what I look out for when I am visiting areas. They are usually up high, like on a hill or somewhere visible. Just like the trials that we are on that people stack rocks to show where the trail goes to. It is kind of like the same thing, but these ones are over great distances.*

- *You can see the different colors in the sands. The different colors can be used for different things, mostly ceremonial use. We were looking at that and the rock formations. Just how they look and how it can be referenced to something back home. The red rocks back here look like Koyemsi to me. The rock pillars up across can be used as a marker.*

Hopi representatives provided comments regarding the area as a whole.

- *Get rid of the pullout at Salt Valley overlook, to keep people from taking lithic artifacts, whatever from that site.*

- *After we came through, there were no footprints that I saw. I would say it is good. They* [tourists] *do not know about it. They do not know it is here so that is good.*

5.7.4 Ethnographic Comments

The Salt Valley Overlook EOA study area is distinguished by the abundant scatter of lithics. These archaeological materials contributed to the interpretation of the place. Hopi representatives connected the archaeological record observed at Salt Valley Overlook with the Hisat'sinom (ancient ones) and Miti'isi'nom (people before the ancient ones) due to the absence of pottery. These were pre-ceramic mobile people; "if such sites lack pottery and contain evidence of 'Archaic style' projectile points, archaeologists routinely assign them to a preagricultural, mobile settlement-subsistence pattern," (Rushforth and Upham 1992: 57). The Hopi narrative is that, "after emerging from the underworld, clans traveled as units, encountered objects or situations from which they took their totemic names, and eventually arrived at various villages where they now reside" (Rushforth and Upham 1992: 119). The Hopi representatives believe the Salt Valley Overlook EOA study area to be a tool-making place of their ancestors. They also associated this place with hunting.

While migrating, Hopi people utilized a wide range of natural resources and employed environmental multiplicity. According to Stoffle and Minnis (2006: 12):

> When people become traditional, learn about their ecosystems, adjust their adaptive strategies to protect them from natural and social perturbations, they then can be said to have developed a resilient way of life. The term 'environmental multiplicity', builds on the narrower but established term 'occupational multiplicity', to describe their system of resilient adaptations. Conceptually these terms describe a range of multi-stranded and redundant connections among the members of a traditional community and between them and their primary natural use areas.

Hopi culture is primarily sedentary and agriculturally based. Hopi representatives, however, described a time in which Hopi people migrated across this landscape, and therefore needed to incorporate hunting into their subsistence patterns. The representatives interpreted the Salt Valley Overlook EOA study area as being a place to make tools or scout a hunt.

5.8 Landscape Overlook A and B

The Landscape Overlook is comprised of two locations (Figure 5.44). Landscape Overlook A includes Panorama Point and surrounding areas. In contrast, Landscape Overlook B allows for views of the Henry Mountains, as well as the same areas visible at Landscape Overlook A. The view of the park is important for this study because it provides an opportunity for reflection on Arches NP and the experience of visiting various EOA study areas. Unlike other places visited and interpreted by tribal representatives, Landscape Overlook B allows for discussions about landscapes and connections between culturally significant places. Some of these culturally significant places can be visited within Arches NP, while others are located far away. Landscape Overlook A and B also provide an opportunity in the EOA to reflect on places visited within the park and add thoughts not formerly shared. Landscape Overlook A and B are less of a destination to be interpreted, and more of a high and open place for discussion and reflection.

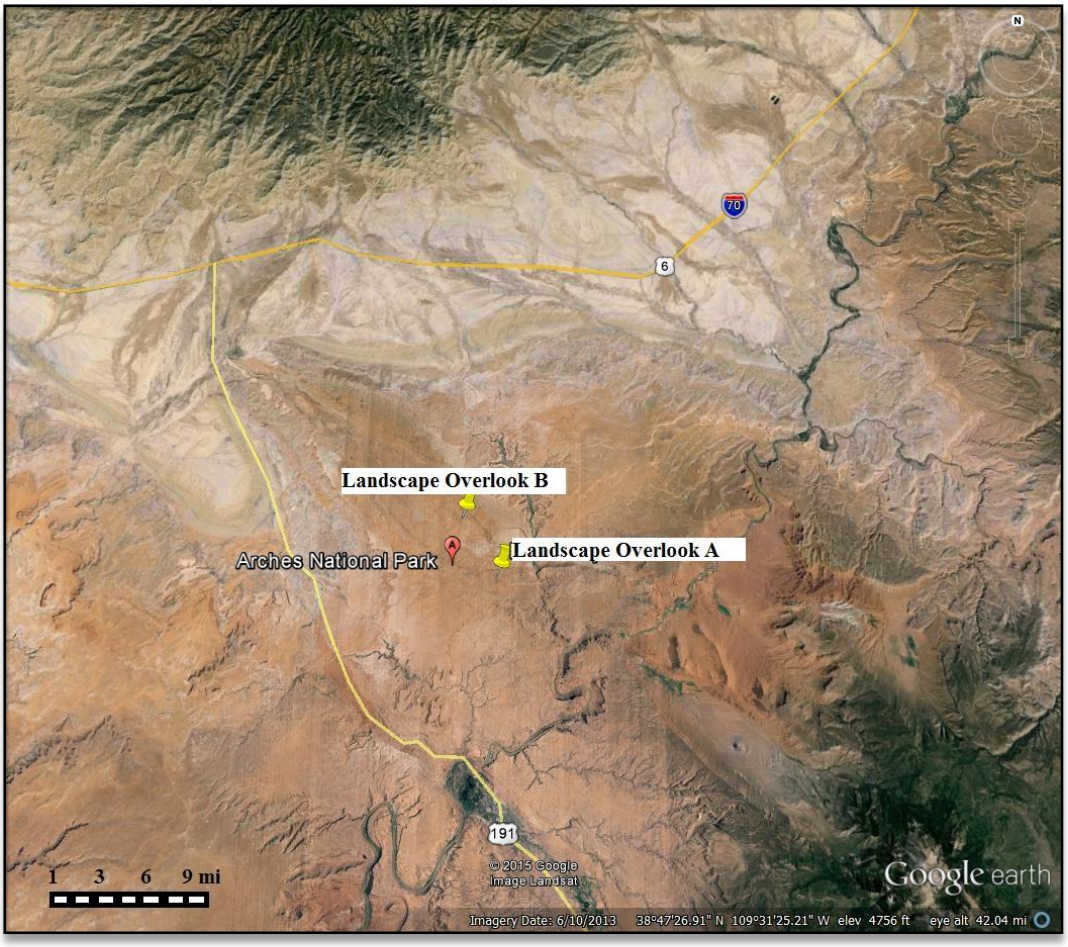


Figure 5.44 Topographic Map of Landscape Overlooks Sites A and B

Hopi representatives visited Landscape Overlook B, because it offers views of both the La Sal and the Henry Mountains to the southeast. This portion of the EOA study area is located at an elevation of 5,100 feet, off of Arches NP Scenic Drive. The Devils Garden can be viewed

to the east of Landscape Overlook B. The Double O Arch and Dark Angel formations are found a few miles northwest of Landscape Overlook B.

5.8.1 Natural Setting

The following section provides the reader with a brief overview of the geology and ecology of Landscape Overlook B. The information provided below is designed to help frame comments made by Hopi representatives during data collection events.

Geology

Landscape Overlook B is located on top of a high area near Devils Garden (Figure 5.45). This mesa is covered with low growth shrubs, large entrada sandstone boulders, and a sudden drop where wind and water has eroded the edge of the mesa. The viewscape from this location illustrates a wide variety of geologic features within the park and the surrounding mountains.



Figure 5.45 The Devils Garden

Salt Valley can be seen to the northwest, continuing several miles to the southeast from Landscape Overlook B. The Devils Garden is clearly visible from the Landscape Overlook B site to the east. Protruding sandstone fins are likewise visible, most noticeable when facing south toward the La Sal Mountains (Figure 5.46). The Henry Mountains are visible to the southwest, although they appear much further away than the La Sal range (Figure 5.47).



Figure 5.46 The La Sal Mountain Range from Landscape Overlook B



Figure 5.47 View from Landscape Overlook B with the Henry Mountains Faintly in the Background

Other unique geological formations around the EOA study area include large hills of igneous rock, Mancos Shale, and other mineral deposits. Towering sandstone hoodoos, or rock pillars, can be seen across the landscape. The colorful orange and red hues of the landscape draw attention to many of the unique geologic forms and canyons cut by rivers and streams.

Ecology

Both Landscape Overlook A and B are part of the Inter-Mountain Basins Mixed Salt Desert Scrub vegetation community (NPS 2011). This community is an open-canopied shrub land typical of saline desert basins and alluvial slopes of the Colorado Plateau. The soils in this vegetation community are often saline and calcareous alkaline rich soils, which are the preferred habitats for one or more species of saltbush, rabbitbrush, big sagebrush, Indian tea, juniper, wolfberry (*Lycium* ssp.), Indian ricegrass, and yucca (West 1982) (Figure 5.48).



Figure 5.48 Plants and Viewscape Landscape Overlook B Site

The dramatic shift in elevation at Landscape Overlook B, in contrast with other EOA study areas, afforded the opportunity to view large clusters of pinyon and juniper trees. In addition to the presence of conifers, scrub oak was also observed at Landscape Overlook B.

5.8.2 Special Features

The Hopi representatives that visited Arches NP observed landscape features, water sources, medicinal plants, and cultural resources that instantly reconnected them with their long standing cultural presence in this region. Special features were discussed in great detail at each of the EOA study areas, with Landscape Overlook B providing a special place, high above the rest of the park, where Arches NP as a whole could be reflected on (Figure 5.49).



Figure 5.49 UofA Researchers and Hopi Representatives Discuss Arches NP at Landscape Overlook B

One key feature that the Hopi representatives found of importance were the hoodoos, that when viewed from a distance were associated with ears of corn. Corn imagery is spiritually significant for the Hopi people since corn represents life. Likewise, the streams and Colorado River hold cultural significance because they too, represent life flowing from one place or person to someone or somewhere else, much like blood.

Mineral resources, especially the Mancos Shale could be viewed from Landscape Overlook B. Brilliant blue deposits of the Mancos Shale could be seen dotting the Arches NP landscape. Mancos Shale was explained as a ceremonial resource for Hopi people who use it to paint themselves blue, and they leave small deposits of it as offerings at shrines. Likewise, the Mancos Shale holds utilitarian functions in painting Hopi pottery.

The panoramic view from Landscape Overlook B offered a place for discussion and reflection that was unique from the rest of Arches NP. By visiting this place at the end of the Hopi field session, a broader and more holistic interpretation of the park transpired.

5.8.3 Native American Comments

Hopi representatives visited this EOA study area in March of 2015. The information presented below reflects the thoughts and opinions of the Hopi representatives who commented on the viewscapes from this EOA study area. Some of the comments are relevant to multiple EOA study areas, so they are repeated here because they especially contribute to this synthesis and overview of the park.

Hopi representatives mentioned how these villages were connected to villages elsewhere.

- *One of the stories at Hopi is that the people are supposed to go out and leave their footprints across the land, and then they come back to the mesas. A certain event occurs, that is when we know to meet up again. So we say that some of these clans never came back, they turned into these other tribes, that is one of the stories we are told. So they went out left footprints as a way of telling others where they had been. So these just mark places where those clans had been.*

Hopi representatives discussed seasonal Indian camps in this area.

- *I think they moved a little at a time because they did not know where they were going to go, they did not know where water was. Until it was time for them to all move out to the villages. Then they moved out there. That is what I know about Hopi migration.*

- *Based on what I know and what we see right now, I would consider these just as temporary places where they prepared themselves and the equipment they were going to need, and then physically and spiritually as well. They would prepare themselves to get ready.*

Hopi representatives discussed ceremonies associated with the EOA study area.

- *This is what we were looking for. Everywhere there are our footprints, there will be a shrine nearby. This is from a long, long time ago* (Figure 5.50).



Figure 5.50 Hopi Representatives Identified a Shrine at Landscape Overlook B

- *This is where you would place your cornmeal and ask or pray for rain. Corn needs rain that is why they always place cornmeal.*

Hopi representatives shared their knowledge of any other creation places of their people.

- *Every big mountain like that* [La Sal] *is where the big heavy rains come from. Maybe because it is higher, or more green. The more green trees, the more they pull the rain down. We call the mountains around Flagstaff* [San Francisco Peaks], *Rain Cloud Home, that is where the rain clouds form first and then move around from there. Omawki* [House]. *So those mountains bring rain to this place, and I bet it goes down to the Colorado River over there.*

Hopi representatives talked about connections between the EOA study area and the surrounding rivers, creeks, springs and washes.

- *They followed the Colorado River, wherever it was flowing, they were walking nearby. Move from drainage to drainage around here. They had runners that would go out in front of the main group and find the good way to go. The big group had things that had to be cooked, moved, and prepared to move on. So the runners went out found the right route, places to cross, or get fresh water, food, you know.*

Hopi representatives discussed Indian trails connected to the EOA study area.

- *They had the main migration trails that everybody probably took, they may have stopped off here and there on their own, but they had main routes. All of the groups had separate routes, but some of them came up this way to Moab during the migrations.*

Hopi representatives mentioned connections between this EOA study area and any other place or events that had not been previously discussed.

- *There are ceremonies that go on that are banned to other people, and perhaps it is during these ceremonies that the languages and the songs from our past, the old days, it is here that they are still sung and spoken. We do not record, we just remember. We ask the ones that have come before us to come and help us if we are not doing it right. These songs that we do not have, maybe they can come here and re-gather those songs* (Figure 5.51).



Figure 5.51 Hopi Representatives and UofA Researchers Discuss Songs at Landscape Overlook B

- *Maybe the clans that came through here would want to come back, if anyone should come back to find songs or stories, it should be them. Probably four days would be good, somewhere with a water source would do for us to reconnect. Somewhere isolated would be best.*

5.8.4 Ethnographic Comments

The views from Landscape Overlook B provided Hopi tribal representatives with a visual connection with all of the previously visited EOA study areas. Natural and cultural features and across Arches NP were discussed while visiting Landscape Overlook B. Rivers, streams, hoodoos, and canyons hold the key in understanding the cultural connections that exists between the Hopi and Arches NP. Through offerings and prayers, these connections have endured over time.

The area surrounding Landscape Overlook B is a confluence of geology, ecology, and viewscapes. These features make it culturally significant according to Hopi representatives who discussed the landscapes that can be seen from this place and their relation to Arches NP as a whole. The La Sal Mountains to the southeast were brought up multiple times by Hopi representatives. Mountains play a major role in Hopi epistemology and ceremony. Ka'tsinas live at the San Francisco Peaks in Arizona most of the year, and visit the Hopi in the form of rain clouds (Waters 1963). They nourish the planet with their *Navala*, or spiritual essence, which comes down with the rainfall, then transfers to the corn and then the essence of the Hopi who eats the corn (Hieb 1979). Mountains are where the clouds come from in spring and return to in fall so the spirits of the ka'tsinam may rest. This contributes to the La Sal Mountains as an important feature in the Arches NP landscape (Figure 5.52).



Figure 5.52 Hopi Representatives with Views of the La Sal Mountain Range at Landscape Overlook B

Another important feature to the landscape of Arches NP is the rivers. The Hopi followed the Colorado River during migration for the nourishment it provided throughout the journey. The Salt Wash and Courthouse Wash both connect the park and its outstanding geologic features to the Colorado River. Courthouse Wash provided access to what is now Arches NP during migration, which Hopi representatives noted to be a great place for hunting game. *Pisivaya*, the Colorado River, also plays a part in Hopi epistemology. The Snake Clan has its origin in a young boy who traveled to the Colorado River (Yava 1980).

Hopi representatives found connections within Arches NP that tied them to the fertile floodplains, sacred waters of the Colorado River, snowcapped mountains where the ka'tsinas might rest, and their past, which is visible through markings left behind by the Hisat'sinom (the ancient ones). Long ago, the Hisat'sinom passed through this region on their migration, and today we walk in their footsteps. Hopi representatives wish to return to Arches NP with other culturally knowledgeable elders and spiritual leaders to help recover more of their connections in this area, through songs, ceremonies, and storytelling.

CHAPTER SIX
UTE EOA STUDY AREA ANALYSIS

This chapter presents the Ute interpretation and ethnographic analysis of the places discussed during the Ute portion of field visits for the Ethnographic Overview and Assessment (EOA) for Arches National Park (Arches NP) in Moab, Utah. Representatives from the Southern Ute Tribe and the Uintah and Ouray Band of Northern Ute Indians visited five areas within the park (Figure 6.1).



Figure 6.1 Ute Representative and UofA Researcher at the Windows Section, Arches NP

Since this EOA focuses on understanding a range of cultural resources that include water types, plants, landscapes, arches, and archaeology, the University of Arizona (UofA) researchers worked to select a range of EOA study areas that represented these various resources. The following sections provide greater detail about the specific sites visited and the unique cultural and natural resources present at each area.

6.1 Ute Study Area Visits

Representatives from the Southern Ute Tribe joined UofA researchers at Arches NP from March 23-27, 2015, while the representatives from the Uintah and Ouray Band of Northern Ute Indians joined the UofA researchers at Arches NP from September 14-18, 2015. Each group of tribal representatives drove to Moab, Utah, to meet with the UofA researchers. Over three days,

cultural discussions occurred at five selected EOA study areas within the park (Figure 6.2). The locations that were selected allow for the interpretation of many cultural resources. Accessibility was a key factor in place selection. Since the two separate tribal visits took place at Arches NP in early spring for the Southern Utes and in early autumn for the Uintah and Ouray Band of Northern Ute Indians, a wide variety of plants were identified during these different seasons. The five EOA study areas selected are: (1) Windows Section, (2) Courthouse Wash, (3) Wolfe Ranch and Ute Panel, (4) Salt Valley Overlook, and (5) Landscape Overlook B. The names of these places do not reflect Native American use or cultural association. The names were assigned either by NPS officials or by local non-Indian residents.

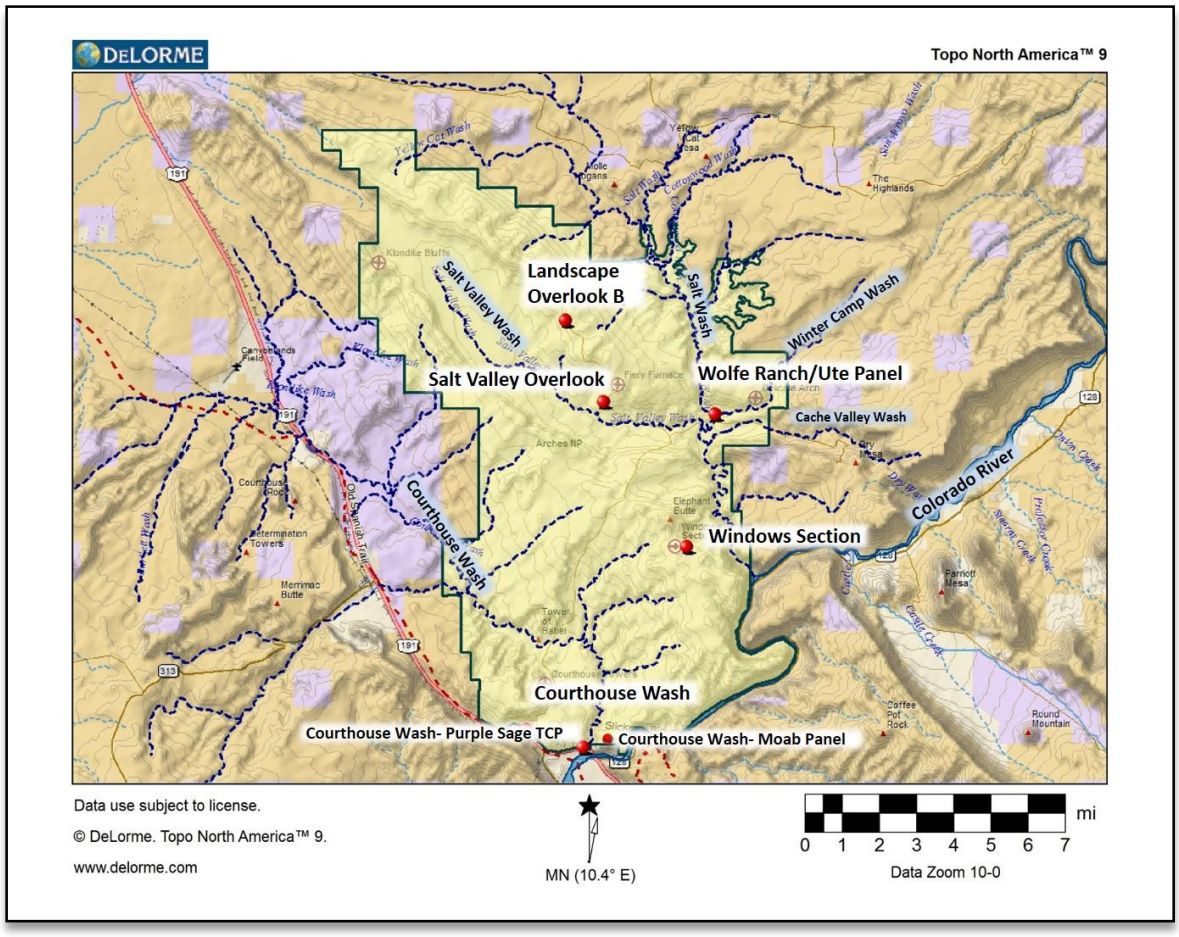


Figure 6.2 Arches NP with Five EOA Areas Visited by the Ute Representatives

The schedule was designed to maximize time by grouping locations that are near one another. On the first day, UofA researchers and the Ute representatives met at the visitor center for orientation and then began their visit at the first EOA study area (Figure 6.3). During the second day, EOA study areas two and three were visited, with EOA study areas four and five visited on the final day. A closing discussion took place after concluding all area visits within the park.



Figure 6.3 Ute Representative Visiting the Windows Section EOA Study Area

While visiting the five EOA study areas, Ute representatives were given the opportunity to look around the area, read interpretive signs, and then provide their analysis of the area. The methods used in documenting their responses are presented in the following section.

6.2 Ute Data Collection Events

Three types of opportunities for sharing cultural data were provided. Formal data collection events involved semi-structured lists of proposed topics. Formal data collection events were both tape recorded and physically written down on paper forms. There are two types of recording forms are: (1) American Indian Ethnographic Resources form and (2) Cultural Landscape data recording form. The American Indian Ethnographic Resources form is a place-specific inventory of traditional area uses, role in the history of the people, and other cultural resources associated with the place, which can include water, plants, animals, materials, landforms, and archaeological remains. The Cultural Landscape form records tribal perceptions about place and resource-specific information, then translates these into a broader regional and more abstract cultural context. The third data collection tool is known as open-ended data collection events. These are defined as recorded and participant guided conversations held between the researcher and tribal member that contain information specific to the project.

In Table 6.1, these three types of data collection events have been categorized into two separate fields. The first category involves the structure and focus of the data sharing events: either (1) formal discussions about the EOA study areas and cultural landscapes or (2) informal

open-ended discussions. The location of data collection events category, on the left column of the table, indicates where the data collection event took place.

Location of Data Collection Events	**Types of Data Collection Events**		**Total**
	Formal Data Collection Events	**Open-Ended Data Collection Events**	
Courthouse Wash	3	5	**8**
Wolfe Ranch/Ute Panel	3	3	**6**
Salt Valley Overlook	3	1	**4**
Windows Section	3	3	**6**
Landscape Overlook B	2	1	**3**
Total	**14**	**13**	**27**

Table 6.1 Data Collection Events by Location and Type

Table 6.1 provides the total collected interviews in the March and September field sessions with the Ute representatives. Each member shared cultural data during semi-structured events at EOA study areas 1-5, providing a total of 14 unique formal data collection events. A total of 13 open-ended and unstructured data sharing events occurred and were recorded. A total of 27 semi-structured and unstructured data sharing events were recorded during the fieldwork.

6.3 EOA Study Area Analysis

Each area description contains a discussion of the environment, including geology, ecology, and Ute comments. It is important to note that the geological and ecological information provided in this chapter is not intended to be an authoritative summary. Instead, the information is meant to orient the reader with regards to each EOA study area's location, geology, and ecology. The Ute representatives explained the cultural significance of places, cultural landscapes, and plants while visiting the five selected EOA study areas spread throughout the park.

6.4 Windows Section EOA Study Area

The Windows Section EOA study area was singled out as special because it contains a variety of different arches, hoodoos, and viewscapes that have formed close to one another. The Windows Section has a well-developed road, parking, and trail access that makes it ideal for visitation by Ute representatives. These geological formations were interpreted as being associated with celestial and ceremonial knowledge and practices by visiting representatives.

The Windows Section EOA study area is located near the center of Arches NP, approximately 3.5 miles from Panorama Point and 11.5 miles from the park headquarters. It is situated at an elevation of 5,290 feet (Figure 6.4). This EOA study area is located southeast of Balanced Rock, within the southeastern corner of a series of unique rock formations that includes Garden of Eden and Parade of Elephants.

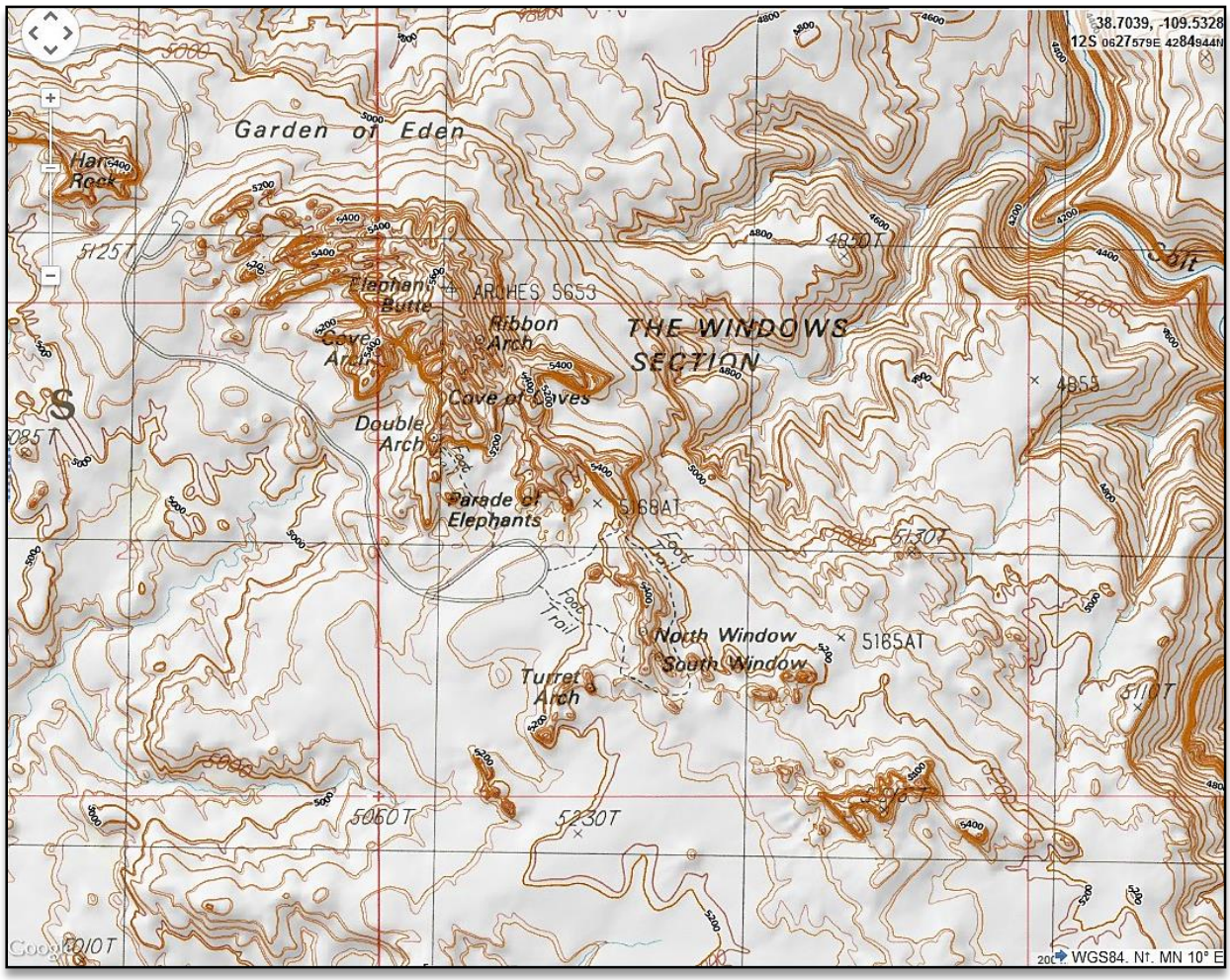


Figure 6.4 Topographic Map of Windows Section EOA Study Area

The selection of the Windows Section EOA study area as part of this project allows for a cultural perspective on the large sandstone arches and other similar formations located throughout the park. Three large arches are clearly visible from the Windows Section trailhead.

These include North Window and Turret Arch to the south, and Double Arch to the north. A trail begins south of the parking lot extending to North Window and forks between the Windows trail and the Turret Arch trail.

6.4.1 Natural Setting

The Windows Section EOA study area is made up of unique geological and ecological features. This area contains landscape features, such as the arches, hoodoos, and the nearby La Sal Mountains. An abundance of plant life and other ecological resources are present.

Geology

The geologic features throughout Arches NP reflect millions of years of wind, rain, and glacial activity. Landscape features such as arches, hoodoos, caves, and deep grooves in the rock, like those present at the Windows Section, further illustrate over 150 million years of geologic activity.

Differential weathering, defined by Chronic and Chronic (2004) as irregular erosion caused by the differences in rock hardness or resistance, is the primary cause of the formation of the arches visible at the Windows Section (Figure 6.5). Over time, the arches continue to weather and erode, eventually leading to the collapse of these geologic features.



Figure 6.5 North Window (L) and South Window (R) as Seen from Turret Arch

The arches are all formed from eroded sandstone, predominately the type known as Entrada Sandstone, deposited during the middle Mesozoic epoch. Entrada Sandstone includes both marine and wind-blown sands (Foos 1999: 4-5). Figure 6.6 illustrates the stages of arch development, providing both a frontal view and side profile.

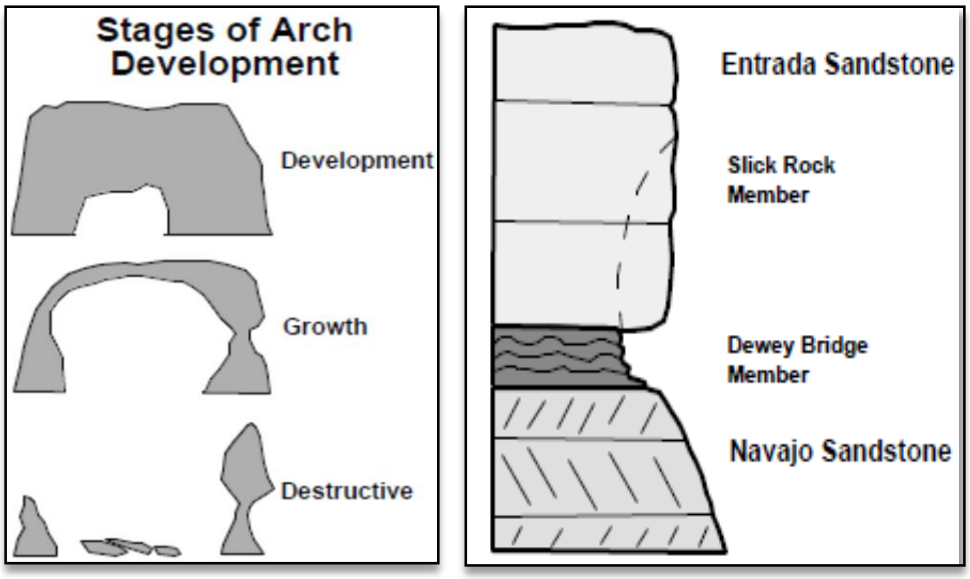


Figure 6.6 Stages of Arch Development (L) and Differential Weathering and Erosion (R) (Foos 1999: 4-5)

Deep canyons formed by the Colorado River and Salt Wash are visible from the North Window and Turret Arch portions of the Windows Section. A series of plateaus and mesas surrounding Salt Wash are visible from the North Window (Figure 6.7). Located approximately two miles southwest from the Windows Section are the Petrified Dunes.



Figure 6.7 View of Salt Wash Canyon Facing Northeast from the North Window

The landscape within Arches NP is continuously changing. Physical changes in the shape of the rocks occur with each gust of wind, snow storm, and rain shower. The viewscape changes constantly as well; mountains visible at a distance spread into desert valleys and washes, which rise up to plateaus containing towering Entrada Sandstone formations.

Ecology

The Windows Section EOA study area has a diverse ecology. Plant life ranges from microscopic cryptobiotic crust to larger plants, such as juniper (*Juniperus* ssp.). The Windows EOA study area is a Salt Desert Scrub ecosystem, comprised of arid to semi-arid shrublands on lowland and upland sites, usually at elevations between 4,980 and 7,220 feet (Colorado Natural Heritage Program 2005).

Cryptobiotic crust is present throughout the Windows Section EOA study area, and provides a natural anti-erosion blanket across the landscape (Figure 6.8). The cryptobiotic crust is comprised of cyanobacteria, lichens, mosses, algae, and fungi, which serves as a seedbed for other plants by retaining moisture (Arches NP, Windows Section: Interpretative Panel).



Figure 6.8 Plants and Cryptobiotic Crust near North Window

Woody low growth bushes, such as Indian tea (*Ephedra* ssp.), fourwing saltbush (*Atriplex canescens*), and sagebrush (*Artemisia* ssp.), grow at the Windows Section. Other high desert plants grow in this area as well, such as yucca (*Yucca* ssp.) and prickly pear cactus (*Opuntia* ssp.). The dominant plant community throughout Arches NP is Pinyon-Juniper woodland, due to rocky soils and fractured bedrock.

6.4.2 Special Features

This EOA study area was selected because of the (1) special geologic features, (2) good roads and trail access to these features, and (3) a variety of viewscapes. Special views occur at the North Window, South Window, and nearby Turret Arch. North Window provides a clear view of Turret Arch and accompanying hoodoos to the west. From Turret Arch, a person will have an unobstructed view of both the North Window and South Window.

Within this section of the park there is a unique concentration of geologic features, especially arches and hoodoos. To the north of the Windows Section EOA study area is a series of hoodoos called the Parade of Elephants. Further north is the Garden of Eden (Figure 6.9) and Balanced Rock (Figure 6.10). Other unique sandstone walls and mountain ranges surround the area.



Figure 6.9 The Garden of Eden



Figure 6.10 Balanced Rock

The proximity of a paved parking lot to the trailhead and an easy hike to North Window are additional features that contributed to the selection of this EOA study area. The trail loops around North and South Window and forks to Turret Arch (Figure 6.11 and 6.12), providing a unique view of the Windows. The trails provide guided access to multiple viewscapes around the Windows Section.



Figure 6.11 UofA Researcher and Ute Representative Hiking to Turret Arch



Figure 6.12 Ute Representative and UofA Researcher Discussing the Windows Section EOA Study Area

Multiple views of the arches at the Windows Section from the trail enhance the cultural interpretation of the place. The Ute representatives mentioned the significant visual interest of the rock formations and their cultural meaning (Figure 6.13).



Figure 6.13 The Windows Section EOA Study Area Against the La Sal Mountains

Distant surrounding features, like the La Sal Mountain Range, enhance the viewscapes of the Windows Section. Spiritual connections were felt by the Ute representatives with the geologic and cultural features located at the EOA study area.

6.4.3 Native American Comments

The Ute representatives that visited the Windows Section with UofA researchers had many comments about the significance of the area and the meaning of several prominent geological features. Responses from the Ute representatives regarding this EOA study area are documented below.

Ute representatives described the geography of this area and/or elements that stood out.

- *It was our Creator that formed theses valleys, mountains, rivers, streams, and gorges, like the Grand Canyon. It was because our Creator at one time saw that this earth was just plain, round, simple, and flat. So he asked the hawk to put a little target way over there, because he was going to do some target practicing, but for some reason that arrow bounced off of the target the hawk had, and that is when the arrow took off and created all the gorges, the mountains, like I said, the rivers. It made it the way it is. So that is the way we think about this area, not just for our people who traveled here, but that is probably the reason why it was created the way it was. Because of him. All of our stories are connected to him, our Creator we grew up knowing.*

- *There might be some stories, like my brother, he told me a story about petrified Indians. Up in that area there is a ledge, on one of the cliffs there is a ledge. On*

top of the ledge, I have not seen it yet, but I look for it when I go up. There are three Indians, and they are petrified and they sit up there. He told me the reason that they are there is they are watching over that land. Apparently, there is some precious metal in that big mountain side. That is why they are there, they would not let anyone go near that. If I came here on my own and did not know anything about rock formations, I would probably just look at it and would not think any more of it. Unless I sat there and looked at every portion, then I would see [the petrified Indian], *it would probably reveal itself.*

- *One day this earth was round and flat. It did not have all of these rock formations or mountains or the hills or the hillsides or anything like that. He said that he was told one day that our Creator was saying that it looked too plain, you know, it was too flat. And so he asked his brother, asked him to take a quiver, I think that is what he said a quiver. Told him to put it way over there where he going to do some target practicing. But he said that the Creator was going to shoot his bow and arrow through that, but somehow it hit a certain part of that and it bounced off and that traveled all over the world. And it went this way, that way, all direction of this whole world, and made these hills, made these mountains, made these rivers, made these streams. You know that was their interpretation of part of their creation story on how different things were formed. And so finally that arrow came to a rest when it went through all of that motion of creating the valleys and the hills and the mountains. That was his story that he was told at one time. So when you hear that and look at it, you kind of think well yeah it fits together.*

Ute representatives commented on the ways that Indian people would have used this area.

- *Maybe those that lived in this area had an idea of where they could go. There were other arches they could use also. I do not think there was one specific spot that they used, but this may have been a centralized spot that they used, but there are other arches that they could use, there is other places that they could use for ceremonies, like areas that are close to water and shelter, where there is enough vegetation or food that they can gather at a certain time of the year. I think that there are diverse areas here in this park. Those who lived in these areas would know where to go. In a sense, I would not call it a ceremonial place but a significant place for people to gather.*

- *Somebody could come up here and experience* [a song].

Ute representatives explained how this place is connected to others.

- *We usually use cottonwood to burn for church ceremonies or funerals. So we burn a lot of them trees there. But it looks nice here. Like we were saying a lot more people kind of traveled along the areas where there was a lot of shade and a lot of water. Feed their horses, feed their animals. They even used their dogs as little, you know, what do they call them, travois. They are like little portable trailers, and then they also get to pack stuff too, along with the travois. So they have*

learned to transport a lot of their things, their camping gear, their clothing, and their cooking utensils.

Ute representatives explained how Indian people would have visited or used the geological resources in this area.

- *When our people passed away they just put them where the wild animals could not get to them. The coyotes, bobcats, cougars. We would put them in an area that would protect their bodies. That is why we do not just rush out there and start climbing all over the place, and start looking all over the place, because we do not want to disturb them and upset their spirit* (Figure 6.14).



Figure 6.14 Ute Representatives at Windows Section

- [UofA Researcher: Could arches be portals?] *It could be possible. Humans have psychic powers, powers like going through a portal. It kind of reminds me of, I was just telling you about that cave over there, see it? And different parts up that way would be homes to the little people. Different parts in the park, I was just noticing there are some places that little people could live. And I think they are around. Maybe at night when it goes real quiet, I think that is when they come out. But as far as going into another dimension, it is possible they were able to do that in a park that has arches. It means you go through a hole or something like this, and you get into another part of the world or another part of the dimensions.*

And that is how some of the old timers talk about the things that happen. They would ask one another, where did you go? I went to this place, a hole, and I come out somewhere else. That is why we could not find you or see you or anything, yes, that is why I came back. There are many stories that people had about certain things, certain areas that people believed they were able to pass through different portals, pass through different time periods, also knowing they could go and travel. Maybe that is what they were talking about, what we call today astro travels, or even time travelers. They could talk about something that is going to happen in a way in the future that is how it is going to be for our people, for the people. They had predictions of the white man coming. They had predictions of airplanes, cars, trains, and highways, and boats. And how we would be, someday, under the rule of the white man. They did not say which one, maybe when the Spanish came into the southwest, maybe when the French came, or when the English came, all those are predictions that they made. And certain things, for instance, for water. One day we are going to be paying for water, one day they are going to block up this water. A lot of the predictions that they made have come true. And I think that they might have seen that maybe going through here, maybe going through another part of the country, certain spots that are significant that had that, that were able to do that. I think that is one of the mysteries of a life of a Native American in this country, because we are able to see and predict a lot of things that are come to pass. And it is easier to say it and tell the story in our language, and I think that is the way with a lot of native people, that they are able to tell the story in their language. When you try to translate it into another language like English, it loses the meaning to it. So we have to be careful what we say because sometimes we might not say the right words, so someone is going to write it down to present it before somebody else, maybe another native, and somebody is going to say that is not right or that is not how it is supposed to be. So we have to think about how we present, how we speak, how we talk about certain areas, because it may have different meaning to someone else.

- *They had* [times when the stars and the moon were in alignment], *especially during meteor showers, or when the planets would align, they had certain people who would watch that, watch the stars. So they had a group of people that were the observers that watched the stars, then you had people that did healings and you had people that knew plants. You had people that had the understanding of where you should be, I guess, who the leader was, pick a certain place, certain time of the year, when everything was in bloom. So they had people like that, different ones, maybe four, five, six people that had responsibilities of taking care of the people, the village, the stars, the environment, and all of that. So they would know when to, if they were raising any kind of food supplies or going after, harvesting rice grass, they would know when that time would be. Also pine nuts harvest, and harvesting of edible plants. So they had people that knew that, when to do that. So I guess in other words, I would say this would be one of the significant spots in this place. And I think the other arches have some significance.*

Ute representatives provided comments regarding the area as a whole.

- *I think they just used this area to bypass, travel through, and they probably stayed for a few days but they were just on their way back and forth to wherever they were going. Trading with different Indian tribes. Not to where they congregated for a year or two years or anything, just an area they knew they could camp at along their travels because of the environment, because of the water, and the animal life that was here* (Figure 6.15).



Figure 6.15 Ute Representative and UofA Researcher at Windows Section

- *The trails that existed back then, they have built roads on them. It makes you think, that at that time it is what our ancestors used as a road. My grandma was told a story about this area. A lot of our elders did that, when they would come through here on that main road, they would stop in Moab. We found out that a lot of our roads were built on native trails tribes traveled on. I think that main road down to Moab is one of them.*

- *In some areas it probably is a* [spiritual place], *that is why we are kind of weary of going out there and walking around. Like I was saying, the difference between rock paintings* [at Wolfe Ranch]. *The one that was off by itself. It looked like they used that as a spiritual place to meditate and pray. There is a difference in their art.*

6.4.4 Ethnographic Comments

The Windows Section EOA study area contains multiple Entrada Sandstone arches, which were a key culturally significant feature to the Ute representatives. The arches serve many purposes to the Ute people. They marked special locations for Utes to gather for the purpose of

ceremony. The arches also might have worked as portals to other dimensions, which, according to a Ute representative, elders often spoke of. One important theme that was discussed was the use of these sandstone arches (Figure 6.16) and other land features as a time-keeping element.

The park has an abundance of arches and other extraordinary geologic features, especially within the Windows Section EOA study area, a collection of sandstone formations that stand out against the surrounding landscape. The arches within the park serve as windows through which celestial movement could be tracked. Geological features, such as hoodoos, would have marked an observation point to align the sight of the arch with an observed celestial feature, such as the sun or the moon. Celestial tracking is instrumental to American Indians and serves to indicate when ceremonies take place and when to carry out seasonal tasks, such as planting, harvesting, gathering, and hunting.



Figure 6.16 A View of South Window

Many examples throughout Indian Country show the connections between solar and lunar tracking and balancing ceremonies that take place in multiple locations simultaneously, such as time keeping at Chaco Canyon (Stoffle 1994). Solar movements also played a role in Ute epistemology; according to Wroth (2000), while looking south from a high point the Utes observed the sun moving left to right in what Wroth calls a sun-wise (clockwise) motion (Wroth 2000: 32-33). The sun-wise motion is preferred by the Ute people and dictates many aspects of their lives, such as dance movement, traveling, and putting on clothing. Arches, like those present in the Windows Section EOA study area and those found throughout the park, are essential cultural features associated with time keeping and observing celestial movements, which in turn influences all aspects of Ute life.

6.5 Courthouse Wash EOA Study Area

Courthouse Wash is a major hydrological system within Arches NP, and is the largest riparian area located in the southern part of the park. The wash trends to the southeast approximately 17 miles, 6.5 miles of which is in the park, and flows into the Colorado River approximately 900 feet south of the park boundary (see Figure 6.2). Elevation for the area ranges from approximately 3,970-4,300 feet. The EOA study area runs southeast from the park headquarters toward the convergence of Courthouse Wash and the Colorado River. The Moab Panel[1] is situated near the convergence point of these two hydrological systems (Figure 6.17). The panel contains a series of painted and pecked figures on a cliff face just east of Courthouse Wash and north of the Colorado River.

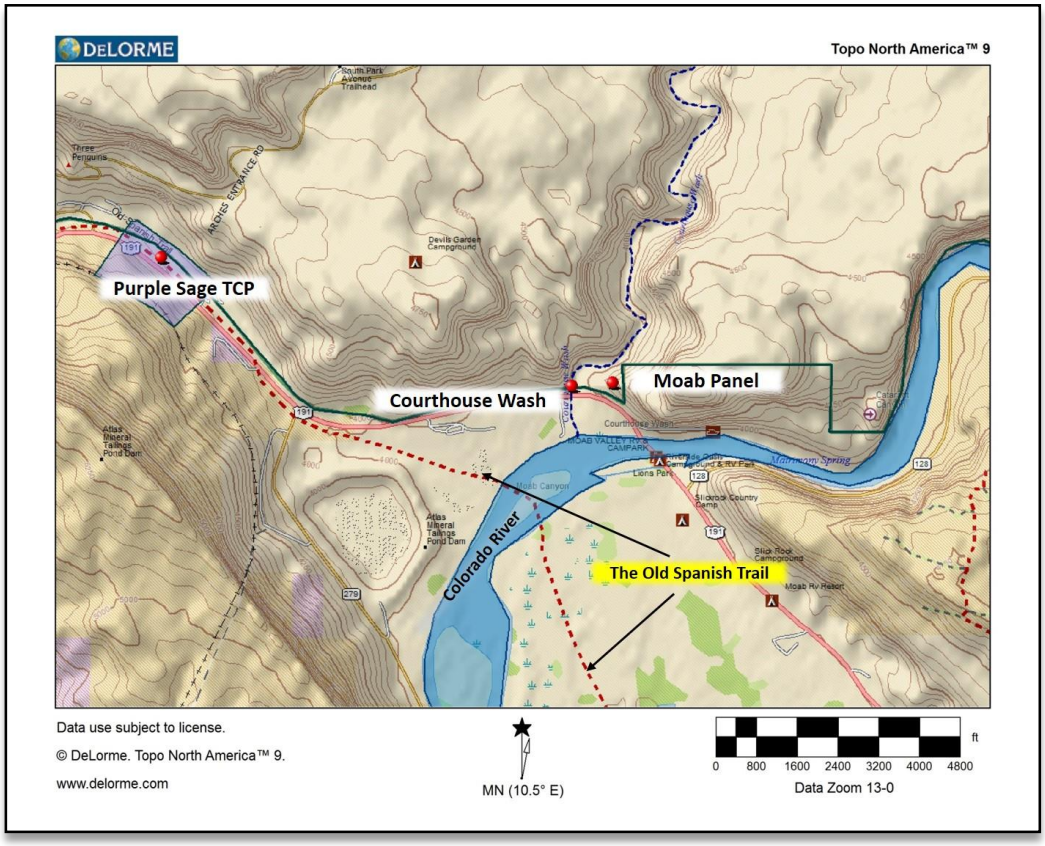


Figure 6.17 Courthouse Wash EOA Study Area

Just south of the Arches NP park headquarters is a large and regionally unique stand of purple sage (*Poliomintha incana*) (see Figure 6.19). This sacred plant grows throughout the valley floor to the southeast, extending towards Highway 191. The purple sage area was previously studied and determined to be eligible as a Traditional Cultural Property (TCP) by Arches NP and the consulting tribes (NPS and UDOT 2000). In addition to purple sage, other ethnobotanical resources are found along the low hills that form the wash. This EOA study area contains both natural and archaeological resources.

[1] The Moab Panel is also referred to as the Courthouse Wash Panel feature by Arches NP.

6.5.1 Natural Setting

The geology and ecology of Courthouse Wash and surrounding area represent a wide variety of resources and places that are essential to the definition of Arches NP. Diverse plant life in the area is supported by the continuous flow of water from Courthouse Wash. In drier areas large quantities of purple sage, Indian tea, and rabbitbrush (*Ericameria nauseosa*) grow.

Geology

Geologic features present within the Courthouse Wash area include two hydrological systems, large sandstone bluffs and outcroppings, and geological traces of the Moab Fault located nearby. The Colorado River is visible from portions of the area. A topographic image of the Courthouse Wash EOA study area illustrates the geological complexity of the landscape, which includes deep, vertical canyons and high, flat mesas (Figure 6.18).



Figure 6.18 Topographic Features of Courthouse Wash and Surrounding Area

Courthouse Wash plays an important role in the formation of the geologic features in the area. The water from Courthouse Wash, along with snow and rain runoff, contributes to the groundwater supply and recharge within Arches NP.

Ecology

Courthouse Wash is the only perennial, or nearly perennial, stream located in the southwestern part of Arches NP. The park is bordered by the Colorado River and the unique ecological systems sustained by the river. Courthouse Wash supports a stable riparian

environment that is critical to the overall ecology of the park and adjacent areas (Hurlow and Bishop 2003: 1). Some of the ethnobotanical resources that grow near the stream include cottonwood (*Populus fremontii*), willow (*Salix* ssp.), sage (*Salvia* ssp.), and fourwing saltbush.

The large sandstone bluffs surrounding Courthouse Wash provide an ideal habitat for drought resistant wild grasses, cacti, and small shrubs. Moisture, dust, and rock debris accumulate in crevices and cracks in the sandstone, providing a place for plants such as sacred datura (*Datura wrightii*), yellow bluestem (*Bothriochloa ischaemum*), prickly pear, and yucca to grow.

Ecological zones outside of the Courthouse Wash riparian area include sagebrush and saltbush habitats. Alluvial deposits with seasonal access to water and the Colorado River are located south of Courthouse Wash. Plants that grow in this area include purple sage, tall sage (*Artemisia tridentata*), sand sage (*Artemisia filifolia*), ant medicine, prince's plume (*Stanleya pinnata*), and Indian tea.

6.5.2 Special Features

Special features at the Courthouse Wash EOA study area include (1) the Courthouse Wash hydrological system, (2) the purple sage TCP eligible area, and (3) the Moab Panel. Each of these features contributed to the decision to visit and interpret these as parts of the EOA study area.

The Courthouse Wash hydrological system is a steep-sided, narrow, flat bottomed canyon that cuts through the surrounding sandstone features. The confluence of the Colorado River and Courthouse Wash is 0.2 miles from the point where it passes under Highway 191. The convergence of the Colorado River and Courthouse Wash provided an access point to the resources within the region. The area was one of the major Indian crossings of the Colorado River. During the Old Spanish Trail period (1829-1848), large trading caravans followed old Indian trails and crossed the Colorado River at this location.

A previous study conducted by the National Park Service (NPS) and Utah Department of Transportation (UDOT) in cooperation with associated tribes determined that the purple sage area was eligible to be nominated to the National Register of Historic Places as a TCP (NPS and UDOT 2000). Purple sage (Figure 6.19) was one of many important cultural resources noted by Ute tribal representatives. These observations led to detailed discussions about Ute connections and meaning of this study area.



Figure 6.19 Purple Sage

The Moab Panel (Figure 6.20) is one of the unique places found within the Arches NP area. The panel contains numerous pecked and painted figures. The diversity in pigments and styles demonstrate long term use of this area for ceremony. From the panel, there are clear views of both the Colorado River and Courthouse Wash. This view contributes to the area's use and overall meaning.



Figure 6.20 Three Components of the Moab Panel at Courthouse Wash with a Horse and Rider on the Lower Left

For the Utes, the various features of this study area such as the Moab Panel, traditional use plants, and associated cultural landscapes contribute to its overall cultural importance. The high concentration of cultural resources within this EOA study area is linked directly to the presence of the Colorado River and Courthouse Wash.

6.5.3 Native American Comments

Ute representatives visited the EOA study area with UofA researchers and provided comments about the significance of the area and the meaning of several prominent cultural and landscape features. The following statements were provided by Ute representatives in associated with the highlighted discussion topics.

Ute representatives described the geography of this area and/or elements that stood out.

- *I would assume it is because it is close to water. Probably at that time a lot of game and it is kind of an easy access to this area. If they are on foot then it would be an easy access. I think there would be enough shelter that they had. With the kind of shelters that they had…wikiup style and I know they did not have teepees back then, it could have been some rock shelters. But I think it was a place where here by the river, they probably used it as a ceremonial a*rea.

Ute representatives discussed why or for what purpose Indian people would have used this area.

- *This area what you call Grand County, from the Arizona-Utah border to north up to the La Sal Mountains, it was considered by Congress that this would be and I guess up to this part of the country and up to the Colorado. And the Colorado would be the western boundary all the way down into Arizona. That was going to be one of the reservations where they had an idea to place all the Utes in this area. So Colorado was saying, 'Yeah! It is a good idea.' New Mexico was saying the same thing. The only problem was Utah…the Mormon population of Utah…their delegation said no. 'We do not want the Utes here.' So this was one of the reservation, or one of the places they wanted to establish as a reservation for all the Utes, after the Northern Utes were moved to up into the Uintah-Ouray reservation. After that, they wanted to move the southern bands out of Colorado into this part of the country. Remove all the Utes out of Colorado. That famous code—'the Utes must go'--that is why they wanted to move us into Utah. They did not want to move into Indian Territory or anywhere else. This was considered to be one the places that was going to be one of the Utah reservations. It was during that time Buckskin Charlie was the chief and this was after Ouray had passed in 1880. Buckskin Charlie was in agreement with the government that we would be moved into this area. And I think his statement was, 'we would like to go there because there was no white man there,' or something to that point. I do not know if I am saying it verbatim but that is what he said.*

- *I would probably say* [this place was] *a camp area. This is a nice place to camp, maybe spend the day, or the night, or the week. Because you have the stream, you have the water.*

Ute representatives explained how this place is connected to others.

- *It is an old panel. I have seen the same, basically, the same drawings down there southwest of Durango, on our reservation, similar paintings. Some down in the Dominguez Canyon down by Montrose, Delta and that area south of Grand Junction, along the river also. And I think there were some similar drawings over toward Colorado Springs.*

- *My people believe in the sun dance you know, the Bear Dance. They used to have times that they had when the moon came, during the solstice, certain times they had a celebration or a gathering or whatever. Like during those times, at Chimney Rock, or at Bear's Den over north of Del Norte, in the Penitente Canyon and up in through there. They have the Bear's Den over through there, the Hole in the Rock, they have that. At a certain time, Pike's Peak would be a place where they went where they did ceremonies, Lawn's Peak was the other where they did ceremonies, up around the Garden of the Gods, and the Spanish Peaks. Different places like that, maybe over at Capulin. They had different places where they would do certain ceremonies. And they would travel but it was not the whole tribe that traveled. It was just four, five, or maybe ten people who went. They were the guardians or the spiritual leaders for whatever that event may be. Those were the ones that went there and those were the ones that came back and told their people things and events that had happened. It was not that the whole tribe went over there and did the whole ceremony. It was certain people that went there. I think that a lot of times when you say that they moved, that the whole tribe moved, it was not the whole tribe that moved. It was families, family groups that moved to certain parts of the country, maybe during the winter, spring, and summer. They all had places they moved to.*

- *I am sure* [the Colorado River] *is connected to other areas. It runs through Canyonlands and different lands, and a lot of the people that lived along there used it for agricultural reasons, probably as a water source in some way. I think it had a lot of influence on people for their needs at that time. I am sure today it still has its uses. People use it for energy, electricity on the way, things like that. It is a body of water that runs through different lands for different reasons.*

Ute representatives noted if Indian people would have used water from the area.

- *The water has something to do with the meaning of this place. Before they came, maybe they did some ceremonies in this area here down close to the river. It would be an ideal place to have camps; an ideal place to have maybe for instance, they might have had bear dances here, who knows. That is an old tradition that the Utes have, the bear dances* (Figure 6.21).



Figure 6.21 Southern Ute Representative and UofA Researcher Discuss Courthouse Wash EOA Study Area

- *When our people offer a prayer, they always offer a prayer for our food or for water. A lot of tribes settled right where the water was, like the river and streams. Even in the desert, they knew where that was going to be.*

Ute representatives explained how Indian people would have used the plants at the area.

- *People gathered* [purple sage] *for their tobacco. They would put that in there with it, roll it in the corn husks, and roll the tobacco in with that mixer. Then they would smoke it. They would use it for prayer, and sometimes social smoking* (Figure 6.22).



Figure 6.22 Ute Representative and UofA Researcher at Purple Sage TCP Eligible Area

- *They might have used that purple sage, the Indian tea, prickly pear, the rice grass, sage, rabbit brush. The cottonwoods…they would have used that for making shelters or they would have used that for fire, homes, and shelters.* [UofA researcher: What did they make those travois poles out of?] *They made them out of long poles. They could have been cottonwood, they could have been aspens. They could have been pines. They could have been lodge poles. And they are used for that…they had small lodges when they were pulling them by dogs. And after they acquired horses, then they probably had teepees at that time.*

During the visit to Courthouse Wash, one Ute tribal representative discussed the importance of purple sage in Ute culture. He explained that it is an important medicine plant that is used in a variety of ways. He added that the Purple Sage TCP area has been one of the primary gathering areas of Ute people. When Ute people would travel from Colorado to the Uintah and Ouray reservation, they often stopped outside of Arch NP to gather. He told UofA researchers that he remembers stopping when he was younger with his family to gather. The Ute tribal representative also noted that this area was one of only three prominent purple sage gathering areas. The others are located in northern Arizona near Winslow and in southern Colorado near Trinidad.

Ute representatives explained how Indian people would have used this area and/or artifacts.

- *Looking at the rock art here, these are kind like, to me, my interpretation of it is like they are guardians. Guardian spirits. If they are beings they are not from this earth. If they go back thousands of years, these drawings, if they are that old, before anything else, I think there were a lot of visitations.* [UofA researcher: By guardians from other places?] *Yeah. Guardians from different places. We have a Creation story that talks about people being placed on the Earth through a hole in the sky, through a beam of light.* [UofA researcher: Was that all people or just Ute people?] *Well, different tribes have different Creation stories but this story is basically Ute, of being placed on this earth through this beam of light coming from the hole in the sky* (Figure 6.23).



Figure 6.23 Ute Representative at the Moab Panel

- *I think this rock art goes way back. I think it is hundreds…thousands of years old because it is a big rock art. A big panel! Not only on the wall here but also on the little slabs of rock here. Like I was saying you know our people believed in the spiral or the circle within a circle. And we see, what, two here. There could be more. Some of the interpretation of the circle within a circle it is kind of telling the story of that the way that the old timers believe that it is that circle within a circle is our galaxy or our where we came from…nobody knows but that is our galaxy that circle within a circle. It does not have no ending and the other one is a spiral and within that spiral, we are in that spiral all the time. We are within our life time…our life time works in a spiral and that at the end of that spiral we go to another spiral wherever that might be. It is like reincarnation. At the end of one spiral you move to another spiral, that is reincarnation of going into another area, another level of life. But that is just some of the beliefs that the old timers had. It may not be everybody's belief, it may not be all the families' belief but that is just some of the family beliefs that they had according to their elders.*

- [The Moab Panel] *was put in a certain place for a certain reason. I think it probably was a ceremonial marking for travelers from different tribes that come here, go through here, and maybe those individuals thought about other people being safe on their travels. Maybe a lot of them came for spiritual reasons. Maybe some came to go sit on a certain ledge, and wait for an answer to his question, whatever his question was. But* [the Moab Panel] *I would say was more for the safety of travelers, thinking about other people. Like I said, there is a lot of people that went through here at that time, different tribes that did trading. That is why it is in the place it is at* (Figure 6.24).



Figure 6.24 Ute Representatives and UofA Researcher at Courthouse Wash

- *That one back over there that kind of looks like a snake on that rock and it goes back and forth…I was wondering if that was a trail. A trail through the canyons here. It could be or it could not be. All the rest of it is animals. One thing that is missing here is a rider on a horse. I did not see that. So it predates horses. So I do not know what else I can tell you.*

- *Clifford and I had an idea that we put together. We were talking about it…talking about our people. You know they always consider us to be hunters and gatherers, you know basically we were. But we had an idea at one time, and we were sitting around talking about it, he and I. He was talking about irrigation. He was talking about that some of our people raised corn or raised some kind farming, or something like that. We had an idea that maybe we were descendants of the Fremont because of not being hunter-gatherers but having some farms somewhere. And we were talking about maybe we were or maybe that is our ancestors because they were here throughout this part of the country. Maybe we did descent from them. Maybe that is who our people are because we do not have a migration story.*

Ute representatives explained how Indian people would have visited or used the geological resources at the area.

- *Earlier, we were talking about* [Mancos shale]. *Men know where to get that too. They make paint out of that. They crush it into a powder for pottery. People would travel to get plants or certain colored rocks.*

Ute representatives provided comments regarding the area as a whole.

- *My dad would always say that is why we have a connection with the Mother Earth. The earth provided everything for our people to live on and to use. Like I was saying earlier, nothing went to waste. Everything was used. Even the plants were used to whatever purpose they had. A lot of our people are really closely tied with the earth here, even with the stars and the universe. They did a lot of star watching in the night, and they knew well how to read them for the seasons. It is all connected, so that is why when we pray, we include everything. With the weather changing now, we are seeing that something is happening out in the universe and it is kind of making things change on earth, the global warming. We believe our earth is telling us something, maybe we need to quit some of the things we are doing or maybe we need to be more cautious. Our people believe right now that this is one big world that we live in now. We cannot forget where we come from.*

6.5.4 Ethnographic Comments

The Old Spanish Trail, the first official overland trade route that connected northern New Mexico to California, crosses the Colorado River and passes the Moab Panel. Traders left Abiquiu, New Mexico, for Los Angeles, California, with pack trains of woolen goods. They later returned from California with large herds of pack animals. The trail was in operation from 1829 to 1848. An important element to the Old Spanish Trail is that it followed traditional Indian trails. The segment that passes by present day Arches NP was once a major Ute trail in the region.

Trails throughout traditional Ute territory served a variety of functions and purposes. Some trails were used for travel to and from other Ute and non-Ute communities and to resource use areas. Some trails were used for the purpose of pilgrimage and knowledge acquisition. Trails also were used in different seasons. Powell and Ingalls documented different words for trails used in the spring (*Ta-ma'-pu*), summer (*Ta'-tsa-pu*), fall (*Yum-pa*), and winter (*Tom'-o-pu*) (Fowler and Fowler 1971:180).

For the Utes, trails are considered sacred entities and their understandings of their traditional trail networks are grounded in the notion that the universe is alive, has agency, and that everything is interconnected through all types of relationships. The universe is alive in a similar way that humans are alive and the universe possesses most of the same characteristics as well. The universe has discrete physical components such as power and elements.

Trails were and are seen by Ute people as being made for them at Creation and as being alive and sentient. The Utes conducted ceremonies centered on trail creation, preservation, and use. These activities were documented in 1912 when Ute traditional leader Buckskin Charley oversaw a trail making ceremony at Ute Pass in Colorado (Figures 6.25 and 6.26). The Ute people continued to conduct ceremonies for their trails as a sign of respect and renewal. The Ute people participating in the trail making ceremony permitted outsiders to observe and document this activity in order to convey a message of cultural importance and ownership to the rapidly increasing non-Indian population (Stoffle et al. 2008).



Figure 6.25 Buckskin Charley Saying Prayers at the Beginning of the Ute Pass Trail Marking Ceremony (Courtesy of the Denver Public Library, Western History Collection, H.S. Poley, P-1298)



Figure 6.26 Mounted Utes Coming Down the Ute Pass Trail
(Courtesy of the Denver Public Library, Western History Collection, H.S. Poley, P-133)

Anthropologist James Goss, who spent much of his career working with Ute people, made attempts to understand and contextualize the cultural significance of Ute trail networks and the Ute connection to the Old Spanish Trail. During his key note address in 2003 to the Old Spanish Trail, Dr. Goss stated:

> The Utes have known the way from the continental divide in Colorado and New Mexico to California since their creation. Yes, the Utes 'know the way to San Jose'. Their Myth explains the origin of the Colorado River system. It is Sinawavi's Trail, Sinawavi's River, Sinawavi's Valley, Sinawavi's Canyon, and it is Sacred and must be approached in a Sacred way. The Myth explains the need for a more circuitous route through and around the Colorado canyon country. Sinawavi made the trail and showed us the way. The way was rough and circuitous because of 'First man's' and our own transgressions. But, it is a Sacred Way, mandated by deity

> The Utes know that the trail has been there for thousands and thousands of years. The Utes know that the trail was there before there was an 'Old Spaniard' (Goss 2003: 9).
>
> The Ute people perpetuate a cognitive mapping of their lands and their trails. Amazing! They had even named the major geographical features in their own language, before the Europeans came and did it for them. And, as they have become bilingual, and even trilingual as alien languages have been imposed upon them, they have kept track of their Sacred names and Sacred Places. Their Sacred Landscape is still here. We should keep in mind that this is their trail and their ancestors were camping along it 10,000 years ago. 10,000 years of human stories are still a part of this trail. In a very real sense the Old People are still here, and they still have unfinished business here. They are kept alive by their children telling their stories along the trail. They are kept alive in oral tradition. And, oral tradition is worth something. Ten thousand years of oral tradition is probably the best part of the story of this trail. The Utes know something about this trail and this land. And we should listen to them. Documented, written history of the last 300 years is like the skin of an onion compared to 10,000 years legacy of the Utes and their ancestors (Goss 2003: 9; Stoffle et al. 2008:).

From a Ute perspective, trails were made for Indian people by the Creator. Ute people stipulate that they retain their Creation-based rights and responsibilities associated with protecting and respecting these trails.

6.6 Wolfe Ranch and Ute Panel EOA Study Area

The Ute Panel is a rock pecking depicting anthropomorphic and zoomorphic figures, which draws visitors beginning the hike up to Delicate Arch, which is one of the park's most famous feature. Ute representatives identified with the panel; five of the figures were recognized as horsemen apparently on the hunt. Other features stood out to the Ute representatives as well, such as the available water, plant, and animal resources, which would make this location a great spot to camp.

The Wolfe Ranch and Ute Panel EOA study area is located along the trail from Wolfe Ranch to Delicate Arch. The elevation of the area ranges from 4,295-5,000 feet, with lower elevation points near the Salt Wash within the basin. The EOA study area is located 2.6 miles northeast from Landscape Overlook A and 6.4 miles north from the Windows Section. The EOA study area is just north of four of the major hydrological systems in the park—Salt Valley Wash, Salt Wash, Winter Camp Wash, and Cache Valley Wash (Figure 6.27). Illustrated in Figure 6.27 are the convergence points of the four washes that come together, joining the Salt Wash south of this EOA study area, which then flows into the Colorado River.

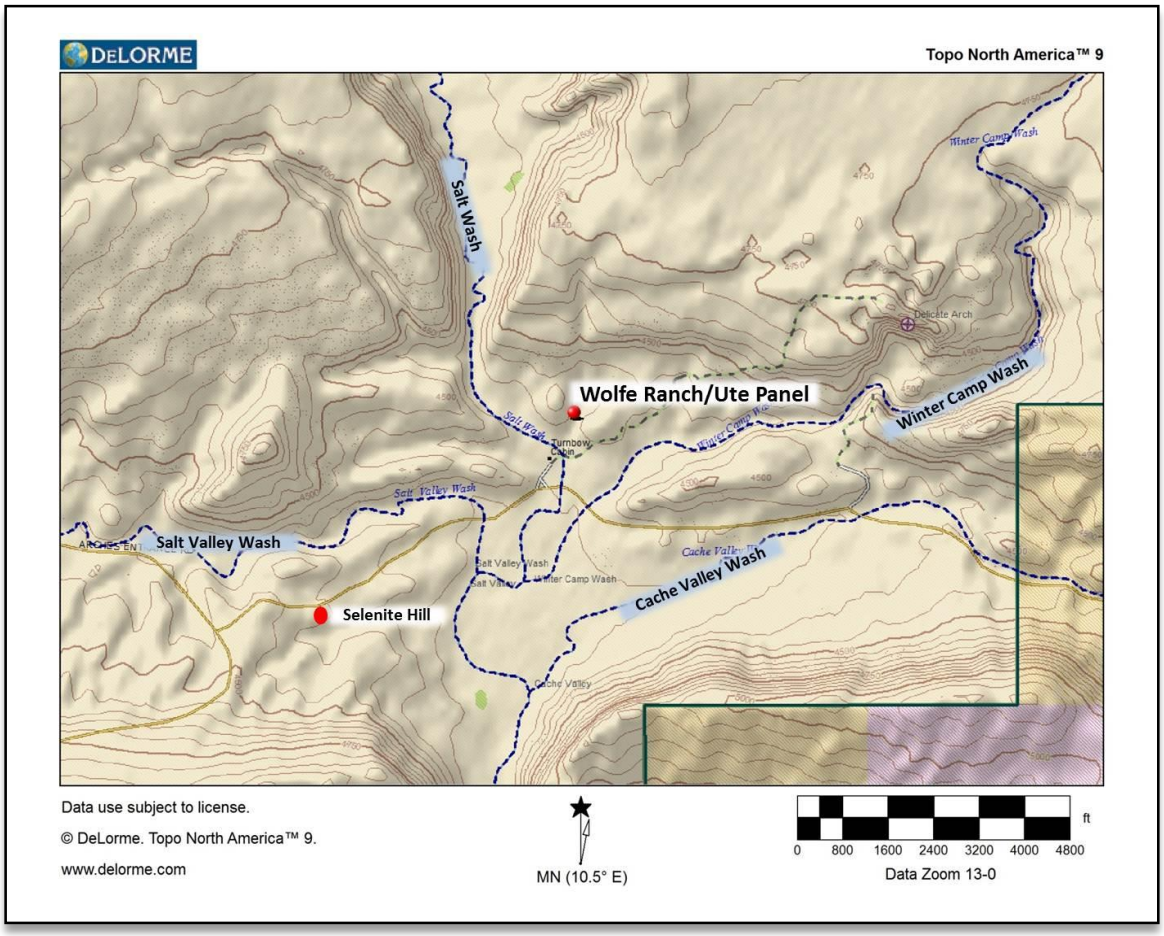


Figure 6.27 Wolfe Ranch and Ute Panel EOA Study Area

The Ute Panel, comprised of two rock pecking panels, is situated in a wet and enclosed valley on the east side of the park along Salt Wash (Figure 6.28). On the west panel there is a single pecking (Figure 6.29 (L), and on the east panel there is a series of zoomorphic and anthropomorphic features (Figure 6.29 (R).



Figure 6.28 Ute Panel Petroglyphs near Wolfe Ranch



Figure 6.29 East (L) and West (R) Close-up of Peckings at the Ute Panel Petroglyphs near Wolfe Ranch

Features identified by Ute tribal representatives factored into the understanding of how and why the Wolfe Ranch and Ute Panel EOA study area and the surrounding landscape are important to the Ute people. The cultural and natural resources observed and identified at this location illustrate strong connections between Ute people's past and their present.

6.6.1 Natural Setting

The geology and ecology of the Wolfe Ranch and Ute Panel EOA study area represent a diverse number of resources and culturally important places. Abutting landscape features that were discussed include hoodoos, selenite covered hills, hydrological systems, and the view of the La Sal Mountains. There is a continuous flow of water from the Salt Wash that influences the biodiversity and biocomplexity of the EOA study area. A freshwater spring is located nearby, and provides a source of drinking water for the inhabitants of the area.

Geology

The geology of the Wolfe Ranch and Ute Panel EOA study area represents diversity in rock, clay, and soil types, and includes the hydrology of four streams that flow nearby. Selenite deposits are found covering a hill south of Delicate Arch Road, less than a mile west of the Wolfe Ranch and Ute Panel EOA study area. The topographic map provides an overview of the geological features and hydrological systems near the Wolfe Ranch and Ute Panel EOA study area (Figure 6.30). This image further illustrates the protection that the large bluffs and canyons offer for communities living within the resource rich basin.

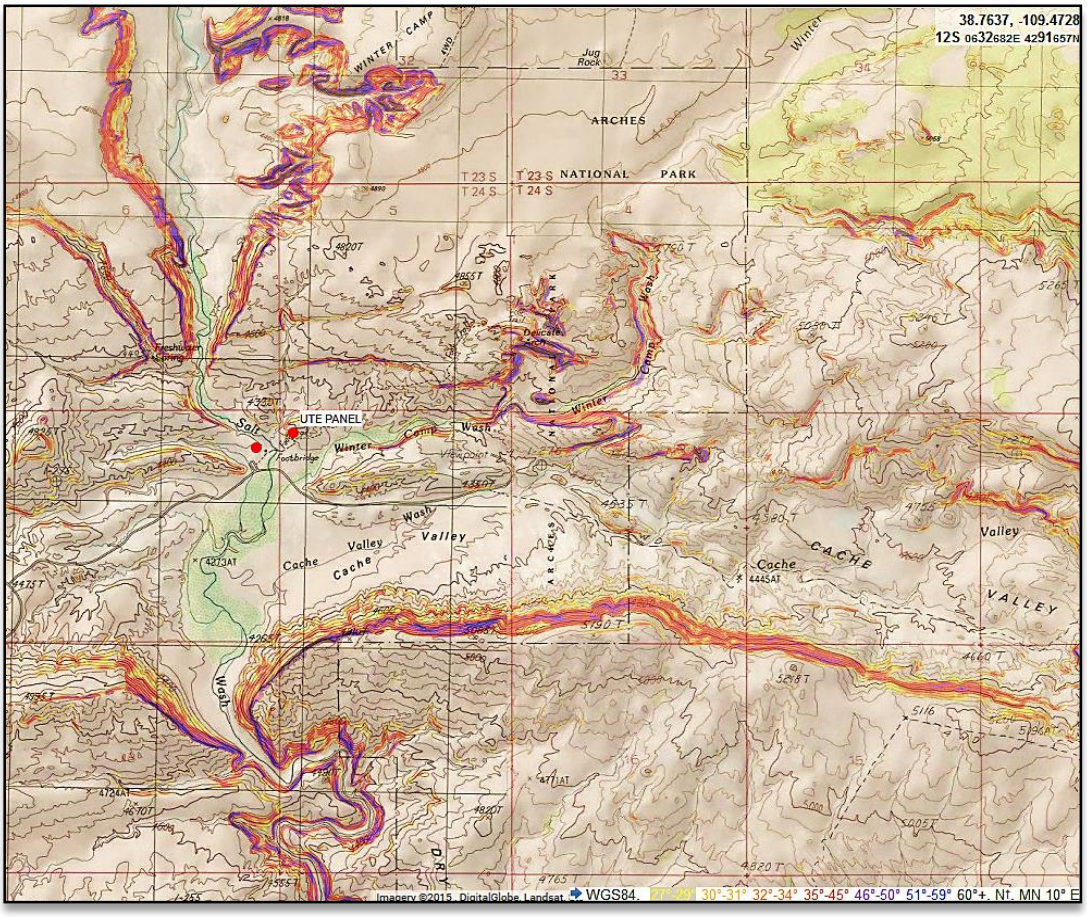


Figure 6.30 Topographic Map of Wolfe Ranch and Ute Panel EOA Study Area

Large Entrada Sandstone hoodoos and arches are visible to the south and southeast of the Ute Panel. Large rock outcroppings and boulders of limestone frame the northern and western portions of the area. Salt Wash flows through the center of the Wolfe Ranch and Ute Panel EOA study area, joining Winter Camp Wash and Salt Valley Wash less than a mile downstream.

The Wolfe Ranch and Ute Panel EOA study area is rich in mineral resources. On a nearby hill, there are large deposits of selenite. Selenite is frequently found deposited in uranium rich soil. This has an effect on the types of plants that can grow in abundance.

Ecology

From the time that Wolfe settled the area to approximately three decades ago, sheep and cattle grazed the land (Wolfe Ranch Trail Guide 2007). As a result, natural resources were altered; however, the extent to which plants, water, and soil were adversely affected is unclear. Salt Wash enables a diverse number of plant resources to grow within this location. Cottonwoods and willows require significantly more water than the Pinyon-Juniper woodlands in high desert areas, and therefore are only found growing along stream and river corridors where their roots can reach the water table easily (Figure 6.31).



Figure 6.31 Plants Observed Growing Near Salt Wash and Ute Panel

Plant resources associated with riparian ecosystems include willows and cottonwood. Other plants observed growing within the EOA study area include woolly locoweed (*Astragalus mollissimus*), Indian ricegrass (*Oryzopsis hymenoides*), greasewood (*Glossopetalon spinescens***)**,

prince's plume, rabbitbrush (*Chrysothamnus* ssp.), fourwing saltbush, scrub oak (*Quercus* ssp.), Indian tea, sagebrush, yucca, blackbrush (*Coleogyne ramosissima),* fuzzy opuntia, columbine (*Aquilegia* ssp.), penstemon (*Penstemon* ssp.), and various grasses (Figure 6.32).



Figure 6.32 Plants Observed Growing near the Ute Panel

Water is a significant feature of this site, as demonstrated by the variety of unique plant resources and the extensive use of the site by American Indian people. The access to a continuously flowing hydrological system and nearby freshwater spring may be key reasons that the first humans came to this specific area, and continued to stay and utilize the land and resources.

6.6.2 Special Features

Wolfe Ranch and the Ute Panel were selected as an EOA study area because this location has cultural and landscape features different from other areas in and around Arches NP. The special features of this area include (1) the Ute Panel (Figure 6.33), (2) convergence of waterways, and (3) wetland vegetation.

The Ute Panel was interpreted by Ute representatives as horsemen hunting game. This panel was thought to be Ute in nature because of the use of horses, dating as far back as the 1600s. Five horse and rider figures were noted. The panel acts as a marker for others who pass by this location.



Figure 6.33 Ute Representatives Talking with a UofA Researcher at the Ute Panel Sign

Wolfe Ranch is located along the Salt Wash, which is one of the prominent hydrological systems in Arches NP. Salt Wash runs south from the Lost Spring Canyon to the Colorado River. Just south of the Wolfe Ranch and Ute Panel EOA study area, this waterway converges with three other systems: the Salt Valley Wash, Winter Camp Wash, and Cache Valley Wash. The convergence of multiple hydrological systems creates a unique ecosystem in the high desert. These waterways also contribute to the animal life, giving credence to the interpretation of the panel.

These hydrological systems create ideal environments for unique plant communities. Numerous traditional Ute use plants were identified. One plant known as wooly locoweed, is used in small doses during ceremony. It acts as a hallucinogen and can place those who use it into a trance like state.

The Wolfe Ranch and Ute Panel EOA study area contains numerous cultural resources. While the use of this area is evident long before the establishment of the non-Indian ranch, the sheltered area would have contained plentiful plant and animal resources needed to survive a range of environmental conditions. It served as an important place for establishing winter camps for Ute families and their horses.

6.6.3 Native American Comments

The Ute representatives who visited the Wolfe Ranch and Ute Panel EOA study area with UofA researchers had many comments about the significance of the area and the meaning of several prominent geological features. The information presented below reflects the thoughts and opinions of the Ute representatives who commented on this EOA study area.

Ute representatives described the geography of this area and/or elements that stood out.

- *This is probably an area where they camped because of the spring, the water, where they could stay for maybe a winter. Anywhere there is less wind, and anywhere there is enough fuel, and anywhere there is enough water and feed for their animals, I think this would be one of the ideal spots in this area* (Figure 6.34).



Figure 6.34 Ute Representative and UofA Researcher Discussing the Ute Panel

- *This area is isolated. And a long ways from other people that would want to come down to this part of the country. I think this is a good hunting area, a good camping area.*

Ute representatives commented on the ways that Indian people would have used this area.

- *I think they would have come up here in the fall. They would have hunted, gathered ricegrass, and sort of settled down in the winter. That would have been one of the things that they did. I mean, you have four streams here. That is where the animals would come to, deer, sheep would come to water. Animals do not get*

too far from water, and neither do humans. So if you have got a spring here, that is. Yeah I think this is an ideal spot for that, and I think that is why they have this panel here, to say that this is a hunting area. Maybe the six that are up there on horses. It is got to be after 1600, when they acquired horses. So years of horses coming through this area, they could, before other native groups that came in. Settlers did not move in until the 1800s.

- *Well, they would probably go down to the La Sal mountains, or they would go, or north* [in the spring and summer]. *Up toward Green River, or going over to Thompson to go over the hill up into Uinta Country. I do not think it was a permanent site that they came to year after year, I think it was a site that they came to, or knew about, if they were in this area. They know the place, they know the surrounding area. So I figured whenever they were in this area this would be an ideal spot to camp in the winter. Or as they are moving from north to south or east to west, they knew there was a spot here where they could camp out because there was water. And I think that is what they would look for, is water and game. You know they got a lot of ricegrass so there might have been a lot of other plants*

- *We were told from generation to generation what was going on with the tribe, not just with the tribe but that environment we lived. What time, what time of the year we gather food, what time of the year do we plant this, what time of the year do we go get the seeds, what time of the year, um… so you automatically know. You know, like we were saying, the change of the colors of the leaves, by that change. Okay, fall is coming, then we need to hurry up and get, you know, our food ready. Dry our food and the fish, dry meat and store our berries. Anything that is edible for, for that tribe to make it through the winter. So we, we use that a lot. That signs of the land. And then the migration of the birds, looking at the sky. I do not know this if the, the area that our geese fly, north and south. The change of colors of the animals… So, here we were raised out there, like that. And you pretty well know what is going to take place.*

- *The purpose of the drawing is what you know, we were saying is just the basic over here, you see a lot of the goats and deer, and horses and the man, you know, but this other guy that is standing by himself, that is a different type of drawing. So that probably meant something else. That individual.*

- *You know, we are more familiar with that type of rock up in the certain area where we live. And then also we have these types of rocks, so, color of the hills there. And I noticed that, looking at the house there, Mr. Wolfe, he covered that roof and the layer between the logs with that type of rocks. And it looks like our dirt or whatever you want to call it. It looks like it was like a sandstone than most got it from the bed of water there to fill in the gaps there. Because I know that when my grandfather stayed, he did live in a little cabin like this, only it was bigger than that. He filled the gaps between the poles that were laid, you know, crossed, however they build it. He filled up with mud and clay like cement, so it is similar to this one down here.*

Ute representatives explained how this place is connected to others.

- *Even though it is kind of far away, that mine down there by Moab really looks like it is done some damage to the environment. It is all connected. Earlier, I was telling you about how our people miss this place, but the plants, the land, and the water miss them too. It is lonely. This area is yearning for our people that used to be here. Comparing this to a story my mom told me one time, we were riding along in one of the communities and she said, 'they ought to fix that house, it still looks like it could be livable', and that is what she was saying. Sometimes even homes, they miss their owners. It yearns for them to come back home, because the people that lived in that area gave it like, you know children playing, going in and out of the house, loving there and cooking. It makes a place alive, but when they leave it is sad and it starts to deteriorate. So in a way, I think that human beings are tied to nature. I get a yearning for Colorado, but I was not even born over there. That is where my ancestors lived though. When I go over there I feel very at peace.*

Ute representatives explained how Indian people would have used the plants at the area.

- *Wooly Astragalus…we used to use it for medicine, but you only use a small amount of it. You do not use a lot. It is kind of like, when they use it, it is kind of like a hallucinogen plant. So they would use that, especially when they were maybe on the hill in ceremony, they would use a little of it so they could go into a trance to find what is wrong, what is going on. Roughly translated into thorny bush* (Figure 6.35).



Figure 6.35 Woolly Locoweed, a Ute Ceremonial Use Plant

- *We use* [rabbitbrush] *in ceremony and also for medicine. They make a cold medicine out of the sage. They boil the leaves, then let it simmer and cool down a little bit, then they drink it hot. Helps break up the cold and open up your lungs, and it also helps, all that stuff that goes in your stomach helps clean it out. They still use them in ceremonies. It is one of the plants that they use, not only this, but they have mountain sage also. Then broadleaf sage that they get off the plains, they use that also in the ceremonies, especially during the sun dance. There are three kinds they use. My mom used to give us this stuff when we have colds. Helps open up your sinuses and your lungs.*

Ute representatives explained how Indian people would have used the animals at the area.

- *I would assume there were a lot* [of bighorn sheep] *at one time because this rock art has a lot of that. Some deer, but mostly they are hunting bighorn. And those six riders out there are probably hunters in this area.*
- *I think* [they used the rock pecking panel] *to mark the site as a hunting area.*
- *They did a lot of traveling, and they did a lot of camping. They hunted through here.*

Ute representatives explained how Indian people would have used this area and/or artifacts.

- *Four horsemen. They are hunting sheep. Then one at the bottom, one on the middle, and one way over there. No one, two, three, four, five. Way at the end, down here at the bottom, then one right in the middle, and there are two on top. You know there could be six. No, that is a goat that is a sheep. The one in front of the two horses facing this way. I thought that was a horseman. Probably, this place had a lot of sheep in here at one time.* [UofA Researcher: They would come down to water, you think?] *Yeah. Had to. This was the only place they had the water so they would come down to drink the water. The one on the left is on its own panel by itself, I have seen that symbol somewhere else. I have seen another symbol like that but I ca not remember where I have seen it. It will come to me in my dream.*
- *You see that Indians have been here. I would say it was mainly for hunting and gathering herbs for medicine, but maybe they were farmers too.*

Ute representatives provided additional comments and recommendations regarding this site.

- *To me, this would be a spot that, you have four streams? You got water, and a lot of water. You do not have any rock shelters, so it is primarily the horse culture. And probably earlier you had people traveled here on foot. I think this is an ideal spot to camp at for a period of time. Replenish themselves, their animals, they*

have feed, they have game. And if they had ceremonies, maybe they did have ceremonies. It is hard to tell what kind of ceremonies they would have.

- *I think Ute people might want to come back to this place, especially from the three bands. There might be a few that want to come back and take a look at this, or if there is a possibility that just, if there was a spot they probably could camp out here for a day or two. Give themselves an idea of how it was out there. Bring their elaborate teepees. I do not think there would be too many campers. Maybe, at the most, 12-15 people. I think not too many people, when you get too many people they start to have an impact on the area*. [UofA Researcher: Do you think that camp would be a mixture of elders and youth?] *That would be the ideal. To get some elders out here to tell some, just stories, the time that we tell stories is between the winter solstice and the spring equinox. That is the time that we tell story about our, but just to give information out that can be done during the summer, spring, fall months. But to tell the stories about our people, things that happened at the time animals were able to speak, that is kind of reserved for that period of time. The winter solstice and spring equinox. So, our story telling stopped last week.*

- *I do not know how many personnel they have here at the park. And I know they are too short handed to have an interpretive person at each site, but if they had someone that would go around, visit some of these sites, and give an interpretation, I think that would be good. Maybe one here for half the day, and half the day on the other side of the hill at the arches, and another person would come up and talk about the arches back here, balanced rock, and all that good stuff up along the Salt Valley.*

6.6.4 Ethnographic Comments

The convergence of four streams and availability of fresh water from a spring just north of the ranch contributes to the EOA study area (Figure 6.36). These different riparian systems build a complex ecosystem in the area that allowed for plant gathering and hunting on a large scale. Within Arches NP, this is one of the most ecologically diverse locations, making it an ideal location for Indian use over periods of time. The Ute representatives identified the rock peckings as being Ute in origin, thus making this location culturally important. Ute traditional use plants were found in the area as well, which may have been used in ceremony throughout the park. Overall, this location would have been an important site to Utes and would be an ideal location for future camp outs by tribal members.



Figure 6.36 Salt Wash at Wolfe Ranch

The pecking panels at Wolfe Ranch were given the official park name, the Ute Panel, by NPS officials. The park staff believed the peckings were of Ute origin. During the March and September 2015 field sessions, the Ute tribal representatives agreed with this assumption and noted that these were made by Ute people after they acquired the horse in the late 1600s. The rock peckings found at Wolf Ranch, like the peckings and paintings found at the Moab panel, are seen as culturally significant and important to Ute people. Often peckings and paintings are associated with ceremonial activities. These activities could be linked to medicine and pilgrimage or they could be linked to ritual associated with hunting.

Wolfe Ranch contains culturally important use plants (Figure 6.37). Plants found at this site were used for sustenance and medicine. Throughout much of the Wolfe Ranch area and the entire Salt Valley is a field of Indian ricegrass, a major food source for many tribes. Woolly locoweed, a ceremonial and medicinal use plant, was also observed growing in the EOA study area. The medicine may have been used to induce a trance like state at significant locations within the park, however, the lush ecosystem of Wolfe Ranch made it the likely gathering spot for this ceremonial plant.



Figure 6.37 Ute Representative and UofA Researcher Discuss Use Plants

Ute representatives who visited this EOA study area believed that this location is culturally important to the Ute people. The abundance of natural and cultural resources is critical for understanding the significance of this place. The water, plants, and animals would have provided the necessary resources to sustain life. Cultural resources like the rock peckings would have been used in ceremonial activity. It also was requested that a time for Ute people to return to this EOA study area to camp be permitted with access to this place be restricted for other park visitors so the Ute people can reconnect with a part of their traditional homeland.

6.7 Salt Valley Overlook EOA Study Area

Salt Valley Overlook EOA study area contains archaeological resources spread across a small plateau. These archaeological resources are a critical component to this study area and show long term evidence of American Indian use including the Utes. Additionally, the place is known for its distinct viewscapes which allow for people to see in all directions.

Salt Valley Overlook (Figure 6.38) is located to the west of the Wolfe Ranch and Ute Panel EOA study area and just south of the Fiery Furnace rock formations. This EOA study area is situated at an elevation of approximately 4,700 feet.

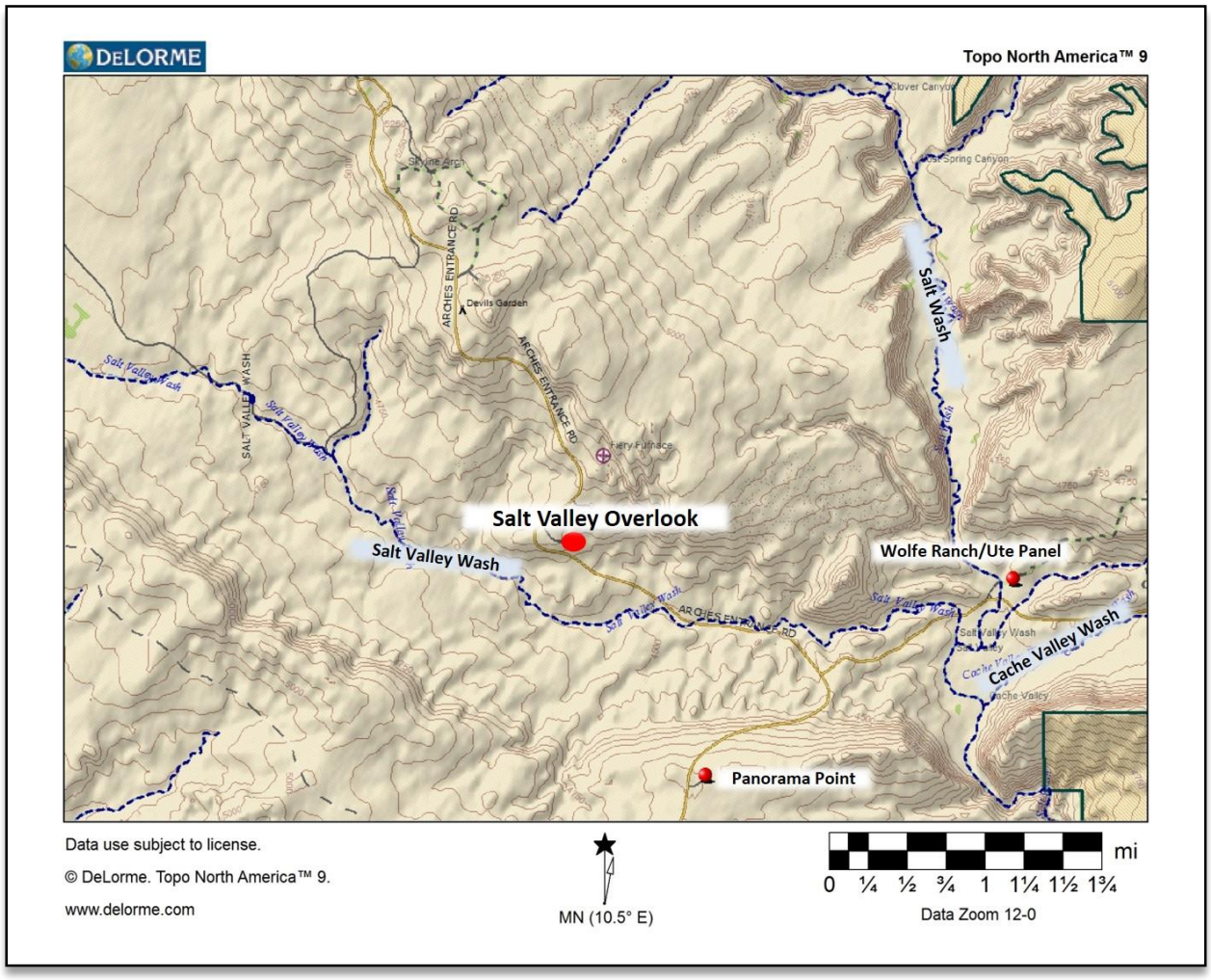


Figure 6.38 Topographic Map of Salt Valley Area

From this location, one can see the Fiery Furnace and the Devils Garden to the northwest, the La Sal Mountains and Garden of Eden to the southeast, and Salt Valley to the southwest. Due to sensitivity of resources, the exact location of Salt Valley Overlook is not marked on the map.

6.7.1 Natural Setting

The following section provides the reader with a brief overview of the geology and ecology of Salt Valley Overlook. The landscape features, viewscapes, and ecology of Salt Valley Overlook contribute to its unique natural setting according to the Ute representatives.

Geology

Salt Valley Overlook EOA study area (Figure 6.39) is located in the central portion of Arches NP. Salt Valley Overlook is bordered by Entrada Sandstone outcrops on the eastern boundary and the western edge slopes into the Salt Valley. The valley floor is approximately 328 feet below the EOA study area's western margin. Salt Valley Overlook is composed of saline and calcareous alkaline soils. It is a large sloping ridge with a series of small Tidwell chalcedony outcrops that overlooks Salt Valley and Salt Valley Wash. The EOA study area is dissected by a series of small run-off channels that flow south and into the wash below.



Figure 6.39 Salt Valley Overlook with a View of the La Sal Mountains

Salt Valley Wash is one of the major hydrological systems in the park. From its headwaters near the Klondike Bluffs section in the northwest corner of the park, the wash flows approximately nine miles before joining Salt Wash and Winter Camp Wash. Once these three washes converge, they flow roughly another four miles before reaching the Colorado River.

Salt Valley contains salt tectonic features, which are common throughout this part of southeastern Utah. Salt Valley is similar to the nearby Moab Valley in that both valleys are collapsed salt anticlines and are examples of salt deformation. The deposits of salt underneath the valley floor are primarily composed of the mineral halite, a form of salt. These deposits

deform plastically and have a low density compared to the surrounding sandstone, shale, and limestone (Foos 1999).

According to Baars and Doelling (1987), overall changes in sediment thickness and the presence of angular unconformities indicate that salt began to rise upwards at the end of the Paleozoic Era and throughout the Mesozoic Era. The upward movement of salt caused the deformation of the overlying sediments, and created a salt dome or salt anticline. Basement faults were later reactivated during the Laramide orogeny and this resulted in the fracture of sedimentary rocks (Baars and Doelling 1987). As groundwater began to percolate along the fault lines and through the fractures during the Tertiary Period, the salt deposits dissolved. This activity left a residual leached gypsum cap and remnant halite. Eventually, the rocks collapsed into a void created by these dissolved deposits, thus creating Salt Valley.

Ecology

Arches NP is located within the Semiarid Benchlands and Canyonlands ecoregion. This region is situated at elevations that range from roughly 5,000 to 7,500 feet. Typically, this ecoregion experiences extreme climatic conditions with warm to hot summers and cold winters. This area receives approximately five to thirteen inches of precipitation annually, with most occurring in the mid to late summer and winter. Within this ecoregion broad grass, shrub, and woodland covered benches and mesas are common. The ecological diversity of this ecoregion is influenced by steep canyons, limited water resources, seasonal flooding, unique geological substrates, and large fluctuations in climatic conditions (Figure 6.40).



Figure 6.40 Ecological Diversity at Salt Valley Overlook

Within the park, there are a variety of vegetation communities that make up the Semiarid Benchlands and Canyonlands Ecoregion. Areas like Salt Valley Overlook are part of the

Colorado Plateau Mixed Bedrock Canyon and Tableland vegetation community (NPS 2011). The vegetation in this community is characterized as having an open tree canopy or scattered trees and shrubs with a sparse population of herbaceous plants.

It is common to find pinyon pine (*Pinus edulis*), juniper, and little-leaf mountain mahogany (*Cercocarpus intricatus*). This vegetation community also contains a number of grasses including Indian ricegrass, cacti, yucca, and forbs (West 1982).

6.7.2 Special Features

Salt Valley Overlook contains a number of special features: (1) it is one of the largest known archaeology sites in the park, (2) it contains a series of rock alignments, (3) it has medicine plants, and (4) it has culturally important viewscapes.

Initially recorded by Berry (1973) and then later resurveyed by Kramer (1991), this EOA study area was described as a large lithic scatter that is distributed over a series of small ridges and drainages on the eastern edge of Salt Valley. Archaeologists recorded bifacial and unifacial tools, lithics in various stages of production, and ground stone in the area. Initially, archaeologists assumed that the majority of the artifacts would be clustered near the rock outcrops found in this area. Upon surveying it, however, they noted that the artifact assemblage distribution varied across the area with the largest concentrations being located away from the rock outcroppings.

During the visit to the Salt Valley Overlook EOA study area, the Ute tribal representatives observed a large volume of cultural materials. There was a high concentration of lithics which were associated with stone tool manufacturing and the practice of ritually depositing offerings during ceremony. Projectile points and other items, such as worked pieces of red and yellow jasper, also were noted (Figure 6.41 and 6.42).



Figure 6.41 Artifacts Observed at Salt Valley Overlook



Figure 6.42 A Point Interpreted at Salt Valley Overlook

In addition to the archaeological materials observed at this area, a range of plant resources (Figure 6.43) were noted by the Ute tribal representatives. These traditional plants were used during ceremonial activities related to knowledge seeking and doctoring. These plants include juniper, fourwing saltbush, rabbitbrush, big sagebrush, cacti, grasses, and two types of Indian tea.

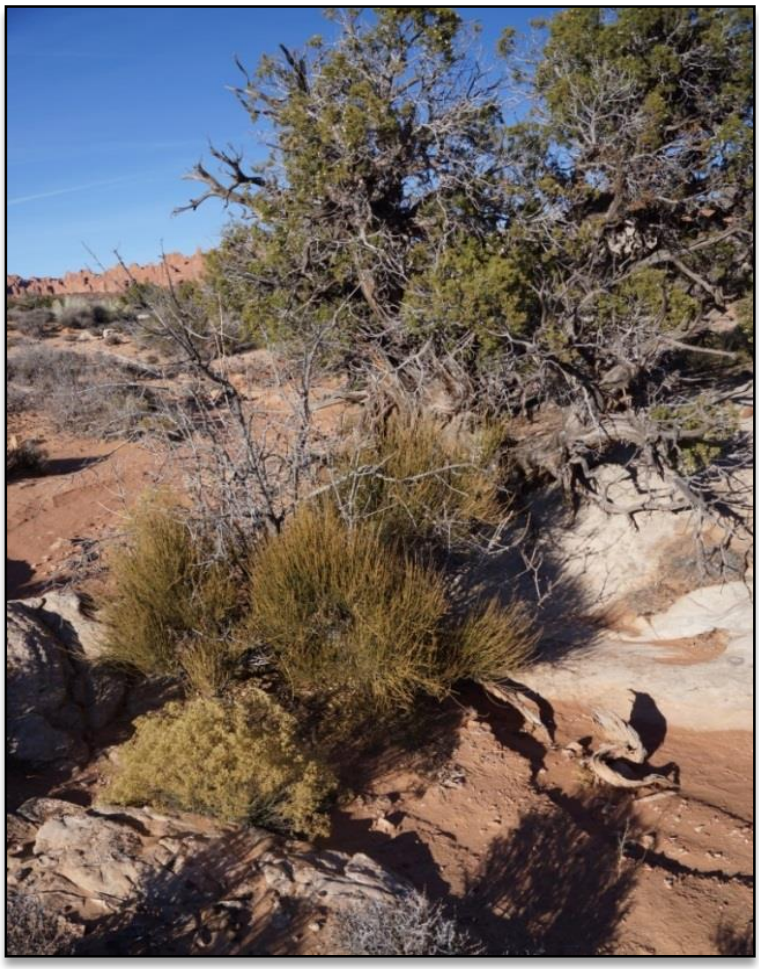


Figure 6.43 Medicinal Plants at Salt Valley Overlook

The presence of archaeological materials, traditional use places, and the expansive viewscapes surrounded the EOA study area offer insight as to why Indian people visited this location in the past. The high concentration of artifacts, also known as offerings, suggests that people visited this area for ceremonies and personal contemplation.

6.7.3 Native American Comments

The Ute representatives who visited the Salt Valley Overlook EOA study area with UofA researchers made many comments about the significance of the area and the meaning of several prominent natural and cultural resources. The information presented below reflects the thoughts and opinions of Ute representatives who commented on this EOA study area.

Ute representatives described the geography of this area and/or elements that stood out.

- *I thought maybe we could find a medicine wheel there but it did not turn out. So I was kind of disappointed that I did not find one. But I thought they were game drives the first time but they go nowhere. It might have been used for some kind of ceremonial purposes. All the things that they did up here, it could have been a place where they gave offerings. Rock crevices like this always remind me of where they did a lot of burials. I did not feel anything so maybe there was not any. It gave you a good vantage point. Some good shelters. Maybe they camped up here also. You have wood and if that creek runs all the time you have water. You have game. There is a lot of juniper up here. The juniper berries…juniper is used like incense. And the dead junipers were used probably for wood, fire. Have not seen a hearth though* (Figure 6.44).



Figure 6.44 Ute Representative and UofA Researcher Discussing the EOA Study Area

- *Good view of the La Sal Mountains and the other valley.*

- *The rocks down here are all kind of sitting on top of each other. I do not really know how that would have formed, but I noticed that.*

- *Well, since it is named Salt Valley, and if the salt was here at the time of our people, that would have been a landmark for them. Now that it is gone, you really cannot tell that there is a difference here. It looks similar to the other surrounding rock formations. Knowing that at one time there was that salt layer through here, I can see the difference.*

Ute representatives commented on the ways that Indian people would have used this area.

- *You know Indian people are pretty superstitious. I guess that is the word for it. They had beliefs in spiritual beings. So whatever they saw that was not common or whatever that might be, they figured it was some kind of spiritual beings that have been there or a place that was kind of forbidden to go to. Or maybe there would be places that maybe somebody experienced something and told a story about, 'do not go there because it is has certain properties or beings there or certain things there.' Other than that, I think that, my own personal opinion, is that they had camps here, they made points, they did not make pottery but they did make points. A lot of that stuff we saw over here, a lot of it was brought in from other places. It could have been a trading post…well not a trading post, but a trading area. It might have been a trading area here. So traders from the north, west, south could all come here and did their trading and they all stayed here and made their points after they go through trading. And that could have been the same thing down at the Wolfe Ranch.*

- *Yeah, they probably did* [use the area]. *That is probably where they got some of their salt. In our diets, we have to have salt. Even back then, we had our nutrition that we had to eat to help keep our body's healthy inside. So, they probably knew that is what the salt was for. It was not processed like it is now, so they probably would have done a lot of grinding or preparations.*

- *This looks like it was part of a pass* [used for travel], *part of a landmark, you know before the salt dissolved. As far as hunting, and fishing, and camping, and gathering, this place was used during travel. The way I think about the lithics is when the earth was first formed, they probably scattered all over. Whenever the earth was formed it just broke up the different pieces. Our Indian people found use for it, and made tools from the stone. They would probably gather the material and work on it in their camps, the arrows for their bow. We were thinking about those willows down the river there. When they are green they are flexible, and you can make bows out of them. They also used cattails for part of their diet, however they fixed it. I just heard about that, they did use them.*

Ute representatives explained how this place is connected to others.

- *I think it would be connected to Moab, the Wolfe Ranch, going up north. It is a location that is diverse for what they use it for. Somebody used it for having ceremonies, camps, making points. It is hard to tell because you have so many spots around here that were used, or could have been used. Maybe they just used this spot here, the Wolfe Ranch, and certain other spots, you know, those places that have not been identified.*

- *This type of area is connected to other places because of the rock formations. It looks like it stretches all the way to Monument Valley. You do see red rocks that*

are shaped like this as a tower way up there in the sky. Shiprock is like that. It stands by itself there in Shiprock, Arizona. Like we were saying, there is a little bit of rock formations like these red ones up in our area, but it is not abundant like it is down here. It is a visual connection, it just helps identify what it is. Some areas might be similar, but it is not really that we can say what was going on up there was happening down here. We cannot really connect it. The shape of the rocks were used as landmarks when our people would travel to say we are getting close to Moab, you know, or getting close to our homeland, or close to our families that we left there maybe when our warriors went out for food. It is like an identification purpose.

Ute representatives noted if Indian people would have used water from the area.

- *We saw this little dried up stream down here, and our interpretation of that is it must rain a lot here. So water comes through here a lot as rain. They did not have to worry about water. They would know where it was at. They would use it for washing. If it just rained, and it was clear, they would drink it.*

Ute representatives explained how Indian people would have used the plants at the area.

- *We use the cedar trees to pray with. It has a nice odor to it. We use it in out ceremonies. It is like smudging. Or incense, it is used like that too.*

Ute representatives explained how Indian people would have used the animals at the area.

- *Jack rabbits would live here, or other rabbits, and deer. Black birds, or ravens, whatever you call them. We call them black birds.*

Ute representatives explained how Indian people would have used this area and/or artifacts.

- *From what I can see, the cedar, we use it for ceremonial purposes and sometimes to fumigate our home. If we feel we need to be a little bit more comfortable at home, we burn it when it is dry. It is pleasing and it is comforting. I do not see anything else that we could use in our home or in ceremony, with our tribe. When we first came into this valley here, the Salt Valley, they had salt up this way. Back home we have the salt flats, west of Salt Lake City. There is a vast amount of it, a lot of it over there. That is where we get our salt. We use it on our tables. Here, I do not see any salt. I did not really see a lot of information on that, where the salt is. It would be helpful if we could get more information on that. Like we said, salt is very important in our diet. It is good for your teeth to keep it leveled out. We use it on our food as part of our diet. It kind of threw me off when they said Salt Valley, because I did not see salt like I do at home. Back then, they probably collected it when it was visible. Not now. The surface now is all dirt, but maybe if you dug down you would find it.*

- *Our people learned to use the stone as a tool, because of the sharpness. They learned to shape it in to points, not only for hunting but for tools and knives.*

- *I think the Indian people in this area, when they lived here, they found a place where they could live and they stayed here. They found a way to utilize what was available as resources. Some Indian people migrate from one area to another for different reasons. Maybe an area was more suitable for them so they would migrate there. Those that did not migrate, maybe they settled in here, like I said they would utilize whatever was available to them to survive on. Once they figured that out, some of them stayed.*

Ute representatives provided comments regarding the area as a whole.

- [UofA Researcher: Do you think Ute people would like to come back and stay at a place like this?] *It is hard to tell. They may or may not because of the traffic. I think they might come here to visit and maybe look around. That is about it. Too much traffic. And I would not bring 50 people and let them loose up here. Maybe a dozen to a half a dozen people that could be brought here and take a look at this at different times, you know, not all at once. Maybe after the rain has come and washed some of the soil away, it might reveal some more artifacts.*

- *I keep stressing that a lot of our Indian people were moved from their original homelands and they always have that yearning or that feeling that they need to go back. It would be to get back in touch with their ancestors. We know that we have an area that was designated by the Creator for us to live, and it ended up not being that way. Right now we have to be where we are at because of the United States government. I think we would appreciate coming here for a weekend. We would need a camping area or a place where we can gather plants. Our people are pretty aware of what they are supposed to do. They do not start coming and digging things up or destroying plant life. These grasses have the purpose here to prevent erosion, so you cannot just go and dig everything up.*

6.7.4 Ethnographic Comments

The Salt Valley Overlook EOA study area contains a large array of archaeological materials as shown in Figure 6.45. Based on interviews with the Ute tribal representatives, these objects served a variety of purposes and functions. Their uses, whether for ceremony or utilitarian use, were directly linked to how American Indians interacted with this EOA study area in the past. Archaeological materials found at this EOA study were left as offerings. The act of leaving offerings at a place is an important moment in ceremonial activity. As anthropologist Christopher Tilley (2004) notes, by leaving offerings at places, it helps to create and maintain long term connections between the people, place, and the objects. These connections are built upon both thought and action.



Figure 6.45 UofA Researcher Holding Stone Tool

The Ute representatives identified lithics present at Salt Valley Overlook and believed that they were associated with ceremonial activities that occurred in the past. The lithics, therefore, were purposely left at this place by shamans or religious specialists. The materials were ritually deposited during key moments of the ceremonies. If the religious specialists visited Salt Valley Overlook while on pilgrimage, this place could have afforded them with a view of their destination place for the first time during their journey. The offerings could have been left as a way of thanking the place and the surrounding landscape for offering elements needed for the religious specialists to complete their ceremonies and their journeys.

These offerings served in the past and continued to serve today as the physical representation of the pilgrims' prayers and are the direct link between the people and place. For Numic-speaking peoples like the Utes and Southern Paiutes, offerings contain the prayers forever and they continue to send their power (also known as *Puha*) across the landscape long after the pilgrim finished his pilgrimage. The offerings left at these places are linked to their history and cultural memory.

6.8 Landscape Overlooks A and B

Ute tribal representatives visited Landscape Overlook B at the end of the Ute field sessions. From Landscape Overlook B (Figure 6.46), one has clear views of the Fiery Furnace, Salt Valley Wash, and the Windows Section. What makes this area unique is that one can see the surrounding sky islands such as the La Sal, Abajo, and Henry Mountains (Figure 6.47). This view is not possible from Landscape Overlook A. Providing tribal representatives an opportunity to have a landscape view of the park is important for this study because it provides an opportunity for reflection on Arches NP and the experience of visiting various EOA study areas.

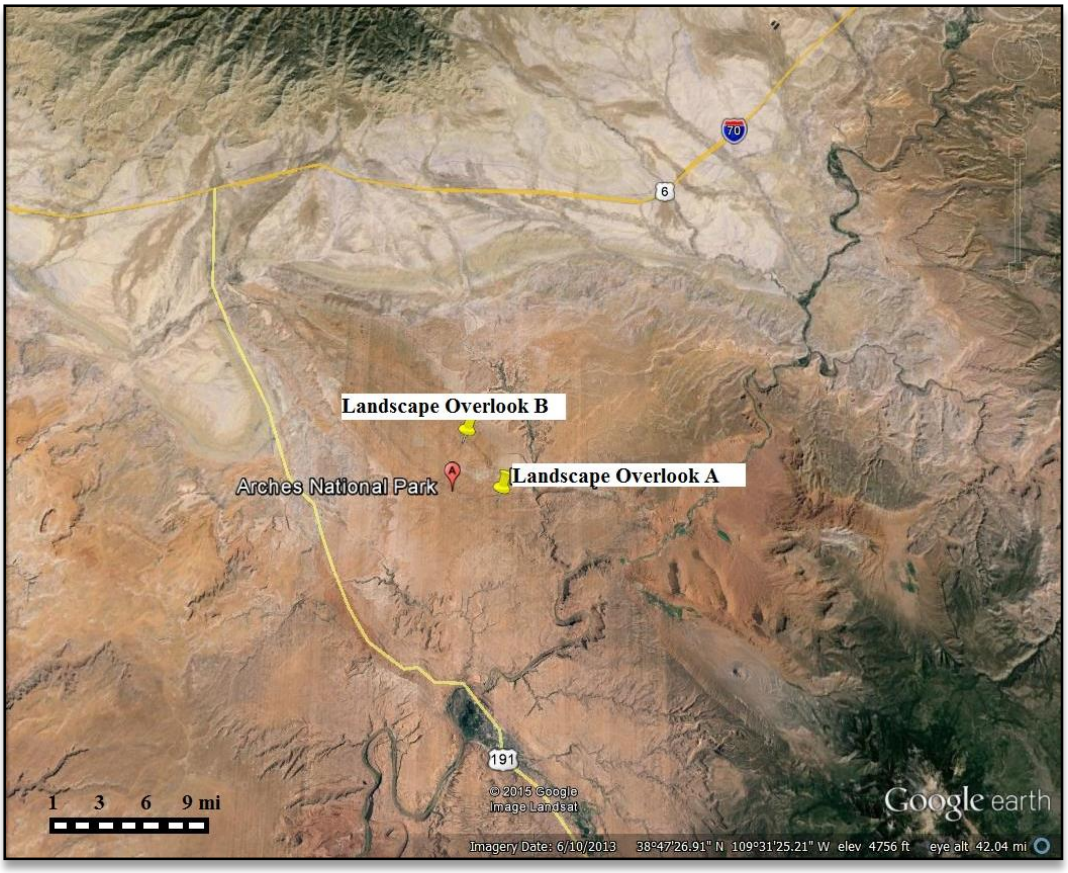


Figure 6.46 Topographic Map of Landscape Overlooks A and B

Landscape Overlook B allows for a discussion of landscapes and connections between culturally significant places, some existing in the park and others located beyond initial park boundaries (Figure 6.47). It is also an opportunity in the EOA to revisit earlier experiences in the park and add thoughts not formerly shared. Landscape Overlook B was chosen not as a site for place specific interpretation, but more for discussions regarding cultural connections and open ended cultural discussions.

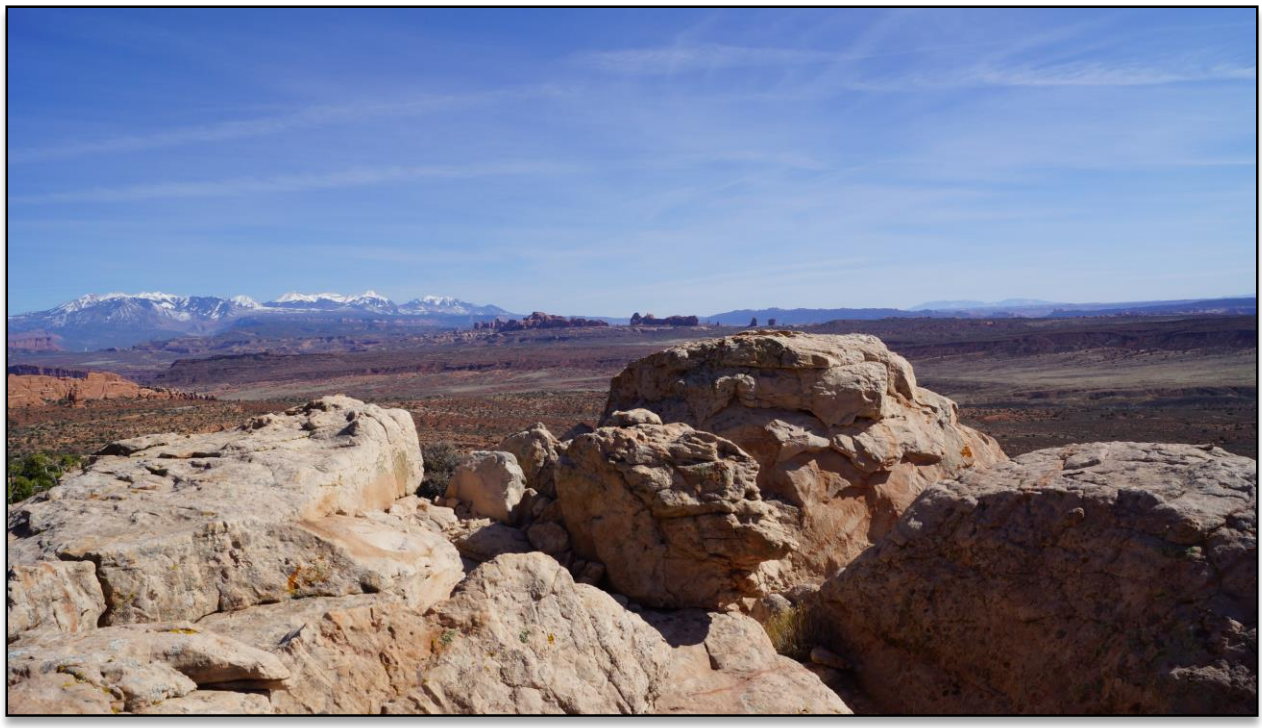


Figure 6.47 View of the La Sal and Abajo Mountains

Landscape Overlook B was chosen for the Ute field sessions because it offers a spectacular view of the La Sal and the Abajo mountains to the South. This EOA study area is located off of the Arches NP Scenic Drive at an elevation of 5,100 feet with Devils Garden to the north and Fiery Furnace to the East. The Double O Arch and Dark Angel formations are found a few miles northwest of Landscape Overlook B.

6.8.1 Natural Setting

The following section provides the reader with a brief overview of the geology and ecology of Landscape Overlook B. The information provided below is designed to help frame comments made by Ute representatives during data collection events.

Geology

Landscape Overlook B is located on top of a high area near Devils Garden (Figure 6.48). This mesa is covered with low growth shrubs, large Sandstone boulders, and a sudden drop off where wind and water have eroded the edge of the mesa. The viewscape from this location illustrates a wide variety of geologic features within the park and the surrounding mountains.



Figure 6.48 The Devils Garden

Salt Valley can be seen to the northwest, continuing several miles to the southeast from Landscape Overlook B. The Devils Garden can be seen from the Landscape Overlook B study area to the north. Protruding sandstone fins are noticeable also when facing south toward the La Sal Mountains (Figure 6.49). The Henry Mountains are visible to the southwest, although they appear much further away than the La Sal range. Klondike Bluffs are located to the northwest (Figure 6.50).

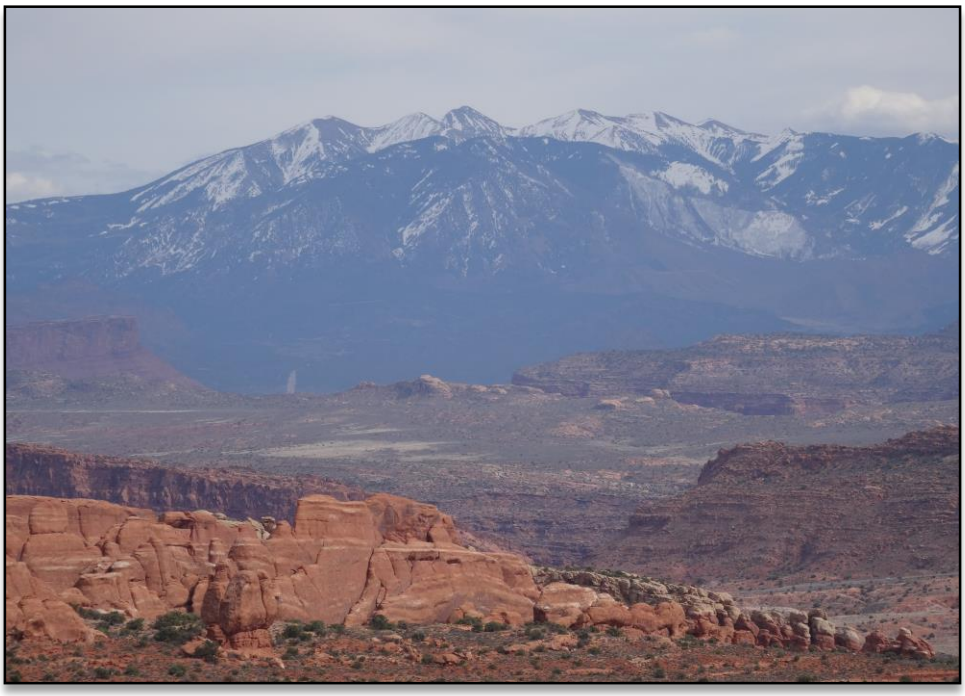


Figure 6.49 The Fiery Furnace, the La Sal Mountain Range, Castle Valley, the Colorado River Drop-off from Landscape Overlook B



Figure 6.50 Ute Representative and UofA Researcher with the Klondike Bluffs and Dark Angel Visible on the Horizon

Other unique geological formations around the EOA study area include large hills of igneous rock, Mancos shale, and other mineral deposits. Towering sandstone hoodoos, or rock pillars, can be seen across the landscape. The colorful orange and red hues of the landscape draw attention to many of the unique geologic forms and canyons cut by rivers and streams.

Ecology

Both Landscape Overlook A and B are part of the Inter-Mountain Basins Mixed Salt Desert Scrub vegetation community (NPS 2011). This community is an open-canopied shrub landscape typical of saline desert basins and alluvial slopes of the Colorado Plateau. The soils in this vegetation community are often saline and calcareous alkaline rich, which are the preferred habitats for one or more species of saltbush, rabbitbrush, big sagebrush, Indian tea, juniper, wolfberry (*Lycium* ssp), Indian ricegrass, and yucca (West 1982).

6.8.2 Special Features

Landscape Overlook B (Figures 6.51 and 6.52) was selected as a place to discuss cultural landscapes because from this location many features situated in and around Arches NP can be seen. From the Landscape Overlook B, many of the EOA study areas are visible, as well as the Henry, Abajo, and La Sal Mountains. These mountain ranges provide water to the surrounding valleys, as does the Colorado River, and smaller springs and perennial streams.



Figure 6.51 Panorama Viewscape from Landscape Overlook B

These panoramic viewscapes serve as an important component in the integrated cultural landscape discussions. This type of location was the last to be visited by each tribe during the EOA study, in order to provide tribal representatives with an opportunity to discuss the park and its key cultural features, including the features in the surrounding region, especially mountains and rivers, and how they are all culturally interconnected.



Figure 6.52 View of Salt Valley from Landscape Overlook B

The location and elevation of the Landscape Overlook B site provides viewcapes of many of the geologic features present within Arches NP. Important geological features, such as arches and hoodoos, are visible to the southeast and north; to the south, large sandstone walls are noticeable.

6.8.3 Native American Comments

Ute representatives visited this EOA study area in March and September 2015. The information presented below reflects the thoughts and opinions of the Ute representatives who

commented on the viewscapes from this EOA study area. Some of the comments are relevant to multiple EOA study areas, and so they are repeated here because they especially contribute to this synthesis and overview of the park.

Ute representatives discussed seasonal Indian camps in this area.

- *The area was not just used by the Utes. There were other tribes allowed to come in and use this area, like we were talking earlier about trading.*

Ute representatives discussed ceremonies associated with the EOA study area.

- *We never forget where we came from and what helped us to get here today. We live in a modern day society, the American Indian people do now, but some of us still hold onto our traditional teachings, whether it might be our spirituality, or tradition, or customs, or beliefs, or religion, we still hold on, we still practice that. So when we come to areas like this we have to treat it with respect, and we have to offer a private prayer, to ask the ancestors to forgive us that we were here, tracking on their land or their area that they occupied at one time.*

Ute representatives talked about connections between the EOA study area and the surrounding rivers, creeks, springs and washes.

- *It was our Creator that formed theses valleys, mountains, rivers, streams and gorges, like the Grand Canyon. It was because our Creator at one time saw that this earth was just plain, round, simple and flat. So he asked the hawk to put a little target way over there, because he was going to do some target practicing, but for some reason that arrow bounced off of the target the hawk had, and that is when the arrow took off and created all gorge, the mountains, like I said, the rivers. It made it the way it is. So that is the way we think about this area, not just for out people who traveled here, but that is probably the reason why it was created the way it was. Because of him; all of our stories are connected to him, our Creator we grew up knowing.*

Ute representatives discussed American Indian trails connected to the EOA study area.

- *A lot of these trails that we used to use are still culturally important to us because we travel on these, even though they are our highways now. I know some people, before they leave home they know they are going to follow these trails, so they make their own prayers or blessings of themselves, some of the people still do that knowing they are going to be following some of the old trails, especially if they are coming up to Ft. Duchesne, or other places that there is an old known Ute trail, they will still do that. But as far as we are concerned, some of these are still very important to us. Some of these places are on private places and we are unable to get to them, because some of them have significant value to us, some of the things our ancestors did on these trails traveling back and forth* (Figure 6.53).



Figure 6.53 Ute Representatives Observing the Unique Geologic Features of Arches NP

- *I think they just used this area to bypass, travel though, and they probably stayed for a few days but they were just on their way back and forth to wherever they were going. Trading with different American Indian tribes. Not to where they congregated for a year or two years or anything, just an area they knew they could camp at along their travels because of the environment, because of the water, and the animal life that was here.*

- *In some areas it probably is a* [spiritual place], *that is why we are kind of weary of going out there and walking around. Like I was saying, the difference between rock paintings* [at Wolfe Ranch]. *The one that was off by itself. It looked like they used that as a spiritual place to meditate and pray. There is a difference in their art.*

- *When our people passed away they just put them where the wild animals do not get to them. The coyotes, bobcats, cougars, we would put them in an area that would protect their bodies. That is why we do not just rush out there and start climbing all over the place, and start looking all over the place, because we do not want to disturb them and upset their spirit.*

- *The trails that existed back then, they have built roads on them. It makes you think, that at that time it is what our ancestors used as a road. My grandma was told a story about this area. A lot of our elders did that, when they would come through here on that main road, they would stop in Moab. We found out that a lot of our roads were built on native trails tribes traveled on. I think that main road down to Moab is one of them.*

Ute representatives discussed Indian songs connected to the EOA study area.

- [Our ancestors] *had songs for different things that were happening. They had mourning song when somebody died, burial songs, and fun songs for games and to get together. I know one of our get-togethers was the bear dance, all the different Ute bands know about that. Some of them are old songs, but most of them are new, modern types of songs. Some of them probably prayed and it came to them, to their dreams, it just comes into their minds. That is how they made a lot of their songs* (Figure 6.54).

Ute representatives mentioned connections between this EOA study area and any other place or events that had not been previously discussed.

- [Returning to the park to gather plants] *would be pretty good. There were other plants I was looking at a little bit more. I would never see that many tea plants. I find them now and then, here and there, but quite a bit here in this area. My opinion is that a lot of them came in here to* [gather] *ricegrass, tea plants, sage, pinion, and juniper. But I think a lot of the old timers came in and, as they were here, at a certain time of the year, like spring, they would see a lot of plants come up. At a certain time rice grass was harvested. You did not have to harvest a lot just to get a bushel. And to gather the pinyons, they would go out there put a big tarp around the tree. Then they would just knock them down. That was after the cone started to open. To go over and knock them off there. Then the pinyon itself would fall and the kids were out there taking the nuts out of the cones. And then they take it home, parch it, and store it. And then mix it in with their soups, their dry meats, or they just ate it plain. There were a lot of ways they ate the pinyons. I am sure there were a lot of ways they ate the ricegrass also. I forget what they call that ricegrass. But one of the stories that go out there and pick that ricegrass. I was just thinking about a place on our reservation that we might, there is probably and there is possibility that there is ricegrass out there. I have not been out there for years, but if there was some* [way to] *get the seeds and take it out there and spread it out. I have a place I do not hardly use anymore but it is probably about 10 acres, 12 acres, something like that. I could just plant them out there* (Figure 6.54).



Figure 6.54 Ute Representative Observing the Landscape at Arches NP

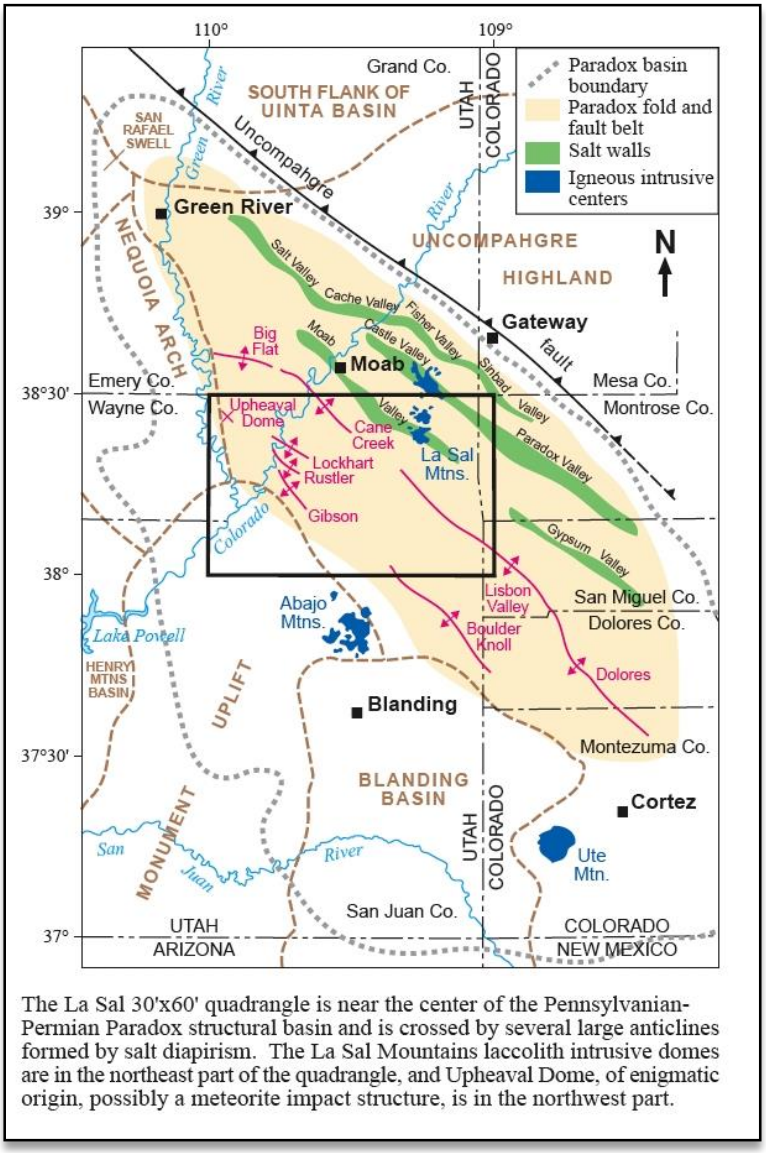
- *I know we can do it with the Forest Service and the BLM, but the Park Service has been a difficult place to get into. If we were able to do that, there might be a few of us that come out here and do that experiment and how to harvest it, and then find somebody else that would give us an idea of how to use it. We have a diabetes program, and I think that some of the people that work in that office would benefit from an ethnobotanical study, just in our area and areas we can go into. There are plants that we know of, a lot of people call them weeds, but it is medicinal and can take care of and help you cure diabetes, kidney problems, limb problems, stomach problems, those kinds of medicinal plants.*

- *So sometimes we feel that connection that our people were here at one time. We know we were there. It is a feeling that we get, that our people occupied this area at one time.*

6.8.4 Ethnographic Comments

American Indian people have occupied the Moab area for thousands of years. Archaeological resources within the La Sal Mountains and Moab Valley region point toward early agrarian pursuits by the American Indian farmers living in the region. Kasper (1977) notes that the earliest agrarian occupation of the Paradox Valley can be dated to AD 750-900. The Paradox Valley is located to the southeast of Moab, and to the east of the La Sal Mountains (Figure 6.55). Schroeder (1964) excavated corn material from Tabeguache Cave, which is located in western Colorado, southeast of Grand Junction. He noted a transhumant of life with maize agriculture occurred well into AD 800-900. Schroeder also found a new species of maize that was later introduced into the region, with use of this new corn variety continuing until AD 1150. American Indian people living in the valleys surrounding the La Sal Mountains relied

primarily on farming, but supplemented their subsistence with animals and traditional plants (Pierson 1980: 61).



The La Sal 30'x60' quadrangle is near the center of the Pennsylvanian-Permian Paradox structural basin and is crossed by several large anticlines formed by salt diapirism. The La Sal Mountains laccolith intrusive domes are in the northeast part of the quadrangle, and Upheaval Dome, of enigmatic origin, possibly a meteorite impact structure, is in the northwest part.

Figure 6.55 Paradox Basin[1]

In the Moab Valley, archaeological investigations have uncovered evidence of human occupation and use dating back 12,000 years (Hunt and Tanner 1960). The valley became an ideal location for agriculture starting around AD 500 (Pierson 1980). From this time to AD 1150, American Indian people developed and utilized irrigated agriculture and grew a variety of important crops, including corn, beans, and squash. Following AD 1150, climatic changes occurred throughout the Colorado Plateau region. The climate turned cooler and drier. This shift forced some American Indian people to give up some of their agricultural lands. Places like the

[1] **http://www.webpages.uidaho.edu/~simkat/course_materials/geol290/paradox_basin.jpg**

Moab Valley had enough water to sustain Ute farms well into the historic period. In the late 1700s, Juan María Antonio Rivera visited a group of Sabuagana Utes living in neighboring Castle Valley. Rivera noted that the valley had marshy areas and thus good water was present (Jacobs 1992).

Since time immemorial, the Utes have maintained connections to places in and around the La Sal and Abajo Mountains, including the Moab Valley area. Early European explorers, such as Juan María Antonio Rivera, documented the Ute presence and noted that this region was clearly Ute territory (Jacobs 1992). Pierson (1980: 65) suggests that there is strong archaeological evidence for extended occupation of this region by, "Numic speaking peoples, and in particular the Southern Utes and perhaps the Paiutes." The valley served as one of the major agricultural centers with the central portion of traditional Ute territory.

The valley has well documented evidence of irrigated agriculture well into the 1850s when Mormon missionaries noted irrigation canals and farms around Mill Creek (Firmage 1996). In 1854, the Elk Mountain Mission and fort were established near Moab in the Spanish Valley (Pierson 1980). Upon their arrival, these Euro-American settlers documented the Ute Indians living in villages or camps throughout the area and farming squash, melons, and corn (Pierson 1980). The lands were acknowledged as belonging to the Utes at the time of American control in 1849, as noted by the Indian Claims Commission (Figure 6.56).

The trails throughout the Moab Valley region traditionally were established by American Indian people. Many prominent trade, travel, and pilgrimage trails cut through the Moab Valley and surrounding landscape. This area is the location of one of the three major crossings of the Colorado River northwest of Glen Canyon, with the two others being the Crossing of the Fathers near Page, Arizona, and the river crossing in Grand Junction, Colorado. For those traveling from what is now present day southern Colorado and northern New Mexico, the river crossing at Courthouse Wash in Moab Valley was a logical choice. The other crossings were approximately 145 (Crossing of the Fathers) and 65 (Grand Junction) miles away.

Given that the Moab Valley was the location of one of the major Colorado River crossings, the valley was the location of a major trading center for American Indian people. The Colorado River crossing was one of the key points where many regional trails converged, thus leading American Indian people to and from Moab Valley for many generations. Prior to early Euro-American expeditions into present day southern Colorado and southeastern Utah, the Utes dominated and controlled many aspects of trade along these trail networks. Due to the spread of Old World pathogens along the trails, such as smallpox, the Utes could not maintain their control due to population loss (Stoffle et al. 2008).

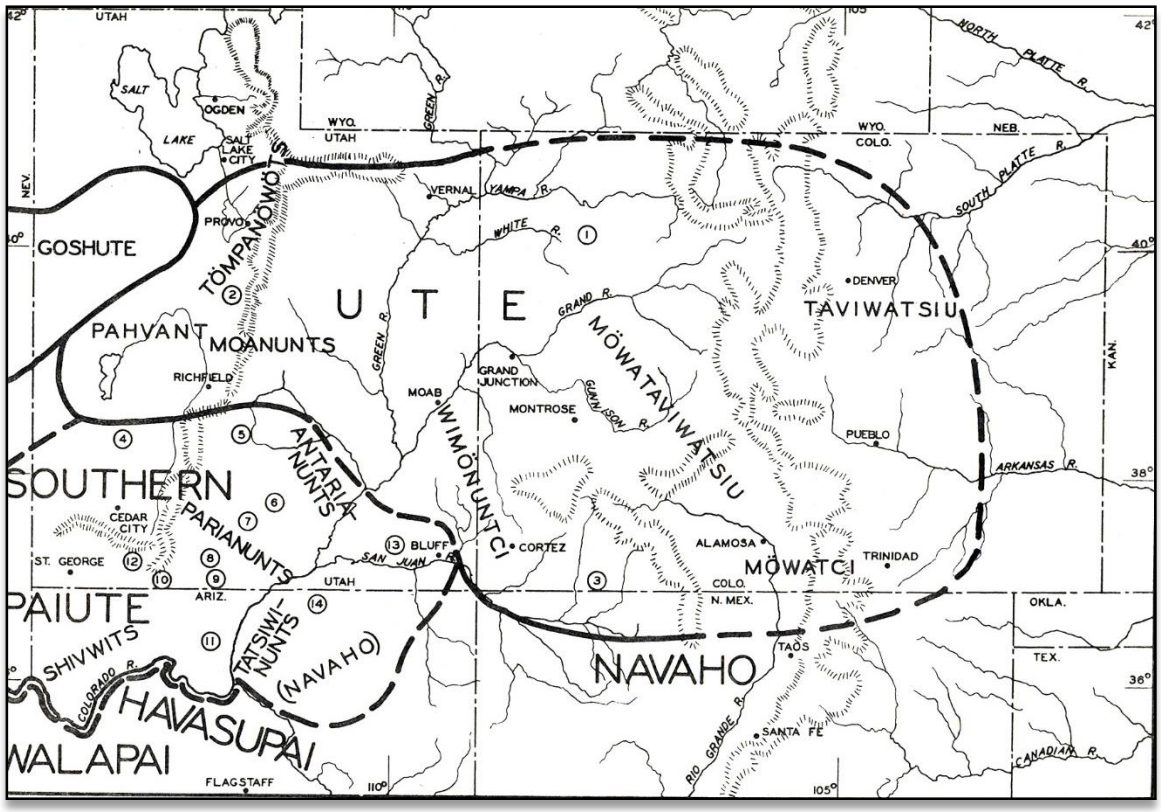


Figure 6.56 Ute Traditional Territory as Documented by Omer C. Stewart (1941)

By the late 1700s, non-Indian explorers began arriving into the region (Bolton 1972; Jacobs 1992). The first person to travel into present-day southeastern Utah was Juan María Antonio de Rivera. The purpose of his expedition was to initially confirm the existence of the Colorado River and map its only known crossing. He made two trips, or entradas, into present day southeastern Utah with this goal in mind. At the start of his second entrada, Rivera and members of his party were mandated by Governor Cahupín to go on this expedition disguised as traders. They were directed to survey the land and document the quality of it along the trail route, the Colorado River Crossing, and the lands on the other side. Rivera also was tasked to determine the names of the various American Indian communities they encounter and ascertain their attitudes towards the Spanish. Rivera and his men met with the Utes and Southern Paiutes along the La Plata River to gain support for this expedition. The Utes quickly rejected the proposal and did not want the Spanish intruding on Ute land. The Utes did not want the Spanish to interfere with Ute trading activities across the Colorado River. The Southern Paiutes, however, agreed to let the Spanish travel the trail because they wanted the Spanish to reveal their true intentions. This led to conflict between the Utes and Southern Paiutes at this meeting. Ultimately, the Southern Paiute position prevailed, and Rivera and his men were granted access. In October 1765, Rivera and his men set forth with their expedition (Jacobs 1992).

According to Rivera's journal (Jacobs 1992), before they reached the Moab Valley area, Rivera and his men visited a Tabejuache Ute camp along Indian Creek near present day Canyonlands National Park. By all accounts, Rivera and his party were clear that this region belonged to the Utes (Jacobs 1992).

Soon after their visit to the Ute camp on Indian Creek, Rivera and his party reached the Colorado River and crossed at Courthouse Wash. The Southern Paiutes assisting Rivera noted that this was the only crossing of the Colorado River in this region. In his diary, Rivera described the crossing area as being a meadow with a large poplar tree (most likely a cottonwood tree). According to historian G.C. Jacobs (1992), Rivera described the meadow and the river in such great detail that anyone familiar with the landscape would recognize it as present day Moab, Utah. Rivera also noted that there were Ute Indians located on the other side of the Colorado River, and he mentioned how the Utes they encountered were friendly to him and members of his party (Firmage 1996). Figure 6.57 shows Rivera's expedition into the Moab Valley and this crossing of the Colorado River.

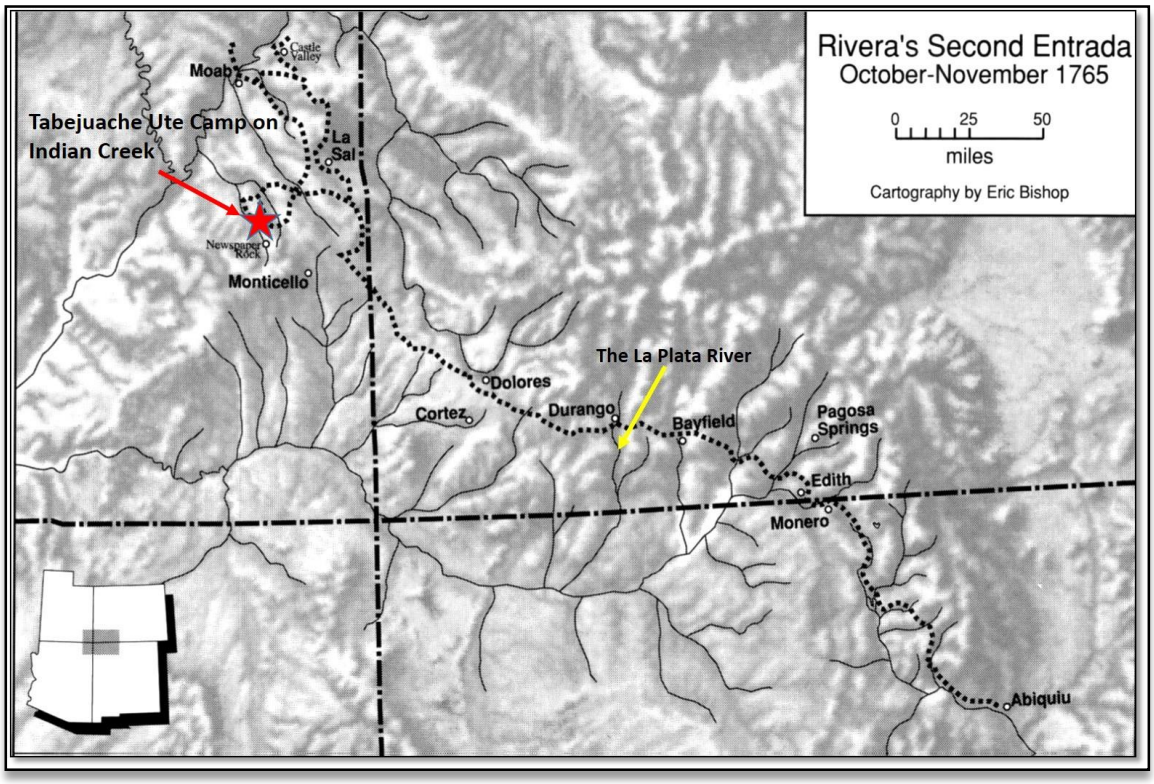


Figure 6.57 A Re-creation of Rivera's Expedition into Southeastern Utah (Jacobs 1992)

Eleven years later, in 1776, Friars Dominguez and Escalante set out on their expedition to try to find a viable overland route to California (Bolton 1972). They intended to follow Rivera's route into Utah, which would have led them through Moab Valley and across the Colorado River at Courthouse Wash. Instead, the friars got lost in the mountains and ended up using the Colorado River crossing to the north at Grand Junction. Even though they never made it to the Moab Valley area, they documented the name of the large mountain range to their west. The friars asked their Ute guide the name of these mountains and were given the Ute term for the present day La Sal Mountains. The friars' Spanish guide, who was a member of the original Rivera expedition, named these mountains "Sierra de la Sal" due the presence of nearby salt flats (Bolton 1972; Jacobs 1992).

Following these expeditions, in 1829, the Old Spanish Trail became the officially sanctioned trading trail between Santa Fe, New Mexico, and Los Angeles, California. The trail followed the traditional Indian trails through the Moab Valley and crossed the Colorado River (Hafen and Hafen 1954; Stoffle et al. 2007).

The valley remained free from non-Indian settlement until the mid-1800s. Mormon missionaries arrived in the Moab Valley in 1854 and attempted to establish a mission (Firmage 1996). Initially when the Mormons established the Elk Mountain Mission, they intended to control activities along what used to be the Old Spanish Trail. During this time, the missionaries had positive interactions with the Utes living in the area. Each group saw the other as a valuable trading partner. Over time, as competition for resources grew, conflict between American Indian people and Mormons arose and ultimately led to the loss of lives. It was believed that the conflict ended when members of the mission were recalled to Salt Lake City during the so called "Utah War" in the mid to late 1850s (Firmage 1996). The U.S. Army was sent to the Utah territory to stop a supposed Mormon rebellion against the United States. When the conflict ended, the United States had a firm control over the territory. Brigham Young decided to reduce the number of outposts in the far corners of Mormon territory and shift focus on settlement in and around the Salt Lake City area. Also during this time, tensions between the American Indian communities and non-Indian settlers were increasing. By the time of the Black Elk Wars in the mid-1860s, the Mormons had abandoned most of their settlements in central and southeastern Utah, including the Moab Valley area (Firmage 1996).

The Utes reestablished complete control over this part of their traditional territory. Given the area's increased isolation, it became a safe and promising location to resettle and continue living a traditional Ute way of life. When pressures began to mount in southern Colorado, this part of southern Utah came to be viewed as a region of refuge.

According to anthropologist Dr. Gonzalo Aguirre-Beltrán (1979), a region of refuge is a term used to describe places with a dual economy consisting of a national and a local sector resulting from colonialism wherein the national sector dominates the market and the local sector is comprised of isolated, closed communities (Aguirre-Beltrán 1979). These local sectors were arranged as refuge regions, and they are areas isolated both physically and socially from the mainstream of the national society. These areas contain close communities of peasants, most of whom were indigenous peoples. The indigenous communities were subjected to massive changes under colonization, and Aguirre-Beltrán explained that these communities could have both internal and external resistances to the cultural changes that were occurring during this period. The stability of the hinterland as a safety region served as a form of resistance and protection from these forced changes (Aguirre-Beltrán 1979).

Following the reputed Meeker Massacre in 1880, a strong push was made by many within and outside of Colorado to pressure Congress and the various departments of the Federal Government to respond (Thompson 1981). This initial effort resulted in the United States signing an agreement with the Colorado Ute bands on March 6, 1880. Under this agreement, the White River Band of Utes was removed and sent to the Uinta Reservation in eastern Utah. By 1882, relocation of the White River band was complete and efforts then were directed towards the Uncompahgre Band of Utes. After many delays and negotiations, the Uncompahgres and the

United States reached an agreement over a reservation location and how removal efforts could be carried out. The Uncompahgres were moved from their home in the mountains of Colorado to the high dry desert of central-eastern Utah near the Colorado border. The relocation of these two Ute bands left only the Muache, Capote, and the Weeminuche in Colorado (Thompson 1981).

Several attempts were made to relocate the remaining Ute groups to different locations. Under the 1880 Ute agreement, it was explicitly stated that the Southern Utes were to be removed and for their reservation to be disestablished. This initial deal, however, did not call for them to be removed from the state of Colorado. It is believed that many saw them as not part of the conflicts caused by the northern bands. They recognized that the Southern Utes stayed in relative peace with their non-Indian neighbors. The Ute agreement did call for the southern bands to give up their reservation land and take allotments in severalty along the La Plata River.

According to Thompson (1981), since the signing of the Ute agreement, the Southern Utes were facing increased pressures from non-Indian land users. In the 1880s there was an increase in mining activities in the mountains in and around Silverton and Dolores, Colorado. The railroad expanded into Durango and branched out to make accessibility to these mining areas easier. Because of the increased traffic in the region, non-Indian farmers, ranchers, and homesteaders began infringing upon Ute lands. The increased mining activities, the arrival of the railroad in Durango, and its extensions into the mining districts of Silverton and Dolores led to shifting and increased pressures in and around reservation lands. This caused the Utes to effectively be prisoners on their own land (Thompson 1981). For example, ranchers often would trespass on reservation lands with their large herds, which affected ecological resources and heightened tensions between the non-Indian and American Indian community.

With growing uncertainty surrounding the status of their reservation and the increased threat of conflict with non-Indian entities, the Southern Utes realized that removal was more than likely to occur and they wanted to be settled into a permanent home. This issue continued to drag on until 1885 when Senator Teller introduced Senate Bill No. 769. This bill called for the Utes to be removed from the state of Colorado, however, the bill did not specifically state where to relocate the Utes. The bill failed to pass but it sparked an intense debate on the issue (Thompson 1981).

At the request of Colorado Senator T.M. Bowen, Southern Ute high chiefs Buckskin Charley, Ignacio, and Tapoche traveled to Washington, D.C., to negotiate with the government for a resolution to their problem. During their testimony before the Senate Commission on Indian Affairs, the Ute leaders clearly stated that they would not be removed to the Uintah and Umcompahgre reservations in Utah nor would they consider moving to a new reservation in the same part of Utah. Chief Ignacio from the Weeminuche Band asked Congress, instead, to move the Utes to lands west of their current reservation on land located in San Juan County, Utah (U.S. Congress 1886). Senate Bill No. 1916 was introduced soon after in an attempt to address Chief Ignacio's request. Their bill, however:

> …died in committee after being referred there while waiting for the Utes to inspect their proposed lands. Not all was lost, though, as the testimony of the Utes, the Colorado delegation, and the Interior Department was important and had

> an influence on further negotiations with the Utes. Indeed, the views stated in support of the bill became the cornerstone of the administration's policy to try to remove the Utes (Thompson 1981:195).

Later, two bills were introduced in Congress: one in the Senate and the other in the House of Representatives. These bills called for the removal of the Utes in Colorado to Utah. The bills died without any action being taken. Compromised legislation then was drafted and attached as a rider to another bill which proposed legislative actions against American Indian communities in Montana (U.S. Department of the Interior 1889). This bill passed and allowed for the Secretary of the Interior to establish a three member commission to negotiate with the three southern bands of Utes to relinquish their rights to any land in Colorado for new lands in southern Utah (U.S. Department of the Interior 1889).

The newly formed commission traveled to the Southern Ute reservation in the summer of 1887. Attempts at negotiating Ute relocation failed. This was because that Ute leaders had changed their position regarding the relocation and now were against removal. According to Thompson (1981), the Utes were unwilling to leave their familiar surroundings and their current reservation because they did not want to disrupt their families.

The commission, in hopes of selling the plan to tribal leaders, offered to show the newly proposed reservation to them. A group consisting of the commission, tribal leaders, and tribal community members traveled towards southern Utah (Thompson 1981). The group made it as far as the Big Bend on the Dolores River when conflict developed. The Utes claimed that the reservation boundary should have included the river bend, but the commission argued that the Utah-Colorado state boundary should serve as the reservation border. The ensuing disagreement led to conflict and violence, leaving one Capote Ute dead (Thompson 1981). The remaining Capotes refused to continue and returned home while the others continued. The group traveled as far as Carlisle Ranch, just north of present day Monticello on the north slope of the Abajo Mountains. The Ute delegation refused to travel further into Utah due to fears that the commission was escorting them to the Uintah reservation and would prevent them from returning home. After seeing the land promised to them under the new reservation deal, the Ute delegation reconsidered the relocation proposal and ultimately agreed to be relocated to the new reservation (Thompson 1981).

When the Ute delegation returned to Colorado, they signed a new agreement with the commission that called for Ute removal to Utah and the establishment of a new reservation (U.S. Department of the Interior 1889). The new agreement established reservation boundaries that were similar to the previously proposed reservation as defined in Senate Bill 1916 with one major alteration. Under Senate Bill 1916, the northern boundary extended 100 hundred miles along the Colorado-Utah border; the new northern boundary was reduced by 25 miles (Congressional Record 1890). The change in boundaries moved the reservation south of the non-Indian town of La Sal and out of the La Sal Mountain range (See Figures 6.58 and 6.59).

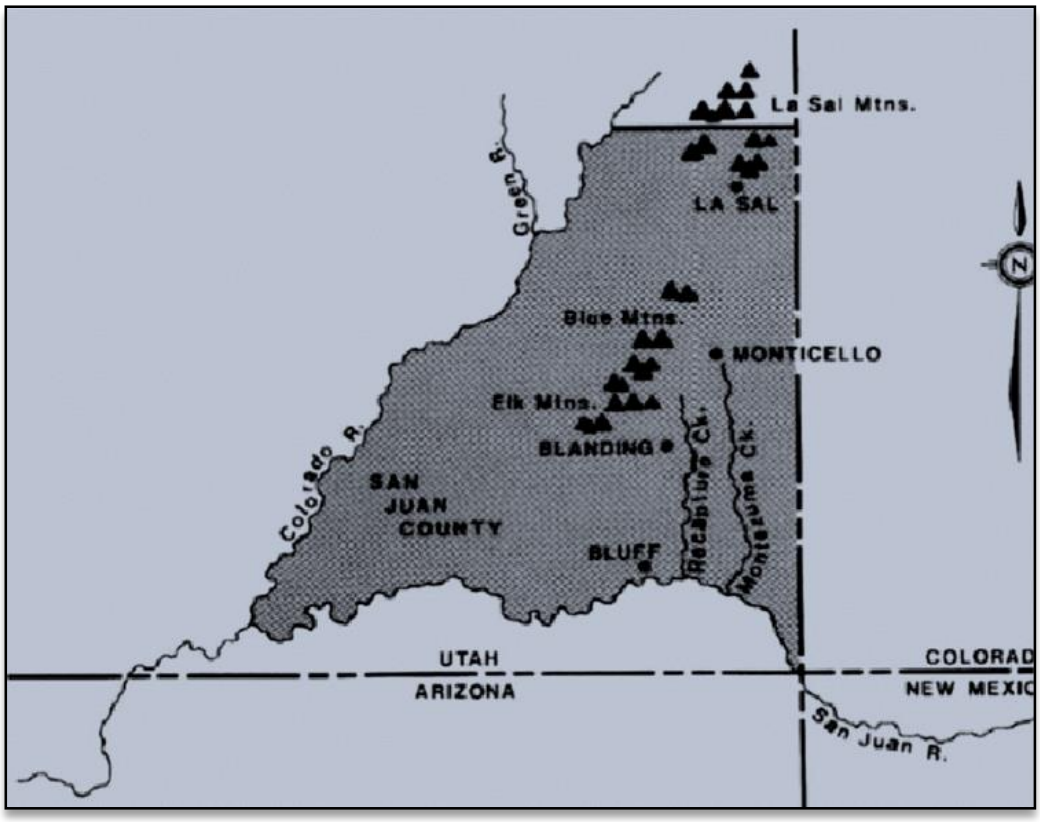


Figure 6.58 Proposed Ute Reservation 1887 (Thompson 1981)

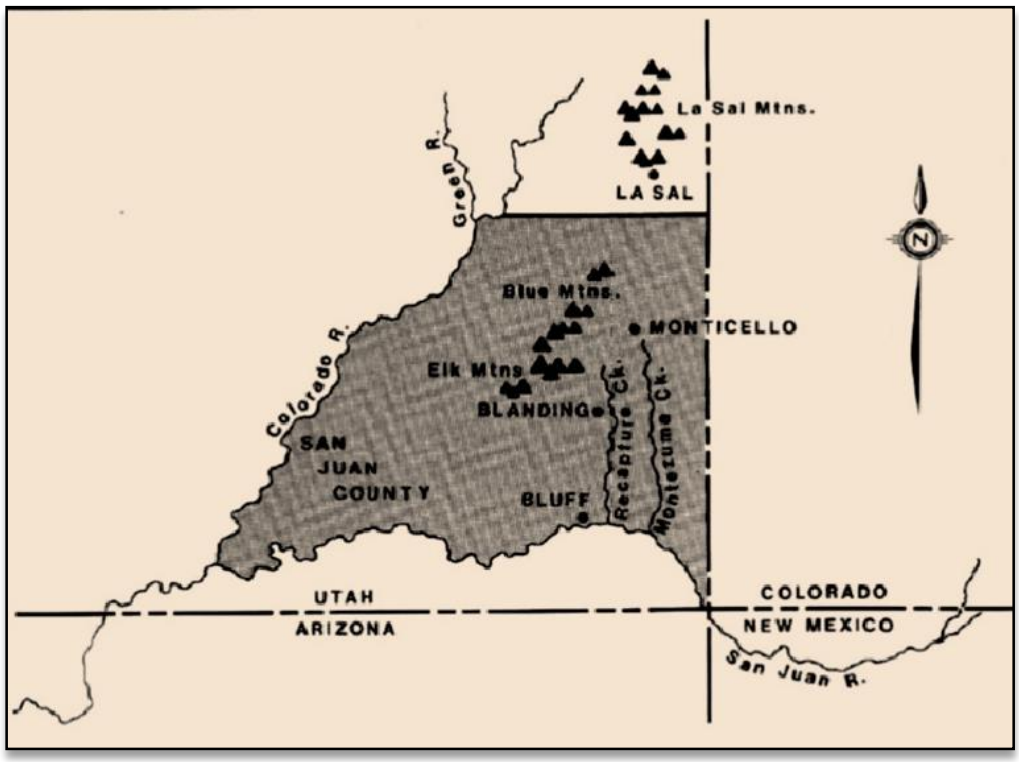


Figure 6.59 Proposed Ute Reservation 1889 (Thompson 1981)

In order to finalize the agreement, the commission needed tribal consent. This required a three-fourths majority of adult male tribal members of the three Ute bands. Then on November 14, 1888:

> The commission presented a document with 274 signatures, well over the number needed. The new agreement stated that besides the land, which amounted to 2,912,000 acres or nearly two million acres more than the Colorado reservation they were giving up, they would also receive $50,000 in ten annual payments, $20,000 worth of sheep, a new agency, and permission to hunt on and around the unoccupied lands of the La Sal Mountains (Thompson 1981: 198).

In January 1889, the signed agreement was sent to Congress for their final approval. The Senate voted in favor of removal and the signed agreement, while the House of Representatives rejected it. The House's rejection was directly linked to increased pressures from outside groups (The Colorado College 1892; Reed 1893; Thompson 1972). Many citizens of Utah pushed back because they believed that Utah had a large enough American Indian population and they did not want it to increase in size. Additionally, the Indian Rights Association, a reform group from Philadelphia, Pennsylvania, was also against Ute removal (Kane and Riter 1892). They argued that efforts to "civilize" the Utes would be greatly hindered due to increased isolation from Euro-Americans and the cattle companies, which used the La Sal and Abajo Mountains as grazing areas (Jefferson, Delaney, and Thompson 1972).

These groups put enough pressure on Congress to defeat all Ute related removal bills for the next five years. Finally in 1895, legislation was introduced that outlined a proposal that kept the Utes in Colorado and turned their reservation lands into individual allotments (Thompson 1981). The special status of the reservation was to be removed and the lands were open to non-Indian settlement. This proposal passed Congress, but it was met with apprehension from the Utes. Those who were against this included the Weeminuche Band under the leadership of Chief Ignacio.

The Weeminuche had wanted to move to the lands that were once proposed to be Ute reservation in San Juan County, Utah. After the 1888-1889 removal agreement was approved by the three Ute bands, the Weeminuche left southern Colorado for southern Utah (Thompson 1972). After Congress failed to approve the agreement, the Weeminuche was forced by the Ute agency to return to Colorado. They, however, refused to return to the lands under control of the Los Pinos agency and their old reservation lands. Ultimately, they were given lands and the three Ute bands lived on two separate reservations. The Weeminuche took up residency on the Ute Mountain reservation, and the Capote and Muache lived on the Southern Ute reservation (Jefferson, Delaney, and Thompson 1972).

CHAPTER SEVEN
SOUTHERN PAIUTE EOA STUDY AREA ANALYSIS

This chapter presents the Southern Paiute interpretation and ethnographic analysis of places discussed during the Southern Paiute portion of field visits occurring during the Ethnographic Overview and Assessment (EOA) for Arches National Park (Arches NP), in Moab, Utah. In general, the Southern Paiute representatives expressed a sense of cultural connection and a resulting attachment to the park (Figure 7.1). The park and the greater American Indian Crossing of the Colorado River (AICC) area contains many features valued by Southern Paiute people and is an area where Paiute people once lived and thrived.



Figure 7.1 Southern Paiute Representatives and UofA Researcher at the Windows Section

This EOA focuses on understanding a range of cultural resources that include water types, plants, landscapes, geology, and archaeology. The University of Arizona (UofA) researchers worked to select a range of EOA study areas that represented these various resources. Southern Paiute tribal representatives visited five areas within the park.

7.1 Southern Paiute Study Area Visits

Southern Paiute representatives from the Paiute Indian Tribe of Utah (PITU) and the Kaibab Band of Paiute Indians met with the UofA researchers in Moab, Utah. PITU representatives joined the UofA research team for a field session in May 2015, while the representatives from the Kaibab Band of Paiute Indians joined the UofA for a field session at Arches NP in September 2015.

Over the three day site visits, cultural discussions occurred at five selected EOA study areas within the park (Figure 7.2). The locations selected allowed for the interpretation of many cultural resources. Accessibility was a key factor in place selection. The five EOA study areas selected are: (1) Windows Section, (2) Courthouse Wash, (3) Wolfe Ranch and Ute Panel, (4) Salt Valley Overlook, and (5) Landscape Overlook B. The names of these places do not reflect Native American use or cultural association. The names were assigned either by NPS officials or by local non-Indian residents.

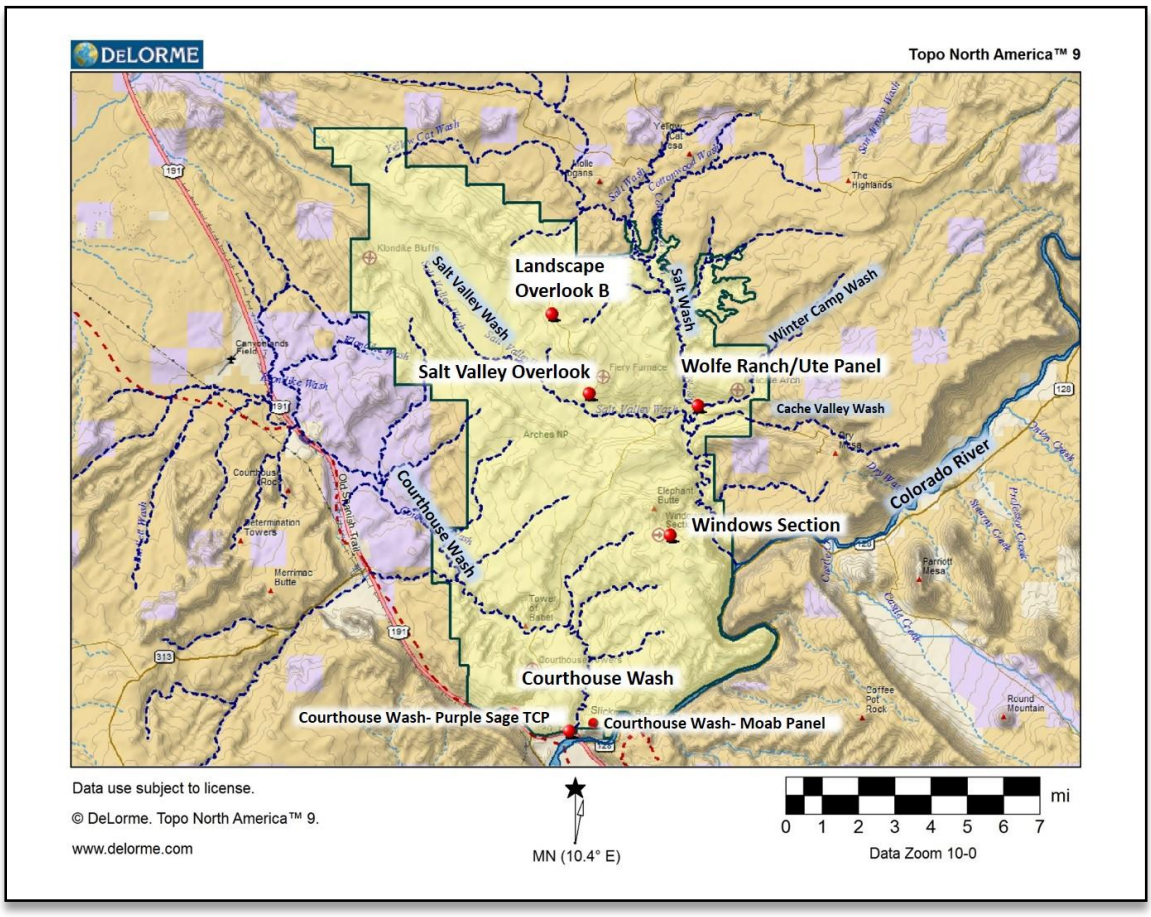


Figure 7.2 Map of Arches NP with Five EOA Study Areas Visited by Southern Paiute Representatives

The tall Entrada Sandstone pillars, referred to as hoodoos, within Arches NP were of great importance for the Southern Paiute representatives who visited the area. The Colorado River and other connected hydrological systems were viewed as significant for both utilitarian

and spiritual purposes. Mineral resources in the park were also a key point of interest for the Southern Paiute representatives, especially the blue colored deposits of Mancos Shale. Archaeological features found within Arches NP and surrounding area reaffirmed the connections between the Southern Paiute people and this region since time immemorial (Figure 7.3).



Figure 7.3 UofA Researchers and Southern Paiute Representatives Discuss Archaeology near Salt Valley Overlook

The schedule was designed to maximize time by grouping locations that are near one another. On the first day, UofA researchers and Southern Paiute representatives met at the visitor center for orientation and then began their visit at Courthouse Wash EOA study area. During the second day, Wolfe Ranch and Ute Panel EOA study area and Salt Valley Overlook EOA study area were visited, and Windows Section EOA study area and Landscape Overlook B were visited on the final day. A closing discussion took place at Landscape Overlook B after concluding all EOA study area visits within the park.

7.2 Southern Paiute Data Collection Events

Three types of opportunities for sharing cultural data were provided. Formal data collection events involve semi-structured lists of proposed topics. Formal data collection events were both tape recorded and physically written down on paper forms. There are two types of recording forms, termed here (1) American Indian Ethnographic Resources form and (2) Cultural Landscape recording form. The EOA study area data recording form is a place-specific inventory of traditional area uses, role in the history of the people, and other cultural resources associated with the place, which can include water, plants, animals, minerals, landforms, and archaeological remains. The landscape form records tribal perceptions about place and resource specific

information, then translates these into a broader regional and more abstract cultural context. The third type, (3) open-ended data collection events, are defined as recorded, informal participant guided conversations held between the ethnographer and tribal member that contain information specific to the project (Figure 7.4).



Figure 7.4 UofA Researcher and Southern Paiute Representative during Data Collection Event

In Table 7.1 below, the three types of data collection events have been categorized into two separate fields. The first category involves the structure and focus of the data sharing events: either (1) formal discussions about the EOA study areas and cultural landscapes or (2) informal open-ended discussions. The location of data collection events category, in the left column of the table, indicates where the data collection event took place. A total of 61 data collection events occurred and were recorded either with digital tape recorders, via hand written notes, or both.

Location of Data Collection Events	**Types of Data Collection Events**		**Total**
	Formal Data Collection Events	**Open-Ended Data Collection Events**	
Courthouse Wash	7	17	**24**
Wolfe Ranch/Ute Panel	8	4	**12**
Salt Valley Overlook	9	0	**9**
Windows Section	9	0	**9**
Landscape Overlook B	6	1	**7**
Total	**39**	**22**	**61**

Table 7.1 Data Collection Events by Location and Type

Table 7.1 provides the total collected interviews in the May and September 2015 field sessions with Southern Paiute representatives. Each member shared cultural data during semi-structured data collection events at EOA study areas 1-5, providing a total of 39 unique formal data collection events. A total of 22 open-ended and unstructured data sharing events occurred and were recorded. A total of 61 semi-structured and unstructured data collection events were recorded during the fieldwork.

7.3 EOA Study Area Analysis

The area descriptions and analysis that are included in this chapter are presented based on proximity to one another. Each area description contains a discussion of the environmental setting including geology, ecology, Southern Paiute comments, and ethnography. It is important to note that the ecological and geological information provided in this chapter is not intended to be an authoritative summary. Instead, the information is meant to orient the reader with regard to the area's location, ecology, and geology (Figure 7.5).



Figure 7.5 Southern Paiute Representatives Interacting with Cultural Resources in Arches NP

The Southern Paiute representatives explained the cultural significance of places, water, animals, archaeological features, geological features, and plants while visiting the five selected EOA study areas spread throughout the park. Within the boundaries of Arches NP, there are a variety of ecosystems that support diverse plant life. During fieldwork with Southern Paiute representatives, a number of use plants were identified at each EOA study area. The table below (Table 7.2) list the 36 identified use plants and the EOA study area where they were observed. The plants are presented in alphabetical order by scientific name.

	Scientific Name	Common Name	Windows Section	Courthouse Wash	Wolfe Ranch	Salt Valley Overlook
1	*Allium* ssp.	Wild Onion			**X**	
2	*Amelanchier utahensis*	Utah Serviceberry		**X**	**X**	
3	*Apocynum androsaemifolium*	Spreading Dogbane			**X**	
4	*Artemisia* ssp.	Sage		**X**	**X**	**X**
5	*Asclepias* ssp.	Milkweed			**X**	
6	*Astragulus* ssp.	Astragulus		**X**		
7	*Camissonia* ssp.	Evening Primrose			**X**	
8	*Castilleja angustifolia*	Indian Paintbrush		**X**	**X**	
9	*Chrysothamnus* ssp.	Rabbitbrush		**X**	**X**	
10	*Coleogyne ramosissima*	Blackbrush			**X**	
11	*Datura stramonium*	Jimson Weed/Sacred Datura	**X**			
12	*Ephedra nevadensis*	Grey Indian Tea	**X**	**X**	**X**	**X**
13	*Ephedra viridis*	Green Indian Tea	**X**	**X**	**X**	**X**
14	*Eremocrinum albomarginatum*	Sand Lily		**X**		
15	*Eriogonum inflatum*	Desert Trumpet			**X**	
16	*Fraxinus anomala*	Singleleaf Ash		**X**		
17	*Gutierrezia sarothrae*	Broom Snakeweed			**X**	
18	*Juniperus* ssp.	Juniper	**X**	**X**	**X**	**X**
19	*Mentzelia multiflora*	Blazing Star		**X**		
20	*Opuntia* ssp.	Prickly Pear Cactus			**X**	
21	*Oryzopsis hymenoides*	Indian Ricegrass	**X**	**X**	**X**	**X**
22	*Penstemon palmeri*	Palmer's Penstemon		**X**		
23	*Pinus edulis*	Pinyon Pine	**X**			
24	*Poliomintha incana*	Purple Sage		**X**		
25	*Populus* ssp.	Cottonwood		**X**		
26	*Purshia mexicana*	Cliff-rose				**X**
27	*Quercus* ssp.	Oak	**X**			**X**
28	*Rhus* ssp.	Sumac		**X**		
29	*Rhus trilobata*	Skunkbush Sumac		**X**	**X**	
30	*Salix* ssp.	Willow			**X**	
31	*Sambucus* ssp.	Elderberry				**X**
32	*Sarcobatus vermiculatus*	Greasewood			**X**	
33	*Sphaeralcea* ssp.	Globemallow		**X**	**X**	
34	*Stanleya pinnata*	Prince's Plume	**X**	**X**	**X**	**X**
35	*Typha* ssp.	Cattail			**X**	
36	*Yucca* ssp.	Yucca			**X**	
Total Plants Identified At Each EOA Study Area			**8**	**19**	**23**	**9**

Table 7.2 Southern Paiute Identified Use Plants

This is not intended to be a comprehensive list of traditional plants in the park, but rather a selection of plants that were observed given the time of year and locations visited. This list is, however, representative of the many culturally significant Paiute use plants present in Arches NP.

These various plants have different uses, including medicinal, consumption, craft, construction, and ceremonial. Southern Paiute representatives discussed these plants based on their cultural values. Some plants were discussed in great detail by representatives (see Native American Comments sections), but in general a full ethnobotany was not possible during an ethnographic overview.

One example of a plant that is significant to Southern Paiutes is the Purple Sage (*Poliomintha incana),* a rare medicinal plant that grows in a uniquely large stand located near the entrance of the park (Figure 7.6). One representative knew of only two other locations to go to gather this plant. Southern Paiute representatives indicated that the Purple Sage Traditional Cultural Property (TCP) eligible area is a powerful place due to the abundance of the plant and the offerings that have been left there overtime by their ancestors collecting the plant.



Figure 7.6 Purple Sage Plant Growing near Courthouse Wash, Arches NP

The following sections of this chapter provide a site by site analysis. Each section contains the Paiute representative's discussions that identify natural, botanical, and cultural elements at each site. These site specific sections discuss other points of cultural significance, such as the relationship of the site to its surroundings.

7.4 Windows Section EOA Study Area

The Windows Section was selected as part of the EOA study based on its diverse geological features and the viewscape of the surrounding area. The Windows Section has well developed roads, parking, and trail access. It also contains numerous medicinal plants and the unique arches. The special geologic formations, from a Southern Paiute perspective, increase the cultural value of this popular visitation spot within Arches NP.

This EOA study area is located near the center of Arches NP, approximately 3.5 miles from Panorama Point and 11.5 miles from the park headquarters, and is at an elevation of 5,290 feet (Figure 7.7). The Windows Section is located within the southeastern corner of a series of unique rock formations, which include Garden of Eden and Parade of Elephants.

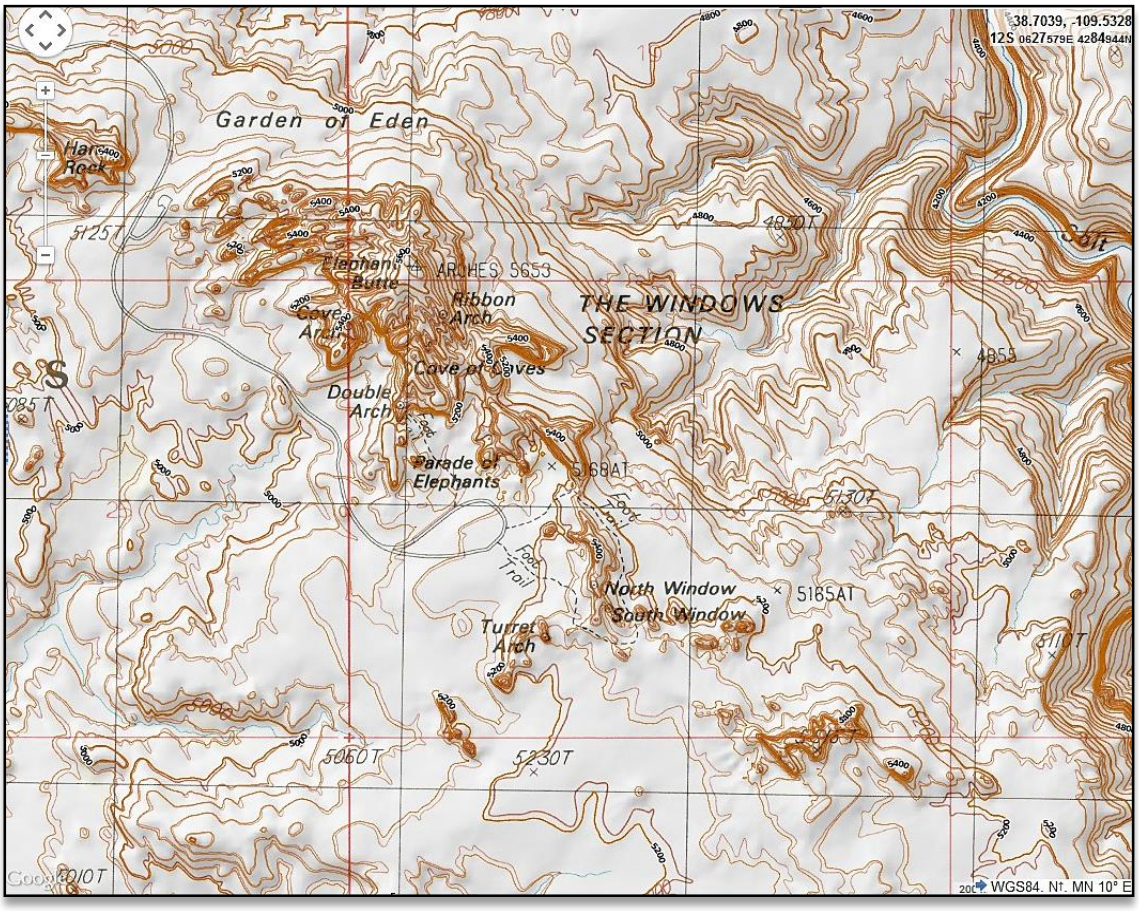


Figure 7.7 Topographic Map of Windows Section EOA Study Area

The Windows Section was selected as part of the study to allow for a cultural interpretation of the arches and other geological formations located throughout the park. Three large arches are clearly visible from the Windows Section trailhead. These include North Window and Turret Arch to the south, and Double Arch to the north. A trail begins south of the parking lot extending to North Window and forks between the Windows trail and the Turret Arch trail. From Turret Arch one has a clear view of North Window and South Window (Figure 7.8).

7.4.1 Natural Setting

The Windows Section is made up of unique geological and ecological features. This area contains landscape features such as arches, hoodoos, canyons, and the nearby La Sal Mountains. An abundance of plant life and other ecological resources are present.

Geology

The geologic features throughout Arches NP reflect millions of years of wind, rain, and glacial activity. Landscape features such as arches, pierced rocks, and smooth rock pillars, like those present at the Windows Section, further illustrate over 150 million years of geologic activity.

Differential weathering, defined by Chronic and Chronic (2004) as irregular erosion caused by differences in rock hardness or resistance, is the primary cause of these geologic formations (Figure 7.8). Over time, the arches continue to weather and erode, eventually leading to the collapse of these geologic features.



Figure 7.8 North Window (L) and South Window (R) as seen from Turret Arch

The arches are all formed from eroded sandstone, predominately the type known as Entrada Sandstone, deposited during the middle Mesozoic epoch. Entrada Sandstone includes both marine and wind-blown sands (Foos 1999: 4-5). Figure 7.9 illustrates the stages of arch development, providing both a frontal view and side profile.

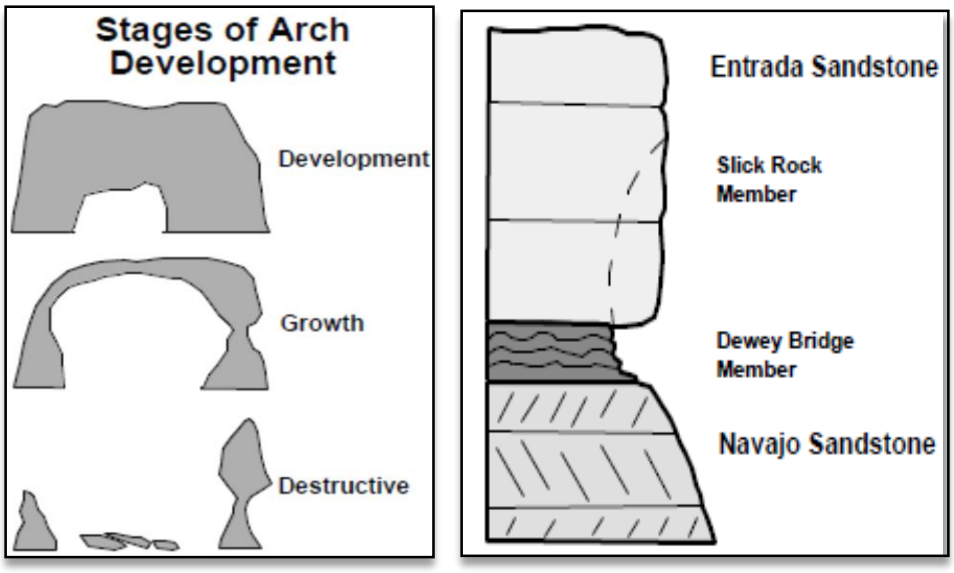


Figure 7.9 Stages of Arch Development (L) and Differential Weathering and Erosion (R) (Foos 1999: 4-5)

Deep canyons formed by the Colorado River and Salt Wash are visible from the North Window and Turret Arch portions of the Windows Section. A series of plateaus and mesas surrounding Salt Wash are visible from the North Window (Figure 7.10). Located approximately two miles southwest from the Windows Section are the Petrified Dunes.



Figure 7.10 View of Salt Wash Canyon Facing Northeast from North Window

The landscape within Arches NP is continuously changing. Physical changes in the shape of the rocks occur with each gust of wind, snow storm, and rain shower. The viewscape changes constantly as well; mountains visible at a distance spread into desert valleys and washes, which rise up to plateaus containing towering Entrada Sandstone formations.

Ecology

The Windows Section EOA study area is ecologically diverse. Plant life ranges from microscopic cryptobiotic crust to larger plants, such as juniper (*Juniperus* ssp.). This EOA study area is a Salt Desert Scrub ecosystem, comprised of arid to semi-arid shrublands on lowland and upland sites usually at elevations between 4,980 and 7,220 feet (Colorado Natural Heritage Program 2005).

Cryptobiotic crust was present throughout the Windows Section EOA study area, providing a natural anti-erosion blanket across the landscape (Figure 7.11). The cryptobiotic crust is comprised of cyanobacteria, lichens, mosses, algae, and fungi, and serves as a seedbed for other plants by retaining moisture (Arches NP, Windows Section, Interpretative Panel).



Figure 7.11 Plants and Cryptobiotic Crust near North Window

Woody, low growth bushes, such as Indian tea (*Ephedra* ssp.), fourwing saltbush (*Atriplex canescens*), and sagebrush (*Artemisia* ssp.), grow in the Windows Section EOA study area. Other high desert plants grow in this area as well, such as yucca (*Yucca* ssp.) and prickly pear cactus (*Opuntia* ssp.). The dominant plant community throughout Arches NP is Pinyon-Juniper woodland, due to rocky soils and fractured bedrock.

7.4.2 Special Features

This EOA study area was selected because of the (1) special geologic features, (2) a variety of viewscapes, and (3) good road and trail access to these features. Special views occur at South Window, North Window, and nearby Turret Arch. North Window provides a clear view of Turret Arch and accompanying hoodoos to the west.

Within this section of the park there is a unique concentration of geologic features, especially arches and hoodoos. To the north of the Windows Section is a series of hoodoos called the Parade of Elephants. Further north from that is the Garden of Eden and Balanced Rock (Figure 7.12). Other unique sandstone walls and mountain ranges surround the area.



Figure 7.12 The Garden of Eden

Viewpoints are one of the key cultural features of the Windows Section EOA study area. From surrounding trails, Southern Paiute representatives were able to see significant rock formations that contrast the landscape. Distant features also contributed to the place, such as the La Sal Mountain range to the south. These viewscapes are important to the spiritual connection and meaning of this EOA study area (Figure 7.13).



Figure 7.13 Southern Paiute Representative Discusses the Landscape with a UofA Researcher near North Window

The proximity of a paved parking lot to the trailhead and an easy hike to North Window are additional features that contributed to the selection of this EOA study area. The trail loops around North and South Window and forks to Turret Arch, providing a unique view of the Windows. The trails offer guided access to multiple viewscapes around the Windows Section.

7.4.3 Native American Comments

The Southern Paiute representatives that visited the Windows Section EOA study area with UofA researchers had many comments about the significance of the area. They also explained the meaning of several prominent geological features. Responses from the Southern Paiute representatives regarding this EOA study area are documented below.

Southern Paiute representatives described the geography of this area and/or elements that stood out.

- *I see a lot of sandstone rock and arches. Sandstone rock is really huge, and the rocks are not only up there but down on the bottom. What I mean is, see on the bottom, like that, layered. Different shapes of rocks, different shapes of sandstone, their all red though. You can tell there was water here billions and billions of years ago. This was once covered with water.*

- *I would call this place Unka-kaivah-pooh-oo-ee-hant…Red Mountain Eye.*

- *To me it seems like, you know how* [the arches] *stand? It means something like they were, just cannot figure out how to tell you what it means to me. It looks like, you know how those people way back used to make statues of people and stuff like that? Well it's just about like that.*

- *The arches and pillars really stand out.*

- *You have sandstone rocks, small cedar trees, and various plants for eating and ceremony.*

- *It seems to have a constant wind in this area, whether it's a slow wind or a fast blowing wind.*

- *The land location is extremely noticeable especially with the arches and the big snowy mountains in the foreground.*

Southern Paiute representatives commented on the ways that Indian people would have used this area.

- *They camped and did ceremony. They hunted. They did a little bit of planting by the water.*

- *They would pray* [here]. *For good things, good life. Mainly good life, good spirit, good health, and their children. There are just some places people go to be alone and pray.*

- *You know Indian people were more, I guess you would call it superstitious, back in the old days then we are today. And this kind of place would have been off limits. You do not go in there. If you go in there, you are asking for trouble. You bring back a spirit with you or they might get you, but you know of course puha'gants are different. They are not ordinary people. They could come up here and do their thing without harm, because they probably do all their spiritual things before coming in. You know, I think this was probably considered a place that was off limits to ordinary people, unless maybe you came here for vision, to some place in this, a place you thought was safe enough for a vision.*

- *I think they sang here. Maybe they sang for it, sang for the hill, sang for this mountain. They came up here and sang for it. My grandma used to say the mountains are alive. I used to be scared when she said that. She would say that the mountains can hear you. You know, there is a legend about a mountain like that, way up on the hill where there is snow, where this snow mountain is, like this mountain here, they would take some old ladies, in their 100s or something, and they would be tired. They would say take me up there, on that mountain, I am going to sacrifice myself to that mountain for you, for my people here. So they did. They would take her up there and leave her there. And that is how they did the old people a long, long time ago. So I do not know, they do not do that anymore, that was a long many years ago, before my time. Yeah, they would take the old ladies up there and the mountain would swallow her. That is what they used to say.*

- *They might have a place around here, a healing rock or something like that where the old ones used to come and talk to these here. Just like I did, you know? That is the way they were. They used to talk to them and give them tobacco that they could chew on. Bread, they shared bread with them so they could eat. That is what I have been taught. Everywhere you go you would have to give an offering to these rocks. I think this should have been done a long time ago, you know, when you used to go around with the older ones. I think they could have told you more about it.*

- *Medicine men were picked out by the Creator. In the older days, that is what they used to do. Today, I do not know if* [the Creator] *is still picking people to do certain things, you know. A lot of them say that they had the power to heal, but I do not know, because why do we need doctors now? Because we had doctors, the white man, you know? Way back then, we never had doctors, so* [the Creator] *had to have people to cure these people, and they had places where they had healing rocks and stuff like that.* [UofA Researcher: Would the medicine men get anything particular from the arch, or focus particularly on the statues?] *From the statues I think. And then, a lot of the Indian doctors would do things badly. They would, they had the power to kill a lot of Indian people. And that is what they*

used to do, they would use their power to do that. And when they did that they were bad doctors, you know? They did not have the power anymore, but they could kill other people to get more power. Just by eating them, or something like that.

- *They say they have not found burials and pottery in these areas of the park. I believe it was this way because Indian people were and are a very spiritual people. When you come to Arches National Park and you see the arches and monuments, it is easy to see that these were all giant people and animals frozen in this spot. Indian people would have a lot of reverence and respect coming here. They would not bury people or leave pottery behind. This place belongs to these great monuments and Indian people lived in their shadow* (Figure 7.14).



Figure 7.14 Southern Paiute Representative and UofA Researcher at the Windows Section

- *I do not think that was used by ordinary Indian people, everyday people. You know, back in those days, people did not know the world like we do. And when you look through those windows, and you see the movement, I think that kind of thing could draw a puha'gant, religious person, to that kind of place. That is what I think about that place. I think that people, well not all people, but people like that knew about that kind of place, would look at it as something powerful. A powerful place to go. Because that thing, standing in the middle of it and looking at it, you can just… to me it felt like, that second arch felt like I was standing right under it like that and with the clouds moving, I felt like I was being, you know, like that somehow. Like I was almost, not like I was spinning but like… like that. And I think if a Puha'gant was up there and he had taken his, whatever he took to*

make his journey, I think he could make a journey through that real easy. I was looking for evidence of other people being there, pottery, but one of the rocks that struck me was that granite, pieces of granite, because we are in the middle of sandstone country. Nothing but sandstone over there. But here and there I saw pieces of granite. And granite is not from this country. And I thought, well this has to be brought in by somebody from somewhere. And it could have been a rock that was brought in for an offering. I know that our Southern Paiutes, when we viewed Bryce, it has those hoodoos that look like that. We did not call them hoodoos. And you know if the Paiutes of our area viewed them that way, the Paiutes up this way probably view these formations as hoodoos. That is why I was talking about that guy standing way over there. He is one of those. And you know, people probably did not come up here just casually, like we are here today. I do not think people came up here just because. There might have been areas like that spring area down there, Wolfe Ranch area, where it was a destination point to go and get certain material. Make certain tools. And because there is water there, you could go in there and get water and gather some stuff, but you get out of there. You probably did not spend the night up here, you know, because there were these spirits, spirit animals, spirit people… I do not think it is an ordinary place. I think this place might be considered sacred by some people. It is full of spirits because it is high up.

- *Indian people used this place for ceremony and power. This is a place for songs, vision quest, power, rejuvenation.*

- [The arches] *help them make that journey to a different dimension.*

Southern Paiute representatives explained how this place is connected to others.

- *It is connected to Colorado, Utah, and Arizona. I say it would even be connected to Mexico. I would say it is connected through trade.*

- *It is connected to Moab Valley and the surrounding area. I believe tribes from the surrounding area would have visited this place. Like today, people all over the world would come here and so would Indian people from the past. It is a very majestic, spiritual place. If I were to go on a vision quest, it would be here.*

- *The Colorado River is connected.*

- *I think they could have used the* [Colorado River] *trade route to get here, because that was the big highway. If you lived over in that direction, you could come from there. You know, I do not know which way they would have come from down by the river. You know, maybe up the same road we came if there was Indian trail through there.*

- *I imagine they would travel from far away, different places, just to this one specific special spot.*

Southern Paiute representatives noted if Indian people would have used water from the area.

- *The water from a rock catchment, it is for drinking water, but everything you get you have to boil. The use of that one there is when a lady has her babies, they lay her down and they use the water to wash her down when she gets done, like a blessing. Just like when it is drinking water. It is so you are pure and like you started your life.*

- *One of the rocks had water coming out of it, like a little spring. There are also rock catchments. Water from here you could drink, and birthing like I said, and ceremony like a blessing. When you first get into a lodge, they bless you with water like they have here.*

- *They would have used the water catchments in the rocks, and the Colorado River is nearby.*

- *There are pohs* [naturally occurring water catchments in rocks] *to catch rain and snow runoff.*

- *Well, in the old days there probably was some water there, because there are some water pockets. We saw some water pockets over there, places that hold water. Water is important because water is used for prayers and blessings too. If you could find a pocket of water there in the window, that would have been even better.*

Southern Paiute representatives explained how Indian people would have used the plants in this area.

- *There are a lot of plants down here. I do not know what they call them, but they give off berries. And different cedar trees that they have up in this area, also. The different types of, what I see is different types of Indian tea. It is kind of different below, somewhat below. We see this greenish tea. Cedar and cedar berries are ceremonial plants. Also sage, you see some sage up here.*

- *Some people have to go a long ways to get a certain kind of medicine for a certain kind of sickness someone has. And they do not just gather a little, they gathered a whole lot. You know, the roots. If it had to be cut into little pieces, and they put them in little sacks. That way they would have a whole lot for other people too. See, back home our tea, the Indian tea, they all look different form the ones here. The ones down home, they are longer. These are short. I don't know if they are just growing or what, but back home they are long. But I know I used to go pick it with my grandma and she would dry it, and that is good for your insides. It cleans you out. If you had a urine infection, if you had kidney problems, or liver,*

whatever, that thing will just clean you out. Flush you all out. And it is good tea, let me tell you. Very good. You can just drink it.

- *I think our people came down this way to maybe look for roots. Different kinds of stuff, stuff we do not have back there at our area. Maybe they had a certain kind of medicine down in this area that they had to go a long ways to get. Maybe they would have said, 'boy, you know what, they have got some down in that area there.' We have to go down and get some before it snows, before it starts to get cold* (Figure 7.15).



Figure 7.15 Southern Paiute Representative Explains Plant Uses to a UofA Researcher at the Windows Section

- *The cedar and the tea would be used. The tea is the main drink for a sick person. You just break it up into pieces and let it boil for about three times, and then strain it out into a rag. Then you drink that. The fourth one is clear. It kind of tastes a little bitter, but then you put sugar in it and it is good.*

- *I see the tea. And maybe other roots too. I do not know. Maybe they came up here to get the acorn. They got acorns. Some cedar, yeah, maybe there were different kinds of cedar they came to get. And sage, different kinds of sage.*

- *There is one plant that grows near here on the way to the Windows, it is one of the most prized plants. It is, I believe, called penny royal. It is a tea and this time of year it has a purple flower on it and it has a mint smell. It only grows in sandy areas. I currently travel to Page, Arizona, or west of Boulder, Utah, to get this plant. It is a tea and a medicine plant. And the flower, when it is dry, is mixed with Indian tobacco. If allowed I would travel to Arches to pick this plant because this is a place of power. The medicine in this plant is stronger here. If Arches National Park would allow or give permission to Native people to gather here, I*

would travel from the Shivwits Reservation to gather. Indian people today as in the past traveled great distances to get medicine plants and foods.

- *There are a variety of plants that were used. There are many plants here that are arranged in a beautiful pattern with each respecting their distances.*

Southern Paiute representatives explained how Indian people would have used the animals in this area.

- *Right now there would be reptiles, snakes, lizards, and chuckwallas. Plus, right now you can hear the bugs, mosquitos, flying ants, things like that. That is what they have out here. And there are birds. The lizard, a long time ago, people said they roasted those thing and they said it was like a sardine in a can.*

- *They have eagles everywhere. They have hawks everywhere. Hawks and the bald eagles. I do not see bald eagles but I think they have hawks here. I do not think they have golden eagles, I think they have hawks. I saw some, back there, flying. I think they were, I could not really tell, but I just saw them way up, flying. It was one of those small ones, it was not that big one. And it had to be one of those red tails because that is the only kind. The one that is very, very sacred is your bald eagle, then your gold eagle. They are the ones that are very special and sacred. They are the ones that have the prayers when you are praying.*

- *Oh yeah, they did. They would kill an eagle, or else they would find a dead one. That is how they used to get their feathers. They used to make a trap, they would dig down in the ground and put a rabbit there, then they would have other things to catch him by the feet. This is sand rock here too, see? Wind hits it and it starts to fall. Yeah,* [the Creator] *built this so people can come in and enjoy themselves here. That lizard there, se-yuh-pits. That is what they call them. He is fast. They grow big.*

- *They probably had bird helpers, to help them go along those windows. In and out. Helped carry them in and out. I did not see much. I did not see anything in there except a few birds and that little squirrel we saw, maybe one crow. But there was a lot of people in there so I think in the old days there probably would have been more birds in there. Maybe some eagles could be flying around over there. Crows or even the vultures.*

Southern Paiute representatives explained how Indian people would have visited or used the geological resources in this area.

- *The Paiutes believe that the rocks, at one time, could talk. At one time the rocks could speak and the birds could talk, the four legged, the insects and bugs could talk, the rabbits, coyotes, wolves. There are people that can talk to the rocks, but you have to be in tune, especially with the plants, and animals, and with the earth. All this stuff, the water, and even the clouds in the sky, have something to do with*

these arches. And the hoodoos. It is all there, it is a mythical thing, but it is all there. The stars, the sky, and the moon. Those have something to do with this whole place here. It is so close to the Colorado River, they could go down to the Colorado River and get some water there, or follow these washes that go into the river.

- *When they ran out of water you can see they have places here where they can get water in the rocks when it rains or snows, when they are thirsty.*

- *They had some sort of ceremony they did in these places also. Ceremonies would be for the sun that comes up. The sun and the stars at night. Different stages of the year: summer, fall, winter, and spring. Those kinds of things. So the sun gets up earlier in the summer, later in the night, so these arches, when they give off the shadows, the shadows will determine the time of the year also. The purpose is for the plants, when the plants grow, when they can pick the plants, when they can harvest the animals, the four legged, when they can harvest them, when they can pick the plants. For travel also, where to make the shelter, or where they are going to camp that year or that week* (Figure 7.16).



Figure 7.16 Southern Paiute Representative Explains Ceremonies to UofA Researcher

- *They would have used the arches and this site for ceremony.*

- *Maybe all those arches or those windows is the way those spirits come in and out. And those* [Puha'gant] *kind people could draw those things out. And their spirit could have taken a journey through those windows too, into that different dimension whatever they were seeking, to find whatever it was they were seeking. I think those were the windows that probably struck me the most because I deliberately went under them and stood under them and watched them and watched the clouds through them. I tried to get a feel of the place but it was very hard because of all the people there, because of all the… If there was any Puha energy there, it is not there now with all of those people there.*

Southern Paiute representatives provided comments regarding the area as a whole.

- *Well, you want to teach the tribal youths here. Teach how the water settles in the rocks and how you drink the water, and the different types of plants, how they are from this height to just a little bit lower, and teach about the hoodoos, talk a little bit about that, and how close this is to the Colorado River, and teach about the rocks in this area, how they are different, and they are significant to how they walk and where they go, and what the rocks are sandstone and how they got here at one time. This is part of their Creation story in a sense* (Figure 7.17).



Figure 7.17 A Southern Paiute Representative Reflects on the Significance of the Windows Section EOA Study Area

- *I think people would probably want to come out here and say a prayer. A man would come out here and do it on his own, pray for himself and his family. They would come as early in the morning or as late in the night as possible. Maybe*

bring someone that is ill. They will have them lay there and say a prayer. The lady always has to be near water during prayer.

- *I think all things like this are spiritual. Something that is so special, it is always spiritual. I am an Indian, so you know Indians are very superstitious people. We as Paiute people are. We do not pick up anything from the mountains like this. Anything that you see like a pretty arrowhead, you do not pick that up because that is not yours. So you do not pick stuff up like that, and pick up rocks, you know?*

- *I would like to bring kids back for something like, an hour or two hours, for peace and quiet. So we can teach the youth the significance of peace and quiet in areas like this, and to talk to them. Tell them what a significant part that was in the way of life back then, and maybe to sing some songs when it is quiet, Native American songs that they can hear that here, and how it affects them in that way.*

7.4.4 Ethnographic Comments

The concept of power, or *Puha*, is essential for understanding the fundamental meaning of a place; the meaning of the place is derived from the power(s) it exhibits. Humans are attracted to these powerful places and incorporate them into their culture. Tilley (1994:24) describes the process by which places acquire meaning to human groups. He notes that places become crystallized out of the environment through the production and recognition of meanings in particular places and through events that have taken place. He further believes that places are fashioned out of the landscape through the recognition of significant inherent natural qualities rather than simply being culturally produced. In other words, the land talks to humans.

In Southern Paiute culture, the land is understood as being sentient and having agency. All elements of the universe have Puha, and this power is dispersed in a network of relationships. These relationships most resemble spider webs (Stoffle, Zedeño, and Halmo 2001). At various points in this web, power is concentrated producing powerful places, which are then recognized and commemorated by humans. Zedeño (2000) observes that places are "made" because they are the loci of human interactions or nature experiences. Therefore, power is cumulative; it accumulates at a place as people live or re-live those experiences.

The Southern Paiute representatives visiting the Windows Section of Arches NP identified several features of cultural significance. Comments from the tribal representatives identified the Windows Section as a place for ceremony and vision questing, and as a place with an excellent view of the surrounding lands, especially the Colorado River. Looking from the South Window and Turret Arch, Southern Paiute representatives were able to view the La Sal Mountain range, which was an important landscape feature.

The viewscape from the North Window, facing east, provided a spot from which Salt Wash and the Colorado River could be seen (Figure 7.18). Looking down on the fertile valley below, Southern Paiute representatives explained that the North Window provided a look-out point to help protect the communities. Representatives noted that being high above the

landscape, you could see other groups coming from far away and view weather and storms that might be coming toward the area.



Figure 7.18 Southern Paiute Representatives View Salt Valley Wash Area from the Windows Section EOA Study Area

Facing southwest from the Windows Section, tribal representatives had a clear view of many hoodoos (Figure 7.19). Within the Southern Paiute worldview, these pillars are understood as being ancient animals, people, or spiritual beings that were frozen in time. Hoodoos are considered to be spiritually and culturally important, therefore, their abundance present at the Windows Section contribute to the overall importance of the site.

Viewscapes, features, and the spaces between places contribute to the overall cultural significance of the landscape. Numic people believe that large sacred mountains "stand up" so they can see one another, and the mountains find joy and power in that experience. So, while the mountains are themselves places of power, they continue to have power in part because they are surrounded by unobstructed space. When a person sits at a certain place he or she can see for great distances and observe many things. Indian people often use such sites for vision quests and spiritual renewal (Stoffle, Zedeño, and Halmo 2001; Van Vlack 2014). Clearly, the viewscapes surrounding such places contribute to its power.

In addition to hoodoos, the arches within the park played a key role in Southern Paiute epistemology. One tribal representative noted that the arches would have been key to time keeping for Southern Paiutes at this EOA study area; the arches and their shadows map celestial movements throughout the year. By recording these movements, Southern Paiutes would have been prepared for important events that were necessary for survival, such as planting, harvesting, hunting, traveling, and ceremony.



Figure 7.19 Entrada Sandstone Pillar near Windows Section in Arches NP

Time keeping has always been an essential component of Southern Paiute culture. In 1876, John Wesley Powell recorded a name for star watchers from a Las Vegas Paiute person, which he spelled *wativivngkunt*. When translated it means a prophet who consults the stars, sun, moon, and other celestial bodies (Fowler and Fowler 1971: 160). In recent discussions with Kaibab Paiute elders, another word, *poots-sii-ving-puha-gant*, was provided to describe this medicine man, which translates to one who gets his power from the stars, or literally a Puhagant (medicine man) who gets power from many stars. These Southern Paiute Puhagants acquired powers from their environment, often in places especially selected by the Creator for star watching or star travel. A *Tuu-hoom-pahvii-yah* is one who knows the stars and the universe and talks to the stars in a *Pooh-aah-kahn*, or house of medicine. A *Pooch-yuu-whaad* is a person who knows the upper world, or the place of medicine. Some Puhagants could understand events that were occurring, or were to occur, just by looking at the stars, moon, sun, sky, and clouds.

The location of the Windows Section high above the surrounding area contributes to the power that the area holds. The hoodoos surrounding the Windows section contribute to the sacredness of the place. Features in the distance, such as the La Sal Mountains and the deep canyons cut by the Colorado River, further enhance the power and spiritual connection that the Southern Paiute representatives observed at the Windows section.

7.5 Courthouse Wash EOA Study Area

The Colorado River and surrounding floodplain is a dominate landscape feature for visiting Southern Paiute representatives at Courthouse Wash. Agriculture and large villages flourished on the fertile floodplains of the Colorado River. Trading and other activities that utilized the Colorado River and surrounding hydrological systems took place in the valley below the Moab Panel[1]. Just south of the Arches NP park headquarters, there is a large and regionally unique stand of purple sage. This sacred plant grows throughout the bottom of the valley to the southeast, extending towards Highway 191. Ethnobotanical resources found at the Purple Sage Traditional Cultural Property (TCP) eligible area were of interest to tribal representatives as well. The purple sage area was previously studied and determined by Arches NP and the consulting tribes to be eligible as a TCP (NPS and UDOT 2000). The combination of these elements and viewscapes made the Courthouse Wash EOA study area a significant place for the Southern Paiutes (Figure 7.20).

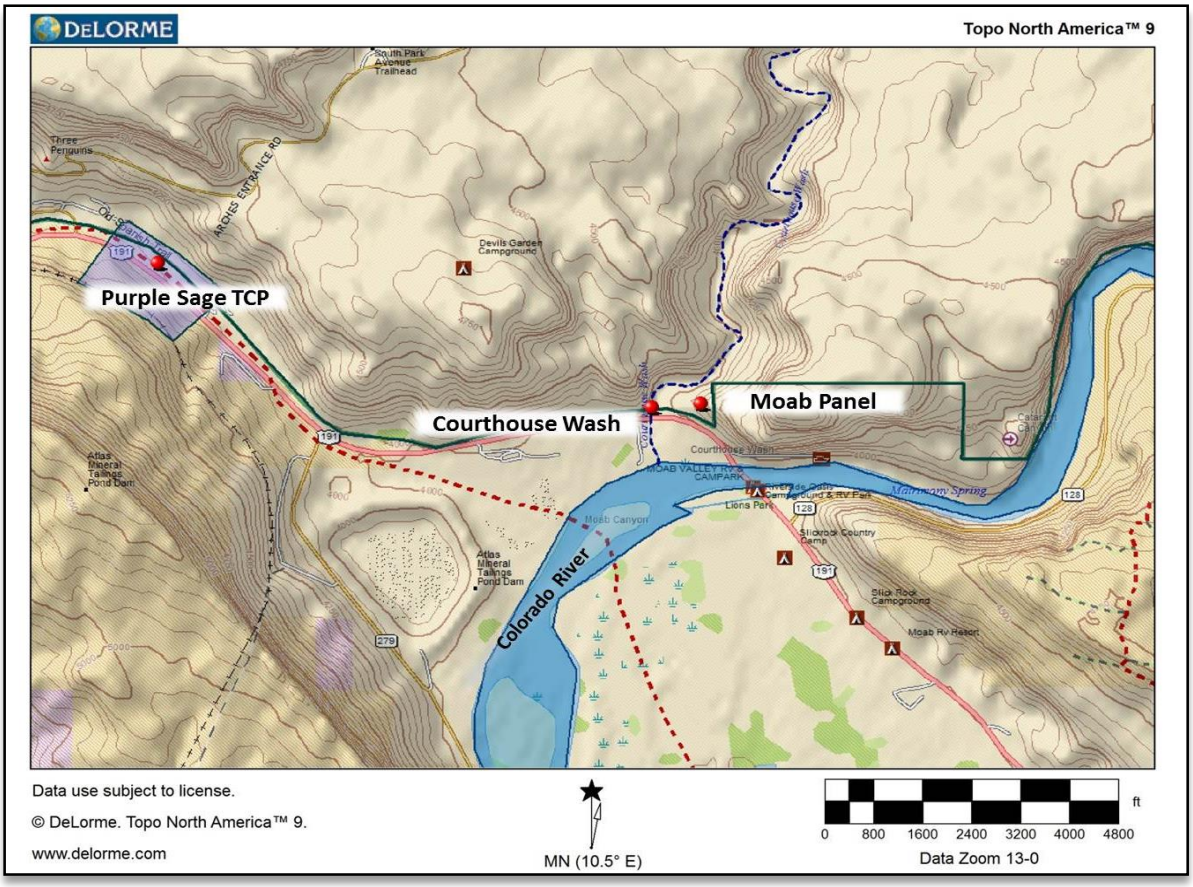


Figure 7.20 Map of Courthouse Wash EOA Study Area

Courthouse Wash is a major hydrological system within Arches NP, and is the largest riparian area located in the southern part of the park. The wash trends to the southeast approximately 17 miles, 6.5 miles of which are located in the park, and flows into the Colorado

[1] The Moab Panel is also referred to as the Courthouse Wash Panel by Arches NP.

River approximately 900 feet south of the park boundary (see Chapter One). The elevation of the area ranges from approximately 3,970-4,300 feet. The EOA study area runs southeast from the park headquarters and includes the Purple Sage TCP eligible area, the convergence of Courthouse Wash and the Colorado River, and the Moab Panel. The Moab Panel, which contains a series of painted and pecked figures, is situated near the confluence of these two hydrological systems, just east of Courthouse Wash and north of the Colorado River. This EOA study area contains both natural and archaeological resources.

7.5.1 Natural Setting

The geology and ecology of the Courthouse Wash EOA study area represent a wide variety of natural resources that make Arches NP unique. Diverse plant life in the area is supported by the continuous flow of water from Courthouse Wash. Outside the wash, large quantities of purple sage, Indian tea, and rabbitbrush (*Chrysothamnus* ssp.) grow.

Geology

Geologic features present within the Courthouse Wash area include the valleys carved by hydrological systems, large sandstone bluffs and outcroppings, and the Moab Fault. The Colorado River is visible from the majority of the EOA study area. A topographic image of the Courthouse Wash EOA study area illustrates the geological complexity of the landscape, which includes deep and vertical canyons and high flat mesas (Figure 7.21).



Figure 7.21 Topographic Features of Courthouse Wash and Surrounding Area

Courthouse Wash plays an important role in the formation of the geologic features in the area. Rain and snow, in addition to water from Courthouse Wash, contribute to the groundwater recharge within Arches NP.

Ecology

Courthouse Wash is one of the few perennial streams located in Arches NP. The Colorado River contributes to the ecology at the southern border of Arches NP. Courthouse Wash supports a stable riparian environment that supports the ecology of the park and adjacent areas (Hurlow and Bishop 2003: 1). Some of the ethnobotanical resources that grow within the EOA study area include cottonwood (*Populus fremontii*), greasewood (*Sarcobatus vermiculatus*), willow (*Salix* ssp.), sage (*Salvia* ssp.), fourwing saltbush, globemallow (*Sphaeralcea* ssp.), penstemon (*Penstemon* ssp.), and three leaf sumac (*Rhus trilobata*) (Figure 7.22).



Figure 7.22 Southern Paiute Representative and UofA Researcher Discussing Plants near Courthouse Wash

The large sandstone bluffs surrounding Courthouse Wash provide a habitat for drought resistant wild grasses, cacti, and small shrubs. Moisture, dust, and rock debris accumulate in crevices and cracks in the sandstone, providing a place for plants to grow, such as sacred datura (*Datura wrightii*), prickly pear, and yucca.

Ecological zones outside of the Courthouse Wash riparian area include sagebrush and saltbush habitats. Alluvial deposits with seasonal access to water and the Colorado River are located south of Courthouse Wash. Other plants that grow in this area include purple sage (see Figure 7.23), tall sage (*Artemisia tridentata*), sand sage (*Artemisia filifolia*), prince's plume (*Stanleya pinnata*), blackbrush/buckbrush (*Coleogyne ramosissima*), Indian ricegrass (*Oryzopsis hymenoides*), and Indian tea.

7.5.2 Special Features

Special features at the Courthouse Wash EOA Study Area include (1) the Courthouse Wash hydrological system, (2) the Purple Sage TCP eligible area, and (3) the Moab Panel. Each of these features contributed to the decision to visit all three areas and interpret them as part of the larger EOA Study Area.



Figure 7.23 Purple Sage Found at the Purple Sage TCP Eligible Area

Southern Paiute representatives identified a wide variety of ethnobotanical resources at Courthouse Wash and the Purple Sage TCP eligible area. These identified plants have multiple uses including medicine, ceremony, and consumption. Indian ricegrass, known in the Southern Paiute language as *waii*, was of particular importance to Southern Paiute people living in the Moab region long before the introduction of other domesticates such as corn or wheat (Figure 7.24). Waii is an important traditional Southern Paiute food plant.

The Courthouse Wash hydrological system is a steep-sided, narrow, flat bottomed canyon that cuts through the surrounding sandstone features. The confluence of the Colorado River and Courthouse Wash is 0.2 miles west of the Highway 191 Bridge. These hydrological systems provided access to a year-round water source for drinking and farming for residents of the valley. The hydrological system, diverse vegetation, and cultural landscape add to the significance of the EOA study area.



Figure 7.24 Southern Paiute Representative and UofA Researcher Discussing Plants

The Moab Panel is another unique feature within Arches NP. The pictographs and petroglyphs present at the Moab Panel are referred to as storied rocks, or *tumpituxwinap,* among the Southern Paiute people. The tumpituxwinap on the Moab Panel contributes to the uniqueness of this area (Figure 7.25). American Indian people utilized this area over a long period of time, which is evident in the diverse styles of the peckings and paintings. The storied rocks connect contemporary Southern Paiute people with ancestral Numic people, known as the *Enugwuhype*. The location of the Moab Panel provides an elevated viewscape of the Colorado River, Courthouse Wash, and the Moab Valley.



Figure 7.25 Southern Paiute Representative at Moab Panel near Courthouse Wash

Features like the Moab Panel, the Colorado River, sacred plants, and the cultural landscape contribute to the significance of this area for the Southern Paiute people. Abundant natural resources within this EOA study area stress the importance of the water from Courthouse Wash and the Colorado River.

7.5.3 Native American Comments

Southern Paiute representatives visited the Courthouse Wash EOA study area with UofA researchers in May and September 2015. They provided comments about the significance of the area and the meaning of several prominent cultural and landscape features. Responses from the Southern Paiute representatives are presented under each topic that they discussed with UofA researchers.

Southern Paiute representatives described the geography of this area and/or elements that stood out.

- *Well part of the geography is* [Courthouse Wash], *and the plants in that wash, and the sediment that is brought down when it floods into the Colorado River. The Colorado River comes from is Colorado, and when snow and rain melts, it comes down here and all of these other side rivers come into it. All of the geography, the hills the rocks around it, at one time, were underwater, a great big huge ocean that settled just like a normal thing. When you play with water you see how it settles, and that is the same concept here, where the water just dried up and came down here, you can see the lines on these rocks, sandstone, and that is what I see in the geography* (Figure 7.26).



Figure 7.26 Southern Paiute Representative and UofA Researcher Discuss Geography

- *During the fall, they moved to a certain place where they could provide food for their families. And when they knew something was coming up* [growing] *they just traveled, and said we'll go get it. And they would take just what they have to have.*

Southern Paiute representatives commented on the ways that Indian people would have used this area.

- *They would have used the water and the food here. You cannot live without those.*

- *The petroglyphs, they tell a story, it tells you where there is food, and it tells you where to go, how many days to get there, all that stuff. It will tell you that you are going to go through water or it is going to be hot. It just tells you all those things. It is like a story, and it tells you places you can get, this and that.*

- *Ceremony. At a certain time they called the rain clouds in. And they used those because those are an element of the rain. Somewhere along the line that called the rain in, there is somewhere along the line that that had a certain connection with the clouds. It could have been though a bird or an animal. Not everybody used that, certain people would use that, what you guys call shamans. There are certain people who do that. I have seen them do that, not with this, but I have seen them call in the rain. And they can stop the rain too.*

- *Maybe there were farmers that had different kind of produce, different kind of plants they were interested in trading. And I am sure with the deer and wild animals, they had plenty here. Because when they killed a deer, it was all used, every part of the deer, and the animals were the same way, they used the animals, their bones, for needles to make holes in buckskin, or making their clothing. I would say, if they made rabbit blankets it was not just a few of them, it was a lot of them, so that was something that they used to keep them warm and for blankets, like in the winter, for their babies. And I think that was a really nice thing to use, the rabbit, for as it is, nice and soft, comfy. And they used the trees, maybe they had spears, arrows, bows.*

Southern Paiute representatives discussed why or for what purpose Indian people would have used this area.

- *The main source of food comes from the water. See, the water is the giver of life and the taker of life, so they have to respect that water. Drink it. And plants, all the plants, the plants you see up here, the cottonwood, it was in abundance. The plants might have not been there, but they were all through here. They were all by the water, all the plants we see. And a lot of people wonder how these people survive. They survived on the plants and the animals, they knew what to pick and what to eat. Just like we were identifying in there, Indian ricegrass and Indian tea, there were more plants than that through this area.*

- *It would be a nice place for resting, camping. I would think it would be seasonal camps. Depending on what they were doing. In the winter I am sure they did not do much traveling. If it snows here it is not easy to travel, as opposed to the summer or spring where they would do more moving and traveling. And I could see this in the summer or the spring, with the leaves, when their camping here or maybe even staying throughout the summer. It would be really nice with the shade, tall trees, sort of kept it cool by the mountains.*

- *I am sure back in those old days that they used some of the shrubs, some of the bushes to make a little shade or a little place where they could rest and be protected from the environment, depending on how long they stay or how long they are traveling through. Rabbit brush or even the sagebrush, because they are long enough and big enough to cut branches off. And they were not really big, just large enough to protect you from the environment, and long enough for you to rest and either say or move on.*

- *They were telling stories. Information may be about ceremonies, who was here, what they were doing.*

Southern Paiute representatives explained how this place is connected to others.

- *I could say yes, it is connected, because when they traveled the trails they traveled, and they had seen, and some probably branched off. And if this was a trading area, for all of the others to come here and trade, and that is how they did in those days, they traded with people. This would be a good spot, and if they had a farming community it would bring a lot of people in here to trade their farming, like their vegetables, corn. And then they would leave whatever they were trading here if they were farmers. The other Paiutes hunted and did beadwork, and they did buckskin, so that is probably some of the things that they traded with these Paiutes. And I am sure they went out and traded, and visited the other Paiutes also, and traded with them, and learned about them, and intermarried. They chose to stay here. They felt this was their home, their place, and my group, my relatives or my Paiute people, chose to live southwest in Southern Utah. And so, even though they lived out over Southern Utah, probably up into the Utes. They were in Northern Utah, so, they lived practically all over this area, and mostly I think it would be men, warriors or runners, traders going to different camps. And that is how the news went around too. They would leave here, and if they have relatives here that live from the outside, and go there, and tell them the news back here, and the same with them coming in here and telling them what was going on out there, or if there was anything they needed. If they wanted to trade.*

Southern Paiute representatives noted if Indian people would have used water from the area.

- *In those days they had to have water to survive. They have to drink water, they have to wash, just the purpose of living. You cannot live without water.*

- *I think* [Courthouse Wash] *helped with the wild animals that they hunted to survive. To kill them and eat them. Not only to help the Indians but the animals.*

- *You see how this one* [image on Moab Panel] *is right here? It kind of reminds me of those water babies* [rock pecking]. *It has no hip, it is just straight. I think there would be water babies along the river here, they are just about everywhere. Late at night, you can hear them crying too. If you ever come around to it, find a place where they are at, you can hear them crying just like a baby. Then you would think maybe someone got lost, kids or something like that. You get in there and the* [water] *is going faster. Oh you bet, got to watch out.*

Southern Paiute representatives explained how Indian people would have used the plants at the area.

- *They do use the shrubs and stuff like that for swelling and ear aches and for your stomach. Everything. They used medicines for things like that, herbs.*

- *Seeds came with the wind or the birds, and that is how they got here. And the Natives, they could have brought some plants too, from somewhere, brought them here and planted them. And they chose a good spot along the river where they could be watered and grow* (Figure 7.27).



Figure 7. 27 Southern Paiute Representatives and UofA Researchers Discussing Plants

- [A Paiute man] *what we call the chief, ran the whole Native American Church, he ran it how it was supposed to be done, how he taught it, and he used these seeds to put in the rattles, and the rattles were made out of gourds. He would put it on a stick, and they make it a certain way, and he would put those in there, they put so much in there, it makes a real pretty sound. That is what they used it for too, they would call it bringing in the water, the water gods, because they had water songs they would sing in there, and the water songs they would sing were sung through that rattle. They had different rattles they would use, and that was one, for the water song. And then they had a regular one, which was a totally different type of rattle, but basically the same, but different sounds. It depended on how many seeds they put in there. They could make it sound full, or not too full, or in between. And it has that really pretty sound. Yeah, my dad used to help them do these things with that too.*

Southern Paiute representatives explained how Indian people would have used the animals in this area.

- *I think that they did a lot of hunting for mountain sheep in this area, because* [the panel] *has a lot of mountain sheep.*

- *They used the animals for food. I guess mainly they had sheep over here, and bears, and deer, elk. And I guess little animals too, I do not know if they ate them or not, they probably did. Prairie Dogs, little squirrels, and rabbits, stuff like that.*

Southern Paiute representatives explained how Indian people would have used this area and/or artifacts.

- *In our culture and our custom we have songs about mountain sheep. It is called the mountain sheep dance song. They still do it, and it protects the mountain sheep. People who put that there, they are probably like spiritual guides or something. It is something in their head, like a vision, that is telling them what is going on, because that is what they had to use for food. Even their horns, they used everything. Some people could say it is different, but based on the mountain sheep and the different figurines on top, it is like a vision, something they see in their head. Those big tall things. It could be the Creator, or something that came and showed them where the mountain sheep were in their vision and in their dreams.*

- *They do not just put the peckings on the rock for anything. It always has to tell a story of animals, or how they lived, or the spirits, what they see at that time. Everything has to do with it, the sky, clouds, even the darkness. All these things have a play in all this. Even bugs, and all the elements on this earth.*

- *The medicine men, they fasted for three days and three nights just to see that painting, and the painting would talk to them and sing. In the morning, after they*

fasted for so many days they would go back home, they start singing those songs and start dancing.

- *They were spiritual, and they did a lot of praying, whether it was to the Mother Earth or the deer, the animals, the food that they had, even the water they would find, going back in the canyons. I am sure that they had special places where they would go and do that. Like in the summer and the spring, like there is a place back there where they would meet and do ceremonies, and do blessings.*

- *To me,* [the panel] *just tells me, they were spiritual beings that came to earth. Visitors. They explain through the panel how the Indians traveled to the stars, stuff like that.*

- *They* [painted figures] *could have been beings that lived in the water, because you know different Puha'gants, they probably looked at it in a different way. Look at the tails on them. They do have tails. Tails like that could move like that in the water. They are almost like, almost like fish. But they are supernatural. Supernatural. And this was probably somebody's Puha dream—something that they saw and for some reason, I think that they recorded it. I do not know, maybe it was as a warning to people about the water. You know how we talk about our water babies? And how you have got to be aware of those water babies, they could do harm for you. And they probably believe in those kind of things too, back in those days' different kinds of water babies, different kinds of water spirits. And I do not know if those footprints, those saddle prints, if that was done at the same time or not. This is painted and that one is picked. Those footprints, those are picked. It could be done at a later time* (Figure 7.28).



Figure 7.28 Southern Paiute Representative Examining the Moab Panel

- *I think the* [peckings] *are connected to the river. Our people, our Puha people, went into different dimensions and they saw you know things like that. They probably dreamt about traveling to [those dimensions], or went into those dimensions somewhere else and then recorded them here. But to me they are all connected to the river.*

- *These are Indians on horses. So I do not know if those are the recordings of the first horses that the people brought into this canyon, this valley. And it was so significant that they wrote it down. They wrote it up there and they wrote it there. You know, that might have been the first time they seen someone riding a horse. And they probably thought well this is awesome, I am going to go record this. I mean why else would you put it there, if you did not think it was something so amazing? I mean is not that why we take pictures of them because we think they are so amazing and we are awed by it? I would think that would be the same reason that they would bother to take the time to write it down on the rock.*

- *To me, this* [Moab Panel] *looks like something that was not done by an ordinary person. Not done by an everyday person. It was done by somebody, I do not know if you would call them a Puha'gant, but somebody who dreamed and saw all of these beings. These beings could be beings that lived out in the water. They are not humans. And they do not look like our typical water babies. But they are some kind of a beings.*

Southern Paiute representatives explained how Indian people would have visited or used the geological resources at the area.

- *I bet they would have used the rocks, because that is just the type of people they were. They knew that these rocks had voices, and they had spirits, and they could find a rock where they can go and pray to.*

- *There is rock writing there, but nothing on these cliffs probably because they are looser. They are different sections. I think that is what stopped them from using that, to write on there. And that was probably more stable, they knew that was more stable on that side than this area, so they put them up here on this long, flat. This has some flat, but it is up higher and they are all in pieces and chunks, where that there is more straight. And you know, it seems to me that when there is writing it usually is on a flat panel. And I think it was easier for them because of what they had to say, what they were telling, was big enough. And I am surprised at how big these are back here, I do not see them very often that big, so they really did a lot of work.*

Southern Paiute representatives provided comments regarding the area as a whole.

- *I would not be surprised if they had special areas where they would do blessings, have medicine prayers, go and have visions. Back in those days they did a lot of that. Or went out on their own just to be with nature.*

- *This is the way the Creator wanted it, they wanted the Indians to teach the kids everything they know. Today, the elder women they are supposed to be telling, they should be teaching the kids about things like who they are and all that. This is a place to do that.*

- *I think this is a good project too, because it is about my people. They lived here and were farmers, they had the same battles. They had their work, their songs, their prayers, stories, places they have been, things they have seen, spiritual things they have experienced. They should be respectful to everything; the mountains, all the rock formations and not desecrate them. Our beliefs are strong, a lot of people do not have any, a lot of people do but they do not go by it. I strongly feel that the Paiutes should be recognized in this area. It is sometimes hard for me to understand when we say the Paiutes lived here eons ago, and so, Anglos move in so there is nothing here about the Paiutes other than the rock art, but there were people here. They were Paiutes.*

7.5.4 Ethnographic Comments

The view of the Colorado River from the Moab Panel plays an important role in connecting the Southern Paiute people with culturally significant areas and landscapes throughout the Southwest (Figure 7.29). Cultural ties with the Arches NP area are emphasized by the Southern Paiute use of purple sage growing near Courthouse Wash, and in rock writing overlooking the Colorado River. Ancestral Numic occupation of Arches NP and the Moab region has occurred since time immemorial, with supporting evidence available from Southern Paiute oral history, archaeology, and Euro-American accounts of large-scale farming in the region. The following section provides further ethnographic data on these topics.



Figure 7.29 Southern Paiute Representative and UofA Researcher at Moab Panel near Courthouse Wash

The technical name for the figures found carved into rock faces is petroglyph. This word has been grouped by scientists and lay people with pictographs, or paintings on rocks, into the term rock art focusing on the aesthetic or pictorial aspect of beautifying a place. Conceptually, the term rock art can imply "expressive cultural activities which are generally understood under the term art" (Stoffle et al. 1995: 3) and convey both meanings and stories. Western connotations attached to the word "art" do not always match with Native American cognition of petroglyphs and pictographs. This classification is an oversimplification of a complex cultural phenomenon. Rock art does not fully capture the full meaning of the images pecked or painted on the rocks.

Images found on rock panels, along the banks of the Colorado River and Courthouse Wash, hold special significance within Southern Paiute cosmology. Less than seven miles downstream from Arches NP is a 125 foot long panel of rock writing (Figure 7.30 (L)). It can be seen from US-279, on a rock cliff face covered in naturally occurring desert varnish. Of the rock writings placed on this wall over a thousand years ago, one figure in particular stood out (Figure 7.30 (R)). Southern Paiute representatives visiting the panel viewed an image depicting a Southern Paiute style burden basket, and found the image to hold special meaning.



Figure 7.30 Cliff Face Where Burden Basket Image is Found along the Colorado River, Seven Miles from Arches NP (L); Ocean Woman's Burden Basket Image (R)

The Southern Paiute origin narrative tells of *Si-chom-pa Ka-gon* (Old Woman of the Sea/ Ocean Woman) and her basket or sack filled with the Southern Paiute people (Powell 1875). The burden basket has been used by the Southern Paiute people for transporting goods since time immemorial. When John Wesley Powell recorded and translated the origin narrative in the late 19th century he misinterpreted the word for basket, recording it as sack instead; therefore the narrative refers to a sack or bag, rather than the distinctive Southern Paiute burden basket. The Southern Paiute representatives visiting the burden basket image along the Colorado River (Figure 7.30) immediately recognized the image as representative of Ocean Woman's basket from their origin narrative. The origin narrative explains how the Southern Paiute people came to live in this region and it is recounted from Powell's translation:

> Si-chom-pa Ka-gon came out of the sea with a sack filled with something, and securely fastened. Then she went back to the home of the *Shin-au-av* (Wolf)

> brothers. She delivered to them the sack and told them to carry it to the middle of the world and open it. There they would meet *Tov-wots* (Rabbit), who would tell them what to do with it. *Shin-au-av-pa-vits* (the elder wolf brother) gave the sack to *Shin-au-av-skaits* (the younger wolf brother) and told him to do as Si-chom-pa Ka-gon had directed, and repeated her directions to him that he must not open the sack lest some calamity should befall him. As he proceeded, his curiosity overcame him, and he opened the sack, and out sprang hosts of people who passed out on the plain, shouting and running toward the mountain. Then Tov-wots suddenly appeared, being very angry. "Why have you done this? I wanted these people to live in that good land to the east, and here, foolish boy, you have let them out in a desert!" These are the Paiutes, the true Utes, the others have scattered over the world and live in many places (Powell 1875: 669).

The visiting tribal representatives stated that the burden basket depicted on the panel is distinctly Paiute (Figure 7.31). Visiting Courthouse Wash, the Moab Panel, and the burden basket image located a few miles downstream from Arches NP reaffirmed the ancient and lasting presence of the Southern Paiute people throughout the Moab region.



Figure 7.31 View of Arches NP from Ocean Woman's Basket Image along US-191

American Indian groups have used the natural resources of the Moab Valley in various ways for more than ten thousand years, as documented by the presence of Folsom points in and around the area (Hunt and Tanner 1960). The prominent source of water is the Colorado River,

which creates floodplains and wetlands as it meanders through the area. Smaller rivers, such as Courthouse Wash, Pack Creek, and Mill Creek, contribute to the Moab Valley ecology (Figure 7.32). These water sources all produce special ecosystems that support both plants and animals used by American Indian people. Likewise, these wet areas served agricultural purposes through time.

The corn-complex, a recognized pattern of growing corn, beans, and squash, was incorporated into traditional American Indian agricultural practices of growing chenopodium, sunflowers, and amaranth. Perhaps the earliest recognized presence of the corn-complex has now been dated in southern Utah at Jackson Flats, along Kanab Creek, at 1,200 BC (Roberts and Ahlstrom 2014). Though the Jackson Flats are south of the Moab Valley, these two agricultural communities are potentially connected, as are so many communities of the Colorado Plateau.



Figure 7.32 Irrigable Farm Land in Moab Valley near Courthouse Wash

Another plant of importance at the Courthouse Wash EOA study area is purple sage. Tea made from purple sage was given to children with sore throats, and dried leaves were smoked for medicinal purposes (Stoffle et al. 1989). The purple sage plant was also used for construction purposes by Southern Paiute people. Rhode (2002) notes the Chemehuevi Southern Paiute used the purple sage plant as thatching material in the construction of brush houses. Purple sage is a culturally important plant that served both medicinal and utilitarian purposes.

Various Euro-American trapping, exploration, and survey groups passed through or near the Moab Valley in the early 1800s, but early Mormon settlers provide the best description of American Indian agriculture. When Mormon settlers arrived in the Moab Valley in 1855, they found Ute peoples farming along the Colorado River. The Elk Mountain Mormon Mission established a small community, but due to local and regional conflict, the Mormons left the Moab Valley after a short period of time. It was not until the late 1870s and 1880s that a few Mormon families returned and established permanent homes in the area (Firmage 1996; Pioneer 2014). These accounts of ancestral Numic people utilizing resources and farming in the area, along with the natural and archaeological features mentioned throughout this chapter, demonstrate long term occupation by Southern Paiutes in the region. Southern Paiute songs, stories, and oral history illustrate their strong cultural ties with the land, water, plants, animals, and geologic features found in Arches NP.

7.6 Wolfe Ranch and Ute Panel EOA Study Area

Rock peckings and flowing water are key features in the Wolfe Ranch and Ute Panel EOA study area (Figure 7.33). A single pecked image on the west side of the Ute panel demonstrates stylistic differences from the cluster of anthropomorphic and zoomorphic peckings on the east side. Southern Paiute representatives interpreted the pecked images, and provided an interpretation as to who may have placed them there. The Southern Paiute representatives added new interpretations and complexity to this EOA study area.

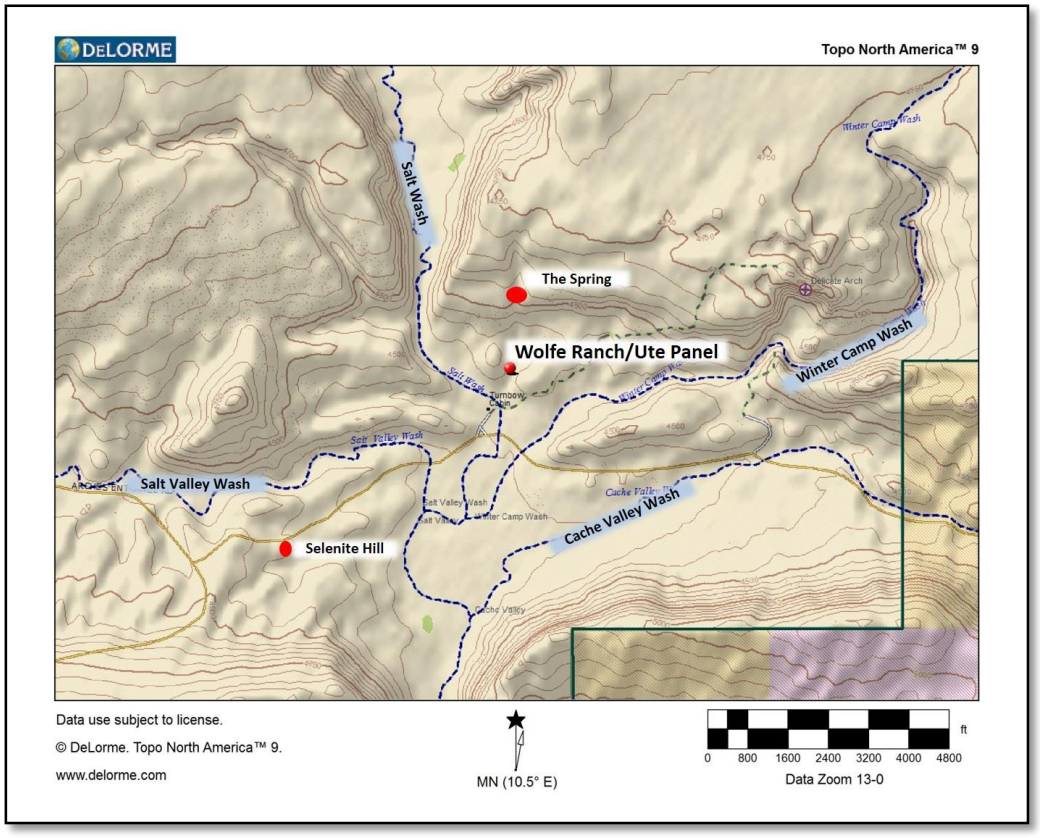


Figure 7.33 Wolfe Ranch and Ute Panel EOA Study Area

The Wolfe Ranch and Ute Panel EOA study area is located along the trail from Wolfe Ranch to Delicate Arch. The elevation of the area ranges from 4,295-5,000 feet, with lower elevation points near the Salt Wash within the basin. The EOA study area is located 2.6 miles northeast from Panorama Point and 6.4 miles north from the Windows Section. It is just north of four of the major hydrological systems in the park—Salt Valley Wash, Salt Wash, Winter Camp Wash, and Cache Valley Wash. Illustrated in Figure 7.33 are the convergence points of the four washes that come together, joining the Salt Wash south of this EOA study area, which then flows into the Colorado River.

The Wolfe Ranch and Ute Panel EOA study area contains several key features that contribute to the overall interpretation of Arches NP. Natural and cultural resources observed at this location illustrate strong connections between the Southern Paiute people, past and present.

7.6.1 Natural Setting

The geology and ecology of the Wolfe Ranch and Ute Panel EOA study area represents a diverse number of resources and culturally important places. Abutting landscape features that were discussed include hydrological systems, mineral and plant resources, and the view of the Windows Section. There is a continuous flow of water from the Salt Wash that influences the biodiversity and biocomplexity of the EOA study area. A freshwater spring is located nearby, and may have provided a source of drinking water for the inhabitants of the area.

Geology

The geology of the Wolfe Ranch and Ute Panel EOA study area represents diversity in rock, clay, and soil types, and includes the hydrology of four streams that flow nearby. Selenite deposits are found covering a hill south of Delicate Arch Road, less than a mile west of the Wolfe Ranch and Ute Panel EOA study area. The topographic map provides an overview of the geological features and hydrological systems near the Wolfe Ranch and Ute Panel EOA study area (Figure 7.34). This image illustrates the protection from weather events that the large bluffs and canyons offer for communities living within this resource rich basin.

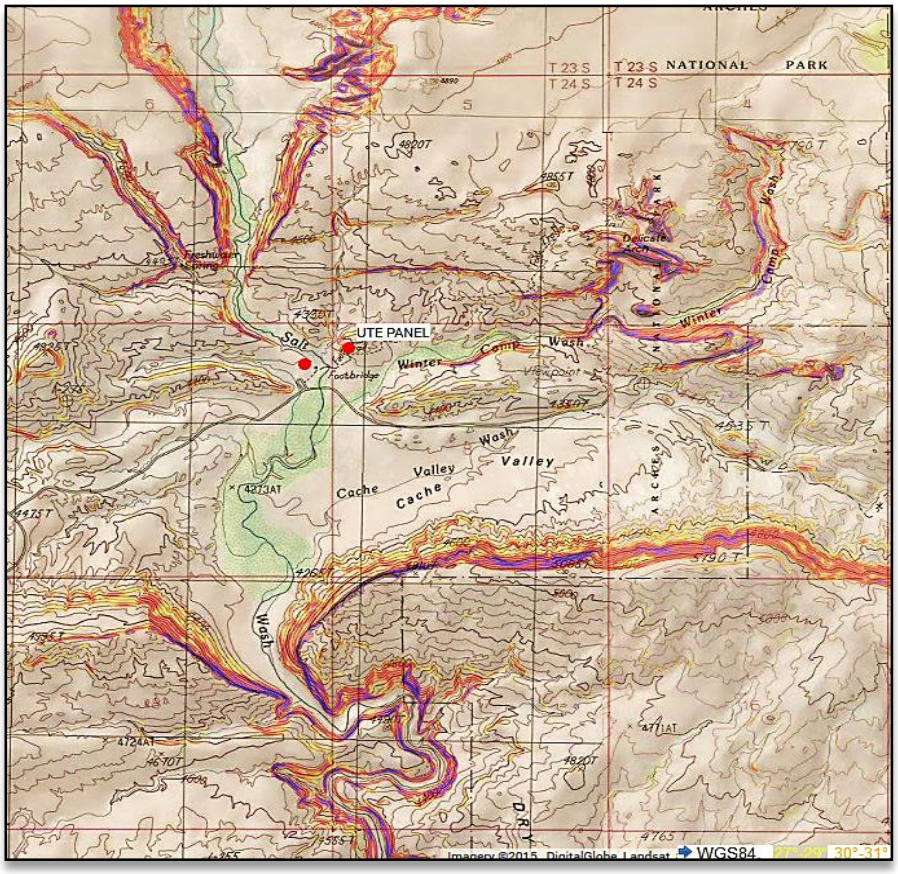


Figure 7.34 Topographic Map of Wolfe Ranch and Ute Panel EOA Study Area

Large Entrada Sandstone hoodoos and arches are visible to the south of the Ute Panel. Large rock outcroppings and boulders of limestone frame the northern and western portions of

the area. Salt Wash flows through the center of the Wolfe Ranch and Ute Panel EOA study area, joining Winter Camp Wash and Salt Valley Wash less than a mile downstream.

The Wolfe Ranch and Ute Panel EOA study area is rich in mineral resources. On a nearby hill, there are large deposits of Mancos Shale. This geologic formation was deposited in marine environments during the Cretaceous period when most of the lands of Arches NP were under a large inland sea (Stokes 1986).

From the time that Wolfe settled the area in the 1800s until approximately three decades ago, sheep and cattle grazed the land (Wolfe Ranch Trail Guide 2007). As a result, natural resources were altered, however, the extent to which plants, water, and soil were adversely affected is unclear. Salt Wash enables a diverse number of plant resources to grow within this location. Cottonwoods and willows require significantly more water than the Piñon-Juniper woodlands in high desert areas, and therefore are only found growing along stream and river corridors where their roots can reach the water table easily (Figure 7.35).



Figure 7.35 Plants Observed Growing Near Salt Wash and Ute Panel

Plant resources associated with riparian ecosystems include phragmites species (*Phragmites* ssp.), willows, and cottonwood. Other plants observed growing within the EOA study area include Indian ricegrass, greasewood (*Glossopetalon spinescens*), prince's plume, rabbitbrush, fourwing saltbush , scrub oak (*Quercus* ssp.), Indian tea, sage, yucca, blackbrush, fuzzy opuntia (*Opuntia phaeacantha*), columbine (*Aquilegia* ssp.), locoweed (*Astragalus* ssp.), penstemon and various grasses (Figure 7.36).



Figure 7.36 Southern Paiute Representative Making Notes about Plants Growing near the Ute Panel

Water is an important feature at this site, as demonstrated by the variety of unique plant resources and the extensive use of the site by American Indian people. The access to a continuously flowing hydrological system and nearby freshwater spring may be key reasons that the first humans came to this specific area, and continued to stay and utilize the land and resources.

7.6.2 Special Features

Wolfe Ranch and the Ute Panel were selected as an EOA study area because this location has cultural and natural features that differ from other areas in and around Arches NP. The special features of this area include (1) the Ute Panel, (2) convergence of four waterways, (3) a freshwater spring and (4) wetland vegetation.

The Ute Panel, comprised of two rock pecking panels, is situated in a wet and enclosed valley on the east side of the park along Salt Wash (Figure 7.37). On the west panel, Southern Paiute representatives noted a single pecking. Tribal representatives recalled seeing this pecking in other areas throughout Southern Paiute traditional territory (Figure 7.38 (L)). On the east panel, Southern Paiute representatives observed a series of zoomorphic and anthropomorphic features (Figure 7.38 (R)).



Figure 7.37 Southern Paiute Representatives Examining Wolfe Ranch and the Surrounding Landscape



Figure 7.38 West (L) and East (R) Sides of the Ute Panel Petroglyphs near Wolfe Ranch

Southern Paiute representatives interpreted this EOA study area as being a place with elements that contributed to both ceremonial and daily living activities. Wolfe Ranch is located along the Salt Wash, a hydrological system that runs south from the Lost Spring Canyon to the Colorado River. This waterway also converges with three other systems before it runs into the Colorado River: the Salt Valley Wash, Winter Camp Wash, and Cache Valley Wash (Figure 7.39). The convergence of multiple hydrological systems creates a unique ecosystem in the high desert. These waterways also support animal life.



Figure 7.39 Lush Wetland Vegetation in Salt Wash Facing South

In addition to the Salt Wash, a nearby fresh water spring also contributes water and vegetation to the Wolfe Ranch and Ute Panel EOA study area. Less than a half mile north of the Ute Panel, a spring is located on top of a slick rock feature. Waters from the spring drop off of an alcove and continue to head south towards the Ute Panel (Figure 7.40). One Southern Paiute representative requested to walk up the stream to contribute to their interpretation of the area.



Figure 7.40 Water Flowing from the Spring North of Wolfe Ranch

The hydrological systems foster unique and lush desert plant life. Southern Paiute representatives identified many culturally significant plant species, including Indian tea and sage. A particularly abundant stand of medicinal plants were observed growing around the spring water north of the Ute Panel. These medicinal plants have been used by Southern Paiute people for thousands of years and have aided in the curing of numerous ailments, including measles.

The Wolfe Ranch and Ute Panel EOA study area represents culturally significant resources and a place for winter camps. Use of this area occurred long before the Wolfe Ranch was established as a result of the plentiful resources needed for survival in a harsh environment.

7.6.3 Native American Comments

The Southern Paiute representatives who visited the Wolfe Ranch and Ute Panel EOA study area with UofA researchers in 2015 had many comments about the significance of the area and the meaning of several prominent geological features. The information presented below reflects the thoughts and opinions of the Southern Paiute representatives who commented on this EOA study area.

Southern Paiute representatives described the geography of this area and/or elements that stood out.

- *What really caught my eye was the little house and the garden where the water comes in, where they had planted their garden. I am thinking that they had a garden there. That is what really caught my attention was the little house and the cellar. And it is way out here in nowhere. That is how people lived a long time ago. Before that guy built that place, there was Indian people everywhere. Anywhere and everywhere. This was their country, this was their land. They were all over. Indian people would have used this place. I think the Indian people came here to pick their food that they gathered. A lot of the Indian people knew exactly what to pick, what kind to pick, and where to pick it. Maybe in different areas they had wild onions, wild carrots. They had to go into these different areas where those things particularly grew. I think that they came here to do this, and that is probably how they ran into this white man that lived here. They hunted through here. I think way before these people came here, I think they lived here in this area, this same area, because of the water. Maybe they had lots of water here at one time.*

- *I noticed it is hilly and there are a lot of rocks. And a lot of gullies that come through here. It meets with that red sandstone, and this is different. It is like sandstone but white. That is what I see. It is a hilly area. It has sand over in that area, and sand over in this area. There is an abundance of plants in the washes here. Like those sage brushes. An abundance of different types of plants.*

- *That* [left pecking], *that is a doctor image, the medicine man. We call them medicine men. They would come here to fast, and maybe fast for three days and three nights and just pray and then they would see the answer in the morning.*

That is a symbol of that. There is one too that is like that but a bit different, and it is about salt songs. Down in Las Vegas towards the Nellis Airforce Base on the east side, that is where they receive their songs. They hear it in the wind, they pray, and they hear the songs, they start seeing it. The [left pecking] *stands out to me, the other is just telling you I guess where they had mountain sheep and that is for food and stuff like that to go on living. They would hunt for food.*

- *They would call these foot stools, or sand rock. You use it when you go to people's homes, when they are decorating their homes and they want pretty rocks, flat ones so you do not dirty your shoes. You get a lot of these kinds over in the Page* [Arizona] *area. You take a big heavy stick and hit it, and it will break into blocks like that. I have even seen a house made out of it.*

- *I think it is a nice little valley, a nice little green valley. It has water, I think that is nice. It has some rock writing, you know, not much, but rock writing. And the blue turquoise colored rocks.*

- *What stood out to me was all the water here. All the plants. The alcoves up there that have the water. Water was important in an area like this, where it is hot and dry.*

- *The turquoise color of the Earth reminds me of a lizard of the same color.*

Southern Paiute representatives commented on the ways that Indian people would have used this area.

- *I just do not understand why that one* [left panel] *is by itself, but he might be there trying to tell a story. It could be, sometimes a long time ago, they had a lot of witch doctors among the Paiute people. They had to have a place where they would go to get their strength; to get their powers. He would have to fast for three or four days. That is what they did. They always said that* [rock peckings] *were the medicine for people that had powers. That was their medicine. Usually, they do not have them out in the open like that. They have them in a cave. Maybe right inside of the cave. They would have a lot of them in there, and they would be red, but they would look exactly like that, maybe a little bit bigger. That is what they used to say about them, what my grandmothers used to say. I think this was a place for medicine men. It is telling a story. That is what I think.*

- *This is a destination place. There is something here, that is what the petroglyph on* [the left] *indicated to me. He is connected to this place; I am not sure how but I had a feeling that the, did you see the thing on the top of his head? It resembled, to me, in my mind, greasewood. And greasewood is a medicine plant. I think that little symbol might have been made before. I think it is a lot older than the* [right] *panel.*

- *They used this area for farming and hunting. And I noticed some cedar trees, and I think there is pine trees. They used that for various stuff, performing and hunting. There were probably rabbits, cotton tails, squirrels, chipmunks, and all this stuff that lived off the abundance of plants.*

- *They could have known about this place too, through their ancestors, and they probably came here for that very purpose. Collecting that rock for making arrowheads, spearheads maybe, small arrowheads for shooting smaller game. They may have come here also to collect medicine. And of course, for good water; there is good drinking water here.*

- [It is a good habitat for] *deer and all kinds of animals. Those over there, those round, what do you call those arches? Those are a significant part because they are almost like a guide. If you are coming from a long ways away or something like that and they explain to you, if you see these holes that are in a rock, the arches, it is like a guide, like a map. So it is kind of a distance and if you look at this and that one it is from here to there, how do you get there? So there is a trail that went through there. A trail that goes this way. It is like a guide, did they go down, up, or across? Because some of these you go around, you cannot even go down them, so they had to find a better way to get from point a to point b, and for hunting also. And for shelter, get under these rocks and building fires with the wood.*

- *Someone lived here but I do not know who. The* [rock panel] *tells a story. You know like the animals bunched together, it tells that they had a bunch of mountain sheep here. And that tells you to beware of snakes and always have a stick with you when you are walking around. Not to kill it or anything but just to be safe.*

- *I am sure, yes. It is got water and it is got plants around here that they used. And probably deer, rabbits.*

- *You know, they could have, because it is a special place. They could have used it for that. Maybe that is why they wrote on the rocks, and I heard one lady say she thought that was a medicine man, the one I was trying to describe as a medicine man or some high important chief. You know, they saw how he was dressed, or maybe they even dreamed it. They put down things that they, what is that, visions. They could have envisioned that in a dream. And so they put it down. And it could be a medicine man. And like I was saying too, it could be a decorated cow skull. But back then I do not know if they did that, but I see them now where they do that, or even elk, deer, or no, buffalo. A buffalo skull. But really, I would go more for the chief or medicine man* (Figure 7.41).



Figure 7.41 Southern Paiute Representative and UofA Researcher Discuss the EOA Study Area

- *Indian people would have lived here because it is a good area to grow food with the springs here. You will always find where settlers have built homestead. It is always over where Indian people lived.*

- *This was a place where people lived, hunted, and camped.*

Southern Paiute representatives explained how this place is connected to others.

- *Oh yeah. A lot of times, like the Ute people, this is more like the Ute area. But then you had your Paiutes over here and they did not really come in. This was their territory. There were different tribes here.* [The Utes] *were here and they would not let the Paiutes in. This was their territory and you had to have permission to come in. Maybe they married into their tribes and that is why they were welcome. There were a lot of other tribes here, not only the Utes.*

- *The songs* [from the Cedar City area] *come clear down this way. Down south. They go clear down to Arizona. They sing their songs and go clear down into Yuma. They had songs for Bear Dance, maybe they had Rabbit Dance or Deer Dance and Buffalo Dance. They had all kinds of dancing, Sheep Dance, the Mountain Sheep Dance. They had all kinds of dances.*

- *In our* [worldview], *we say everything is connected. It might be connected by people. I say that because our people had stewardship of springs. There were certain families that camp there, and people knew that that family uses that spring, but we can camp there and use that spring. All people were connected to*

the water, all water is shared, but certain families would take care of that spring. Keeping it clean, making sure it was treated right, make sure people are not trashing it. That is a pure water source, you do not want your horses up there pooping in it and stepping in it, so they would have taken care of it, cleaned it out, gave it offerings, prayed over there, so that water would continue to grow, continue to give them good drinking water. So I think it might be connected through people, people who took care of it.

- *All the mountains that look strange like this, they had names. Our people, the Paiute, gave names to rocks. They would name it so when you are going passed it you could be telling a story, then they would say oh we went passed that, maybe it was elephant rock. Up that way we went they would say, so they would know which way they were talking about and what way they went. This place has a story and the medicine man that lived here probably had a story. Everyone has a story of what kind of life they had and what they ate* (Figure 7.42).



Figure 7.42 Southern Paiute Representatives with UofA Researcher near Salt Wash and Wolfe Ranch Cabin

- *It has to be. Our people traveled on foot, or horses, or whatever they had. It could be that they came through. It has to be because it has a lot of stories. My people say not to pick up anything, because it might belong to the person that left it there.*

- *I would not be surprised, I would not be surprised if it is because they were out over here, all through here, and they, maybe on their hunting trips, they take a group and go hunting and they send some out in different directions, and they would either come back with game, sometimes some would not find any until, and who knows, maybe they even traded with this family over here. Maybe they knew*

them, came around and they were friendly. But I think so, I think they roamed all over and did their hunting. And investigating, they are curious, they want to know what is going on, where things lead them, where they can end up or who they can find. And if they were guides, that way they knew how to get in and out of different places, or how to get to where somebody wanted to go, you know, like maybe an Angelo, or maybe even another tribe if they wanted to get through going maybe south or north, west. So they kind of did that. I think my grandfather did that. He went to different places with different people and he checked out the area, and then if he needed to be the guide he would say I know how to get there, you know, I could get you there, and after that you would have to find someone else. That is probably what they did too. You know, in this area, they would know this territory around here. And they would know how to get the people in and out of here, to wherever they are going. Then they had turn back and do more hunting or more investigating of different areas. Or if they run into water, they would think okay, I can come here, camp here, or when I go hunting I know I can camp there, there is water. Or take the family and say there is water there. Or even send a group over this way, say there is water there, you can camp there.

- *This place is connected to Moab Valley and surrounding areas. It is connected to their people and families, tribes, the land, and who all lived in this area. It is our tradition, culture, and ceremony. It is our Creation* (Figure 7.43).



Figure 7.43 Southern Paiute Representatives at Wolfe Ranch

- *This place is connected to other places through stories, visions, and songs. The rocks, plants, and water here was plentiful. That is why the Pioneers built a house here. Most are evasive and it shows signs of heavy ranching.*

Southern Paiute representatives noted if Indian people would have used water from the area.

- *Yep. If that water was not there* [permanently] *this place still would have had water. You can tell by how green it is. The Indian people knew what kind of water it was, if it was a good water or if it was a bad water. I think the water is just there, and the Indian people, no matter what tribe, knew how the water was. Maybe you had a drought, there is some places where they might know where there is water. Maybe a cave that had drops of water coming down. Paiute people knew where their water was.*

- *Water is connected to the panels. But, you know, the spring it goes, and sometimes it depletes, and sometimes it replenishes. It depends on how much rain is coming in, snowfall. And they use that for some purposes, the water, because the water is the giver of life and the taker of life. That is what grows all of these plants, water sage and the sage, cultural plants they use. The water, it feeds the mountain sheep. Mountain sheep and every animal, the birds, stuff like that in this area.*

- *It is down here in these gullies, it is what I have seen, and up high is where the water comes from over in this area where it comes down through there. And it floods, small floods, it looks like a flood plain too. It is like a floodplain because a lot of flood that flows down through there. And when it rains and snows, it is probably like a watershed, right? It is like a watershed, and it goes down to, what was that canyon we went to yesterday? Yeah, this goes to the Colorado River. It replenishes the Colorado River with runoffs and floods when it rains.*

- *Now, the water is not very good because it is out in the open. You have to boil it and strain it through some material to get all the bad stuff out of it. After that you can cool it down and drink it, but you do not drink it right from there because you will get sick.*

- *If they camped. And you know, if they stayed. They must have stayed here because they put that rock art up here. They must have stayed around here. Maybe they used it seasonally for when they came to get out of moving around. Find a nice place, kind of private. Then others would come, come by and stay or set up camp. Have a get-together. And then they had to go back or just move on, find different areas. Because that is how we were, you know. It was just to stay there for seasonal, you know, moving around here and there. It would be where they could just build a shelter, depending on if they have a family, a nice big size like right here. And the mother, if they have kids, they could be home and the husband would go hunting or go investigating around, looking around. You know, I think hunting mostly, because if they are out in the middle of nowhere they have to eat. So, you would have to go kill something for them to eat. And water, water would be good for them. I think that would be a blessing for them. And if they stayed for the summer they could put a little garden in, then they had have something for that summer or maybe they could do enough for the winter and save some seeds*

for next year, maybe come back the following year. So they could replant them again, or maybe either the same spot or a different spot, or they could maybe tell another family to go there. There is water there. Then they could go a different direction. Or people that are traveling, maybe some of the Paiutes are traveling just wandering around trying to find a place, or else maybe they want to come visit them. Maybe some families here and there, they come in and have a nice little get-together, have a party, a feast, sing, dance, tell stories, you know catch up on things they have missed out on. Maybe they could be brothers, uncles, you know, that kind, sisters, granddaughters. That kind of stuff. It would be a nice place to stay for a while.

- *They used the springs for food, drink, medicine and ceremonies.*

- *The three water tributaries were used for drinking, medicine, and ceremony.*

Southern Paiute representatives explained how Indian people would have used the plants at the area.

- *This is what they call cedar. It is what the old Indians used to make their shoes out of; this bark. Mainly for winter they used this kind of plant to make their shoes. During the summer they wore their moccasins, but they needed something else* [in the winter] *so they do not get wet underneath, so they used this kind and they made shoes out of it. They looked like sandals, but they were for winter.*

- *There is that Indian tea over there, and I know they would have picked that. They probably had more plants to use also.*

- *I used to go to my grandmother's to pick the roots, because they dig the roots for illness. Sometimes there was food, like the rice, the wild rice they would pick that for food. They always knew where certain plants grew. Wild onions grow up on that type for area, but it has to be flat and green. My mother-in-law and I used to go pick wild onions. She would pick the carrots too, but they came from different areas. They did not just grow anywhere. They had to be in certain areas, so they had to go a long ways just to go get that onion. You have to be really careful because there are poisonous onions too. You have to know what kind to pick. You had to be really careful. It looks just exactly like what she was picking, but she knew exactly what kind to pick. She would pick a whole bunch, and when we got home she would fry it in bacon.*

- *One time my cousin got the measles all over her body and her face and she was crying, and my grandmother told me to go up there and get some sage brush. She said there is some up there on that hill all along the side there, and she said climb up there. She said you better take a knife, so I went up there with a knife. I did not know what kind of brush it was. I did not know what sage was, so what I did is I went up and cut everyone. When I first went up there, I got the wrong kind, and she scolded me. Then she told me what it looked like, but I still did not know what*

it looked like, so I went up there and cut every little brush that I could see, and among it was that one right there. So after all that I took those down there and said which one is it? And she said this one, she said right there, sage brush. She said bring a lot of it, so I had to go back up there, and she said make sure they got big leaves on them. I went up and I got what I could, and when I got home she boiled it in a big bucket. She put water in that and she boiled it. Then she chased us all out, all except for my cousin. She kept her in there and told her to take her clothes off and she shut all the windows. It had to be dark in there. She stuck her in that sage after she put her in a tub, and she was praying and talking to it. She said okay, now you are all done. My grandmother brought her out with a towel wrapped around her. She came out and the next day all her little face and body just kind of had little spots. It took it about a couple of days to really cure it, but yeah it worked. That is what she used. I picked the right one, but I did not know what sage brush was. If it was not for my grandmother telling me what kind to get I did not know. I used to go pick Indian tea for her. I use to go down about a mile from where she lived and it would grow all over a hill like this. She used to say go pick the one that is on the side of the hill, do not get the kind that is on the flat. I used to ask why and she said the animals urinated on it on the flat. She would dry it and when it gets dry she would put it in the bread sacks. When she needed some tea, then she would get it, cut it up, and boil it. It was the best tea I have ever tasted, let me tell you. It is not bitter, it is not strong, and it is just good.

- [Cedar is] *special for Native Americans because they use that to burn. Cedar wood, I see a lot of cedar wood in this area, and back then there were probably more cedar trees than we know about. And pine trees. Yeah, they are significant because you can live off of the seeds and bark. Where I come from, what I believe in is, cedar is a cultural plant.* [It is] *ceremonial. Not the tree itself but the leaves, the green stuff that grows on it, it is almost like a leaf, you use that for ceremonial purposes.*

- *They use that medicinally, the pods on the cedar tree, the little round berries. I know sometimes you can put those in water, boil it and drink it. I see sage. And I see some water sage in there too, that is a cultural plant. And this big sage too. We use that for cultural purposes, ceremonial purposes. That is another one where you can use it for ceremonial purposes, you can boil it, but you have to pray to it and talk to it. You cannot use it too much, you just use enough, like a couple of swallows. They mostly use that water sage; that is a good one. The river sage, that is a good one too. I think I saw some willow over there too, right near where the water is coming down through there. I cannot remember. There are some plants there that I do not remember their names, but they give off berries. I cannot remember what they are called.*

- *Well this, this has more plants, but a lot of them are the plants that are already here. Whereas over there you had a variety of plants, but this is all in one little, like in this wash, there is more plants in it. It is greener. There is just an abundance. It is just like these sage brushes, some of them are just all together.*

- *There are still plants that grow here, so there is food. You have to be awfully careful how you do it, like how you wash it and stuff when you take it, because there are a lot of chemicals and stuff that* [White people] *are doing. It messes it up.*

- *There are many different places in the area that were used for food and medicine.*

- *They used the tea, willow, ricegrass, sage, and squawbush.*

Southern Paiute representatives explained how Indian people would have used the animals at the area.

- *All animals were important to them. I would say all animals were important to them. The mountain sheep here were important, and they must have had cotton tails. I know they did not have antelope, because antelope do not come around mountains. Antelope live in flat areas. They might have had some deer that wandered over here, but they need to be around a lot of cedar trees. Deer can roam anywhere though.*

- *Yes, there are mountain sheep* [pecked on the panel]. *And there is, you can see they came in this area too. Because the mountain sheep goes for the rocks, higher. They came in this area and back here. They had an abundance of mountain sheep at that time.*

- *Here, it is flat and it is dry, so mostly big horn sheep. They are the ones with the great big horns.*

- *They would have used animals at this place. So far I have only seen lizards and small birds. Animals would have been used for food, clothing, and tools.*

- *They used mountain sheep, deer, rabbits, birds, and lizards.*

Southern Paiute representatives explained how Indian people would have used this area and/or artifacts.

- *The purpose* [of the panel] *is to tell the story of where a lot of the mountain sheep were. In this area, where they can harvest them, and when to harvest them.*

- *This is more horse than sheep. Horse and rider. This is dog like, it could be wolves, it could be a sheep, you know with the horns. The second horns are like some decoration they put on top of it. But then, I could be wrong, it could even be their medicine man or their chief, or somebody that came through that dressed like that, that they saw.*

- *There is a figure of a being there. What is that thing coming out of the top of his head… but he is facing the river. To me, maybe he would be signifying like a*

water spirit either protecting or watching over that area or it could be somebody's claim on the area. I know back home that there were different family groups that cared for and watched over certain springs, different springs there in the Kaibab area. So maybe that is what it could be, someone's mark. Something that identifies that family group is there to watch over this area,

- *They would have used the petroglyphs, lithics, and the rock shelter. The lithics would have been used for living activities, hunting, gathering, ceremony, and power acquisition.*

- *The vegetation was probably a lot lusher than it is today. There is a lot of evidence of* [previous Indian use]. *They were here because of the water here, and that rock, whatever that rock was that they were using to make arrowheads and scrappers.*

Southern Paiute representatives explained how Indian people would have visited or used the geological resources at the area.

- *They make things out of it. Like putting down turquoise, or another regular stone, and they put that* [Mancos Shale] *in the middle of it. It thickens and it sticks to the middle so you can make yourself a ring or whatever.*

- *I do not know if* [Mancos Shale] *could be mixed with animal fat or coloring, put on your face. That could be a good thing to do, to use it, because when they did face painting when they were dancing, war parties, or even hunting they would paint their face. And they use the fat of an animal, usually its bear or deer, they have a lot of fat, then they use that, mix the powder with that, then you can just smear it on your face, and then just wipe it off or wash it off. And then with ompi, that is what they did with that too. They used the fat of the animal, and mixed it with that so it would stay on your face, or wherever you put it.*

- *They used the different colored earth, the mountains and the arches. The land was used for seeking knowledge and power in ceremony. The land was used to communicate with other Indians and with spiritual beings. The land was also used to teach other Indian people and children.*

- *Different shapes. They probably represent spirit beings or places you should not go, you should not venture into. Some of them are high enough, tall enough so maybe they are medicine spots. Maybe you could climb to them or hike to them and sit up there and do your prayers at some of the highest ones. Make your offerings. Get your Puha.*

- *They used the Mancos Shale. And there is also a spirit being here. Silence and respect need to be observed, this is a place of our people.*

7.6.3 Ethnographic Comments

Wolfe Ranch and Ute Panel EOA study area contains numerous important cultural elements that contribute to the place's overall meaning and importance to Southern Paiute people. One of the key elements at this study area is the year round water source provided by Salt Wash. Additionally, there are the two rock pecking panels that contribute to the importance of the site.

Water is the most important element for all life forms, especially in the arid environments of the Great Basin and Colorado Plateau. Southern Paiute people associate water with power and ceremony because it sustains life (Figure 7.44). Water is viewed as a sacred element and its power is found in clouds, rain, snow, hot and cold springs, seeps, lakes, streams, and rivers (Miller 1983). It is understood that Puha is strongly attracted to water and is used as a purifying agent (Whiting 1950).



Figure 7.44 Southern Paiute Representatives Observe the Hydrology near Wolfe Ranch and Ute Panel EOA Study Area

While Puha, and the paths it follows, indicate a spiritual connection to the land, it is included in physical connections because it is intimately tied to the land and has a special connection to water. Water is a life giving force that both falls from the heavens and springs from the land. It is imbued with power from its origin places, which it carries as it moves through the courses that carry it. Puha moves in much the same way, coming from the earth and spreading along natural courses. In a way, water is a metaphor for Puha, and the element is often inseparable from the power. Puha is not an abstract concept for Southern Paiute people, it is a physical reality.

Places that the Southern Paiute people went to gather plants or hunt are revered because of the relationship that Indian people must form with these resources in order to effectively use them. Stoffle and Dobyns (1983) wrote about the relationship that Southern Paiute people

maintained with their plants, and the kinds they cultivated for food. These places are deemed important because of the resources available from them and the power therein. Southern Paiutes care deeply for plants, and will often look at the health of the plants to determine the condition of an area. The quotes we received concerning these kinds of resources reflect the feelings that people have for plants and animals, as well as what they were used for. Many of these plants are not commonly viewed as cultivars by non-Indian people and are therefore not seen as important in land management decisions. These relationships carry over to animals that were hunted as well. Southern Paiute people maintain relationships with animals that they use. If these relationships are not honored, the animals can go away. Sometimes the relationship no longer is extractive, but the animal must still be treated with respect.

When discussing rock peckings in Southern Paiute culture, it is important to understand that the meaning of rock art is attributed to the composition of the stone itself and where the rock pecking is placed, not what is pecked or painted on the stones. These understandings of place and landscape connections shape how Southern Paiutes relate to and use the world around them and thus direct the responsibilities they have for the protection and management of their homelands. These connections were established at Creation when the proper balance between use and preservation was established (Miller 1983; Stoffle, Zedeño, and Halmo 2001).

Rock writing or petroglyph sites are important Puha places (Figure 7.45). These are places where a person on pilgrimage would visit to acquire power or a spirit helper to be used in ceremony. Numic speaking people hold strong beliefs that the rocks are alive, have power, and spiritual value. People interact with these places to aid in ceremony and power acquisition to address issues on local, regional, and global scales. Great Basin archaeologist David Whitley (2000) noted that Native people in California and the Great Basin view rock art as gateways to the spirit world. Religious specialists can enter the spirit world through certain types of storied rocks as part of ceremonial activity.



Figure 7.45 UofA Researcher and Southern Paiute Representative Observe Landscape at Ute Panel

As noted in the ethnographic comments for Courthouse Wash, the preferred term for rock writing is tumpituxwinap, which when translated into English means "storied rocks." These images are not meant to be forms of casual communications or expressions of cultural aesthetics. Based on over forty years of collaboration and research with Numic-speaking peoples, researchers from the Bureau of Applied Research in Anthropology have documented consistent and reoccurring themes when discussing tumpituxwinap. They noted the following (Stoffle, Zedeño, and Halmo 2001: 122):

- The meaning of a petroglyph or panel is not meant for the public nor widely shared by a community or ethnic group; the exact meaning is revealed to humans individually.

- Storied rocks derive from supernatural authorship, whether they are made by the spirits or re-revealed. The rocks were once alive, were once people, but became rocks for human benefit. The writings on them related to this transformation and are part of the cosmos.

- The strong beliefs that the rocks are alive, have power, and spiritual value, and fit into the larger scheme of things, corroborate the ethnographic conclusion that the worldview perceived that all the world is alive, its components all interconnected and interdependent, and that power or knowledge is revealed to individuals through dreams and private visits to such locations.

- A storied rock is a permanent feature that modifies and becomes integrated with the natural surroundings. It is a landmark, a place that draws people and is remembered by people regardless of its original intent.

The key to understanding tumpituxwinap is to know that the place was powerful prior to the appearance of the peckings or paintings. Based on how Puha manifests itself across a landscape, powerful places attract powerful elements (Figure 7.46).

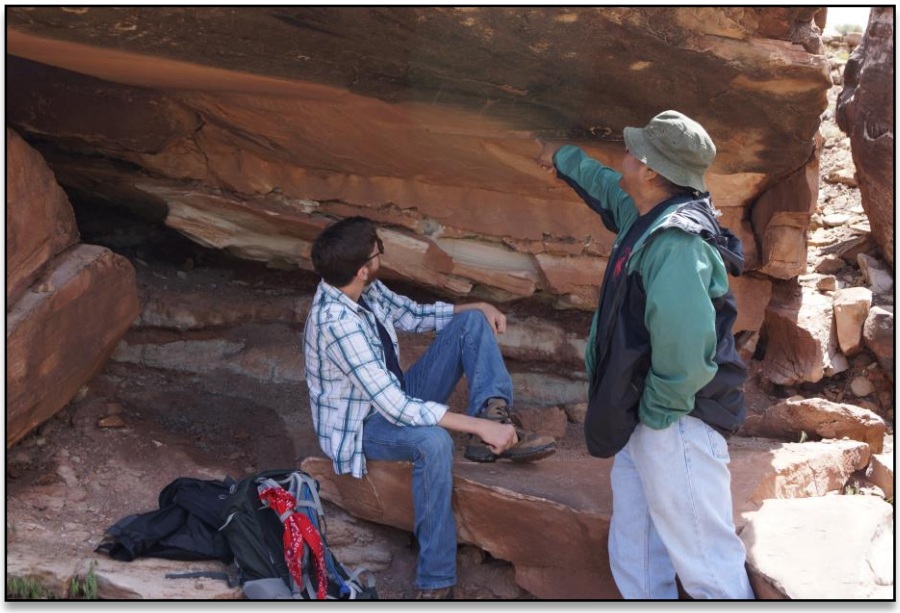


Figure 7.46 Southern Paiute Representative Reflects on Tumpituxwinap near Ute Panel

At places containing tumpituxwinap, other powerful elements like medicine plants, water, and various types of minerals in and around the storied rocks are found. This is because the elements that comprise the universe have individual personalities, dispositions, and characteristics; therefore, like humans, such elements are attracted to and negotiate relationships with each other. Powerful elements are attracted to each other and like to exist in places together. At the Wolfe Ranch and Ute Panel EOA study area powerful elements converge together including four major waterways, a fresh water spring, culturally important plants, landscape features, and tumpituxwinap.

7.7 Salt Valley Overlook EOA Study Area

Archaeological resources spread across the plateau are the key components that make the Salt Valley Overlook EOA study area distinct. Southern Paiute representatives noted the importance of the nearby salt dome formation, as well as other rock formations and natural resources. Even resources like the Colorado River, which are not visible from the overlook, added to the interpretation based on proximity. These cultural resources and viewscapes are not independent of each other; together they contribute to the meaning of the place.

Salt Valley Overlook (Figure 7.47) is located to the west of the Wolfe Ranch and Ute Panel EOA study area. It is found to the south of the Fiery Furnace rock formations. The EOA study area is situated at an elevation of approximately 4,700 feet.

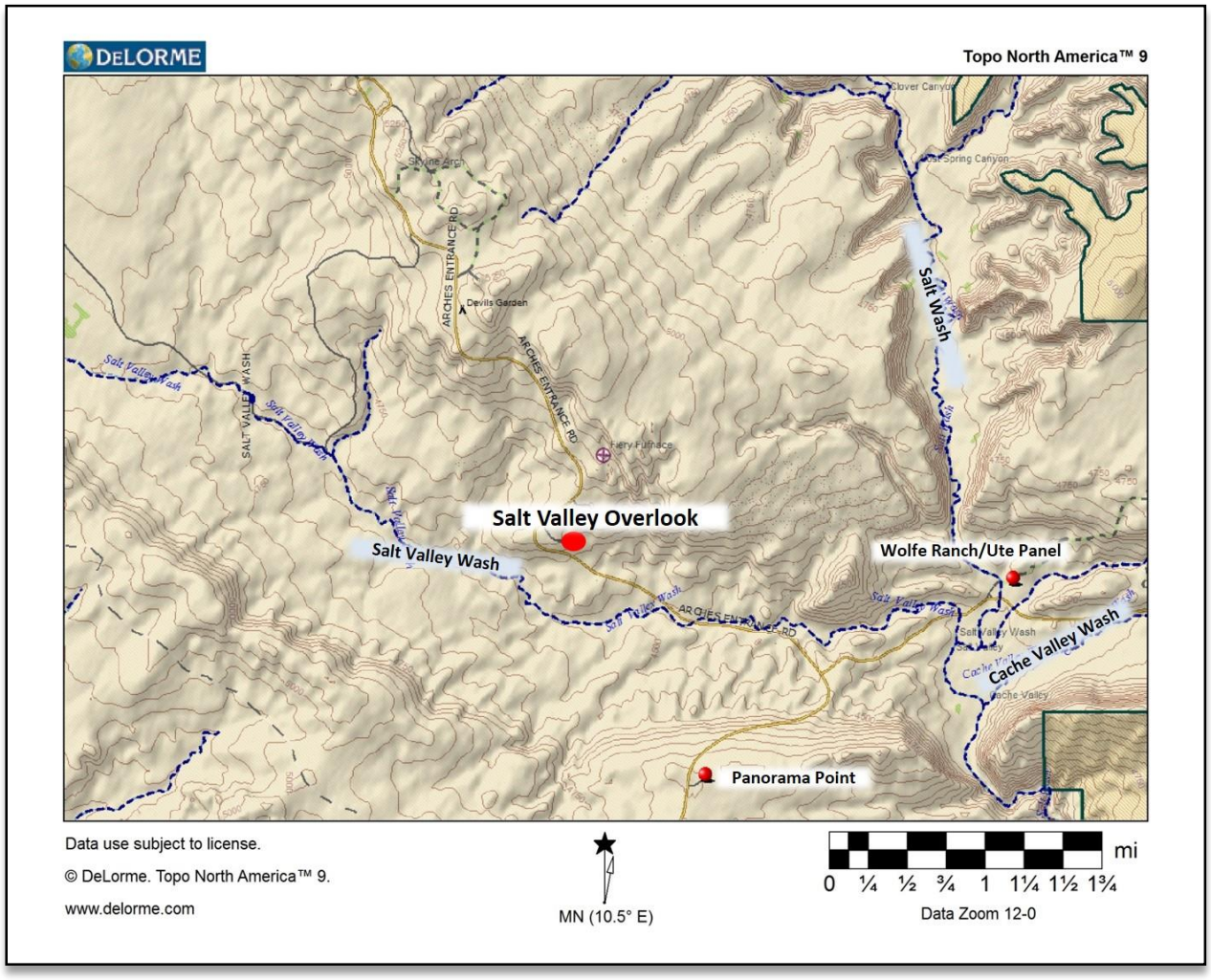


Figure 7.47 Topographic Map of Salt Valley Overlook

From this area, the Fiery Furnace and the Devils Garden are visible to the northwest. The La Sal Mountains and Garden of Eden are visible to the southeast, and Salt Valley can be seen when facing southwest. Due to the sensitivity of archaeological resources, the exact location of Salt Valley Overlook is not marked on the map.

7.7.1 Natural Setting

The following section provides a brief overview of the geology and ecology of Salt Valley Overlook. The landscape features, viewscapes, and ecology of Salt Valley Overlook contribute to its unique natural setting according to the Southern Paiute representatives.

Geology

Salt Valley Overlook (Figure 7.48) is located in the central portion of Arches NP. It is bordered by Entrada Sandstone outcrops on the eastern boundary and the western edge slopes into the Salt Valley. The valley floor is 328 feet below the EOA study area's western margin. Salt Valley Overlook is composed of saline and calcareous alkaline soils. It is a large sloping ridge with a series of small Tidwell chalcedony outcrops that overlooks Salt Valley and Salt Valley Wash. The EOA study area is dissected by a series of small run-off channels that flow south and into the wash below.



Figure 7.48 Salt Valley Overlook with a View of the La Sal Mountains

Salt Valley Wash is one of the major hydrological systems in the park. From its headwaters near the Klondike Bluffs section in the northwest corner of the park, the wash flows approximately nine miles before joining Salt Wash, Cache Valley Wash, and Winter Camp Wash. Once these four washes converge, they flow roughly another four miles before reaching the Colorado River.

Salt Valley contains salt tectonic features, which are common throughout this part of southeastern Utah. Salt Valley is similar to the nearby Moab Valley in that both valleys are collapsed salt anticlines, or salt domes, and are examples of salt deformation. The deposits of salt underneath the valley floor are primarily composed of the mineral halite, a form of salt. These

deposits deform plastically and have a low density compared to the surrounding sandstone, shale, and limestone (Foos 1999).

According to Baars and Doelling (1987), overall changes in sediment thickness and the presence of angular unconformities indicate that salt began to rise upwards at the end of the Paleozoic Era and throughout the Mesozoic Era. The upward movement of salt caused the deformation of the overlying sediments, creating a salt anticline. Basement faults were later reactivated during the Laramide orogeny and this resulted in the fracture of sedimentary rocks (Baars and Doelling 1987). As groundwater began to percolate along the fault lines and through the fractures during the Tertiary Period, the salt deposits dissolved. This activity left a residual leached gypsum cap and remnant halite. Eventually, the rocks collapsed into a void created by these dissolved deposits, thus creating Salt Valley.

Ecology

Arches NP is located within the Semiarid Benchlands and Canyonlands ecoregion. This region is situated at elevations that range from roughly 5,000 to 7,500 feet. Typically, this ecoregion experiences extreme climatic conditions with warm to hot summers and cold winters. This area receives approximately five to thirteen inches of precipitation annually, with most occurring in the mid to late summer to winter. Within this ecoregion, broad grass and shrub covered benches and mesas are common. The ecological diversity of this region is influenced by steep canyons, limited water resources, seasonal flooding, unique geological substrates, and large fluctuations in climatic conditions (Figure 7.49).



Figure 7.49 Cactus in Bloom at Salt Valley Overlook EOA Study Area

Within the park, there are a variety of vegetation communities that make up the Semiarid Benchlands and Canyonlands ecoregion. Areas like Salt Valley Overlook are part of the Colorado Plateau Mixed Bedrock Canyon and Tableland vegetation community (NPS 2011). The

vegetation in this community is characterized as having an open tree canopy or scattered trees and shrubs, with a sparse population of herbaceous plants.

It is common to find pinyon pine (*Pinus edulis*), juniper, scrub oak (*Quercus berberidifolia*), Indian tea, and little-leaf mountain mahogany (*Cercocarpus intricatus*). This vegetation community also contains a number of grasses including Indian ricegrass, yucca, cacti, and forbs (West 1982).

7.7.2 Special Features

Salt Valley Overlook contains a number of special features. Southern Paiute representatives found this EOA study area to be culturally significant based on the presence of: (1) many traditional use plants growing in this area, (2) a dense lithic scatter, and (3) culturally important viewscapes.

Southern Paiute representatives noted a variety of traditional use plants growing at the Salt Valley EOA study area. The traditional use plants observed at the EOA study area are used for many different purposes including food, medicine, ceremony, construction, and crafts. Indian tea was identified by Southern Paiute representatives as a culturally important medicinal plant. Another plant observed by Southern Paiute representatives was juniper, which holds medicinal, utilitarian, and ceremonial roles. Scrub oak was noted as an important food resource present throughout the Salt Valley EOA study area.

This EOA study area was initially recorded by Berry (1975) and was later resurveyed by Kramer (1991). They both describe Salt Valley Overlook as a large lithic scatter that is distributed over a series of small ridges and drainages on the eastern edge of Salt Valley. Archaeologists recorded bifacial and unifacial tools, lithics in various stages of production, and ground stone in the area. Initially, archaeologists assumed that the majority of the artifacts would be clustered near the rock outcrops found in this area. Upon surveying, however, they noted that the artifact assemblage distribution varied across the area with the largest concentrations being located away from the outcrops.

The Southern Paiute representatives observed many cultural materials at this EOA study area. This location was noted by Southern Paiute representatives as a place to make tools. Evidence of stone tool manufacture includes pieces of worked red and yellow jasper and quartz (Figures 7.50). The people who used this site brought with them the high quality jasper, quartz, and other lithic materials identified at this location. Southern Paiute representatives noted that this EOA study area was a place where their ancestors would have come to camp and to make tools before hunting, or perhaps they came to this area for spiritual purposes.



Figure 7.50 Artifacts Observed at Salt Valley Overlook EOA Study Area

The surrounding viewscape is another culturally significant feature of the Salt Valley Overlook EOA study area. Southern Paiute representatives explained that the EOA study area provides a spot for vision questing based on the unobstructed views of the landscape (Figure 7.51). From this EOA study area, there is a clear view of the La Sal Mountains. In Southern Paiute culture, mountain ranges are important because they provide a range of natural and cultural resources.



Figure 7.51 Southern Paiute Representative Visiting Salt Valley Overlook EOA Study Area

The viewscape, combined with the cultural and natural resources, makes this a powerful place within Arches NP. The Salt Valley Overlook EOA study area provided an understanding as to how this place would have been used by ancestral Numic peoples.

7.7.3 Native American Comments

The Southern Paiute representatives visited the Salt Valley Overlook EOA study area with UofA researchers in May and September of 2015. Representatives had many comments about the significance of the area. The tribal representatives offered interpretations for several prominent natural and cultural resources. The information presented below reflects the thoughts and opinions of the Southern Paiute representatives who commented on this EOA study area.

Southern Paiute representatives described the geography of this area and/or elements that stood out.

- *It is on a plateau and there are rocks coming out where the sand is, and in this area there are a lot of* [lithics] *right up there, and they are found in one area. Those were made by certain individuals that could make arrow heads. So they used that stuff, and they made arrow heads in this area. And it is just like a person who has a trade I guess, in a sense. What you are trained to do in the world. So the person who was making those things were trained in that craft. And these lithics, you see how they are all busted. You can see they are not all an arrowhead. So they try to make arrowheads out of them, but when you hit those things nothing comes out perfect. When you hit them they do not always come out perfect so they just disregard some of those. They just throw them out, leave them there. So they try to find the best rocks to make an arrowhead, and they work with that. Some of them bust because they hit it wrong or they did not do something right, so they leave a lot of that there. That is what this place is. There were craftsmen like I said who made those, like the craftsmen who made arrows, craftsmen to make bows. And they know what to get, what instrument or what rock or what plant to get to make those things.*

Southern Paiute representatives commented on the ways that Indian people would have used this area.

- *I think it was a quiet place, where people could think, or else a good place to pray to the Creator and they would sit and meditate.*

- *Sometimes when it is really special, it would be good to bring a doctor out. They could build rocks all around in a circle and cleanse with her or him, and clear their mind and their heart and everything. It makes them think well and be happy. That is all we pray for. This would be a good place for that. They would just need rocks, a fire, and water. That is it. We would bring water to this place. Our people did pack water for miles and miles, so they do not think it is really that hard of a job.*

- *I think Indian people would have used anywhere, as long as it had water or if they stayed overnight to camp out. I think this would be a good camping area because it is flat. A lot of Paiute people used juniper trees as a wind breaker. Just to camp out, you know, and make the fire. Maybe they were heading somewhere, and just*

camped here. There might be a group of them, maybe it was a family. I think this is where [the lithics] *comes from. Maybe it came from somewhere else and they had some and they were making arrowheads and left all the chips here. There might have been a whole mess of them that worked here and were doing that. I think that is where that comes from. I think* [they made them] *to kill animals, or to kill somebody if they had to. I think that is where those chips came from* (Figure 7.52).



Figure 7.52 Southern Paiute Representative Examines Artifacts

- *I would say it is very beautiful, but it has a meaning too. People used to live here at one time. They lived in the mountains and down in the valleys. The things they call a wikiup, they made it out of* [juniper], *and they made it out of willows. They were like, how would you say, a little packrat. They would seek these things, and they would go far away for them. They would do anything just to get it.*

- *I was asking about any black places where they might have made fire, because I was thinking maybe they were camping up there. But without that, they may have been there but not making any fires for some reason. But they were there making probably tools and arrowheads, things like that. I think that was a deer hunting camp, not a deer hunting camp but a mountain sheep place to stay over so that they can go out and look for mountain sheep. But it looks like they did not make any fire because there is nothing out there, we did not see that kind of thing in the report. For some reason, they did not make any fire. But they made a lot of tools, or arrowheads, or whatever. And you know, they could have been hunting deer too if there was probably more vegetation in here. And the water sources down below, and animals need water, so you could be way out here away from the*

animals before you start your hunt. And you can go out in all different directions to try to find those animals and they very well could have been near water. That is anytime of the day when they were needing a drink. And back then there were probably tons of mountain sheep. You do not see any here today, but there was probably a lot back then. And you probably could hunt rock squirrels in here too. We saw rock squirrels and there was probably a bunch of them back then too. And down in the valley there is all of that nice Indian rice grass and there was probably camps over there. A lot of camps for women to gather rice grass, maybe men up here hunting while the women are gathering down below. And if they are hunting they probably brought food with them so that they did not have to cook. This might be also where Utes, well they had to be Ute people, or Paiute people, that did that hunting. And that petroglyph down there is probably an indication of that. They came up here probably to hunt mountain sheep. Those mountain sheep were probably coming in and out of that place for water. But they had to be away from it in order to sneak up on them.

- *Maybe they did something here to prepare the men for the hunt. I know that Paiutes, they did not have a chief, but they did have a deer hunt boss, or probably a big horned sheep hunt boss. And they probably did things that prepared themselves for that hunt to bless them, so they could have a good hunt.*

- *It is a good place to talk to the Creator, it is up high. This is a good place to make offerings and prayers before you go out there. A good place to maybe even look, and see if you can spot a mountain sheep out there somewhere. Or even spot a deer down below. Preparing for the hunt, listening to your deer hunt leader. What he has to say to you about the hunt, getting instructions.*

- *Maybe they got together and did mountain sheep dance over here. That might have been the ceremony that was taken place here. While the men were preparing, you know making their arrowheads and preparing and mountain sheep dance over here. Men are the only ones that can sing the mountain sheep song. So it was probably a place for men, hunting preparation area; mountain sheep hunting.*

Southern Paiute representatives explained how this place is connected to others.

- *It is like a map, you can see from here to there and they can judge how far they are going. And also to that, they call it the La Sal Mountains, you can see that, so if they made the arrowheads here they could go hunting clear across to there. In the summer, when it is hot, they can go up through there, camp and hunt whatever is in there, elk, and whatever game is in there and come back.*

- *It is connected to a lot of places, almost like a borderline.*

- *This place is connected to the spring down at Wolfe Ranch.*

- *There is a connection to the Indian ricegrass in the Salt Valley.*

- *This overlook is connected to that salt dome, and even all the way down to the Colorado River, because people had to make their way up here.*

Southern Paiute representatives noted if Indian people would have used water from the area.

- *Water running through here could be used for medicine.*

- *I think maybe they had old water here, in rocks, and would just camp out for two or three days. They probably knew where the water was anyway. Indians always know where there is water. They liked to camp closer to where they think there is water.*

- *The water from a rock catchment, it is for drinking water. They used that one there when a lady has her babies, they would lay her down and they use the water to wash her down when she gets done, like a blessing. Just like when it is used for drinking water. It is so you are purified like you started your life.*

- *For the water, when it rains, it settles in there. It is for drinking too, to wash your hair, stuff like that. Those* [holes in the rock] *are good to wash your hair with rain water in.*

Southern Paiute representatives explained how Indian people would have used the plants at the area.

- *This is where they were making arrowheads, right in here, you can tell that. A lot of Indian tea in here. Well they say that is good to clean yourself up with. It is just like a medicine, this one here. You can use it as a medicine. Talk to it, then you can take some of the leaves off of it, dry it, put it away, it will last for a long time. Then winter time you can drink it. If you are ailing or something, you can drink it that way too. That is what they claim it was, medicine, the old man used to tell me it cleans you out good*

- *They came everywhere to get plants. On their travels they picked plants. Wherever they went, and maybe they were on their trips to get winter supplies, they had to go a long way to get supplies, so yeah getting ready for winter they came down this way if they needed some kind of plant. There is Indian tea right there, and I think at one time they used acorns. There is one right there.*

- *There is plenty of tea up here.*

- *Look at the pine nuts on this tree. I climbed back there, over towards* [Delicate Arch]. *I have seen a lot of the pine nuts here. Big pine nuts, they are pretty good size.*

- *The sage brush and* [juniper] *have a spiritual use. They cut and dry it, and then they burn it. It has a sort of pine smell that it is used for clearing your sinuses. It is a spiritually thing. You blow the smoke into the ear and it lifts off hurt and pain. My mother used to use it when we would have some sort of ear ache or something. She would get a kind of ointment and rub it on the back of the ear. It would be like it got air; like its breathing. You boil it three or four times until the color goes away. You can even add sugar to it to drink it like a tea* (Figure 7.53).



Figure 7.53 Southern Paiute Representatives and UofA Researchers Viewing Plants at Salt Valley Overlook

- [Juniper] *could be used for medicine too. Keep the evil spirits away. They use it in their homes when they know a spirits in your home. An uninvited spirit that comes into your home, then you can burn some of these here. You can boil it, but you have to talk to it before you take it, and tell them you want that plant so you can make medicine out of it. You have got to talk to everything, like that tea, before you break anything off you have to talk to it and tell it you are going to take it back home and make tea out of it or use it as a medicine. That is the way it works.*

Southern Paiute representatives explained how Indian people would have used the animals at the area.

- *I think the game was up in this area. Just like this area, there was mountain sheep inside those hills, those ledges, and then there is also deer that roamed in this area. These big canyons on the sides. And rabbits, squirrels, deer, mountain lions were in this area too at one time. So, there was an abundance of game that was in this area.*

- *Lizards would live here because of the rocks, and snakes. Birds would also live here, like that black bird called the crow. Birds can tell you what season is it, like the robin and the blue bird come during spring. In summer, the robin's chest turns yellow, and that means its turning fall. There are woodpeckers around here too. The lizard eat the insects where you are living. They eat them to survive. I know there had to be buffalo here once because of the way it looks, and the elk live a little higher, deer have no home. A deer could go anywhere all around. You see a deer and then it will be all the way in another state. We use the deer, the jaw of the deer we use that as a blade. We use everything, the bone, everything. Even the whole head. For our buckskins and stuff we use the deer's brain only, we do not use any of the chemical things on it, just the brain. You boil it and just start rubbing it on the dry hide once you have already scrapped the hair off it. Same for the birds too. We use everything. Birds are very precious to us. The eagle is the most, because they go higher than any bird, even higher than the airplane. We do not kill it, but people find it on the side of the road and bring it home and pray for it. They talked to it and pray to the Creator and say what they will use it for. We never kill it.*

- *Well there is an abundance of lizards that they could eat.*

Southern Paiute representatives explained how Indian people would have used this area and/or artifacts.

- *They traded lithics back in those days. They traded with different tribes. Let us say arrowheads, arrows. Even the mountain sheep, they traded horns and stuff like that. They had songs for these, but I do not know what they are. They had songs for those lithics. Back in those days they had songs for everything. They had songs for those and it is just like making songs for good times and bad times. They have a lot of songs that are thousands of years old.*

- *They might have brought sick people here, especially when it is warm. They used to go a long way to find those flat rocks, or if they find it by mistake like on a hunting trip or journey going somewhere. If they ran into something like that, finders keepers. There are a lot of the flat rocks, they put them in fire and warm it up. If you were sick they would make you lay on it, on the flat rock. Maybe you were sick with your blood on the inside, and that good for that to thin it out. If women were on their menstruation they would do that, put the lady on the rock, or they would get a smaller flat rock and wrap it up and put that on your stomach. That is what these rocks remind me of.*

Southern Paiute representatives explained how Indian people would have visited and/or used the geological resources at the area.

- *They made different types of arrowheads here. Some this long* [gestures with both hands], *for spears, some short. They even made arrowheads for rodents that were about as big as your thumb. So they made different types of arrowheads. It was*

what they were after, what four legged game they were after, but in this place it was probably deer and mountain sheep, so the arrowheads were probably pretty big.

- *The rocks stand out the most. The flint rocks* [chipped rocks] *and the sand rocks, also. Sandstone rocks are used for scraping and making things soft and stuff, like a sander. That is what it was used for, and shaping up things, like the arrowhead that you want to be perfect.*

- *They use the rocks to make knives, for cutting up things. The bigger blades are used for cutting up buckskin. I have one of those because I scrape up skin and all that. All these rocks have a meaning to them.*

Southern Paiute representatives provided comments regarding the area as a whole.

- *I can stand here and I can feel it. From the bottom of your soul, it quivers. You know that is what it was. I do not know how the other people feel. The guys, they know pretty well what it is, but I do not know if they are going to say it or not, but they should be the ones that should say it. The guys know more than the women. The women, they were really the backbone of everything. They were the ones that stood before everybody. They were home, but they knew what to do. If the women were home by themselves, and people came that were going to harm her, or whatever, she would take her own life. That is the way it was and that is the way this place make me feel. A lot of things happened and it was not fun. You feel kind of lonely, you can feel it. It is hard to explain, because of what happened here. Maybe they were fighting over this place here. I know they did that on Navajo Mountain. They call it Navajo Mountain, but that really is a Paiute mountain. You can find a lot of things there too. It is the same thing, same feeling. Sometimes I wonder what it was, but only the guys know. Some of them will tell, some of them will say nothing and just look at you. I looked at their expressions on their face when we got here, and said 'oh my.' I could tell you, but they can too, and I know they will tell how they feel about it and what will come about it you know. It is a pretty place, it is a beautiful place.*

- *It is a very spiritual place. If you were by yourself and you sat down there somewhere and you did a lot of thinking and a lot of praying… If something was bothering you or ailing you, this is where you would come.*

7.7.4 Ethnographic Comments

The Salt Valley Overlook EOA study area is distinguished by the abundant scatter of lithics, medicinal plants, natural water catchments (*pohs*) (Figure 7.54 and Figure 7.55), and viewscapes. These medicinal plants and archaeological materials contributed to the interpretation of the place. The Southern Paiute representatives visiting Salt Valley Overlook connected the archaeological materials and culturally significant plants that were present with their views on ancestral Numic occupation in the area for hunting, camping, and ceremonial purposes.



Figure 7.54 Southern Paiute Representatives and UofA Researcher Examine Archaeology at Salt Valley Overlook

One of the most striking features at Salt Valley Overlook is the abundance of stone chippings, referred to as lithics by archaeologists. When creating stone tools, such as projectile points, darts, scrapers, and drill bits, a tedious reduction process must occur. Many of the stone tools found in the southwest are created from larger rocks, therefore they must be reduced from a larger stone. Careful blows to the large rock break off small chips that are not able to be used further, while larger pieces are modified to create arrow points and other sharp edged tools. Southern Paiute representatives viewed the stone chips at Salt Valley Overlook as indicative that this area was a place used for hunting, camping, and ceremonial purposes.

The high concentration of lithics at Salt Valley Overlook suggests that this area could have been a ceremonial destination place for those seeking knowledge and Puha. Destination places like Salt Valley Overlook have high concentrations of power and must be approached properly and with respect. Religious specialists who come to these areas need to prepare themselves prior to reaching their destination. Preparation involves ritual cleansing and purification, prayers, and leaving offerings along ceremonial or pilgrimage trails. Then when religious specialists reached their destination, they interacted with not only the place but also the surrounding landscape through song and prayer in order to draw upon their power (Van Vlack 2012).

One of the activities that they would have done when reaching one of the destination places like Salt Valley Overlook would have been to clean out naturally occurring water catchments, such as rock tanks or pohs (Figure 7.55). These water catchments needed to be cleared of debris and sediment because the water served as a vital resource for not only the

people visiting the area for ceremony, but also the plants, animals, and spiritual beings. The cleaning process is part of the stewardship responsibilities given by the Creator to Southern Paiute people to tend to their traditional homelands.



Figure 7.55 Poh Located at Salt Valley Overlook

Leaving offerings is another activity associated with ceremonial places. Numerous items serving as offerings have been carefully placed by religious specialists, such as obsidian, chert, chalcedony, and red and yellow jasper. The act of leaving an offering at an area or place is seen as a key moment in ceremony. These moments are vital for establishing relationships with places and gaining Puha. Religious specialists placed offerings at a chosen spot and they prayed to the Creator and to the surrounding places, particularly to their destination. According to Southern Paiute beliefs, the offerings contain the prayers forever and they continue to send their Puha across the landscape long after the pilgrim finishes the pilgrimage. The offerings left at these places are linked to Southern Paiute history and cultural memory, and should not be disturbed or removed (Van Vlack 2012).

7.8 Landscape Overlook B

Southern Paiute tribal representatives visited Landscape Overlook B at the end of both the May and September 2015 field sessions. There are clear views of the Fiery Furnace, Salt Valley Wash, and the Windows Section from this area. What makes this point unique is view of the surrounding sky islands such as the La Sal and the Abajo Mountains from Landscape Overlook B (Figure 7.56). The views of the park are important for this study because they provide an opportunity to reflect on Arches NP and the experience of visiting various EOA study areas. Landscape Overlook B allows for discussion about landscapes and connections between culturally significant places, some existing in the park and others located far beyond. It is also an opportunity in the EOA to revisit earlier experiences in the park and add thoughts not formerly shared. Southern Paiute representatives visited Landscape Overlook B because it offers a spectacular view of the La Sal, Abajo, and Henry Mountains to the Southeast (Figure 7.56).

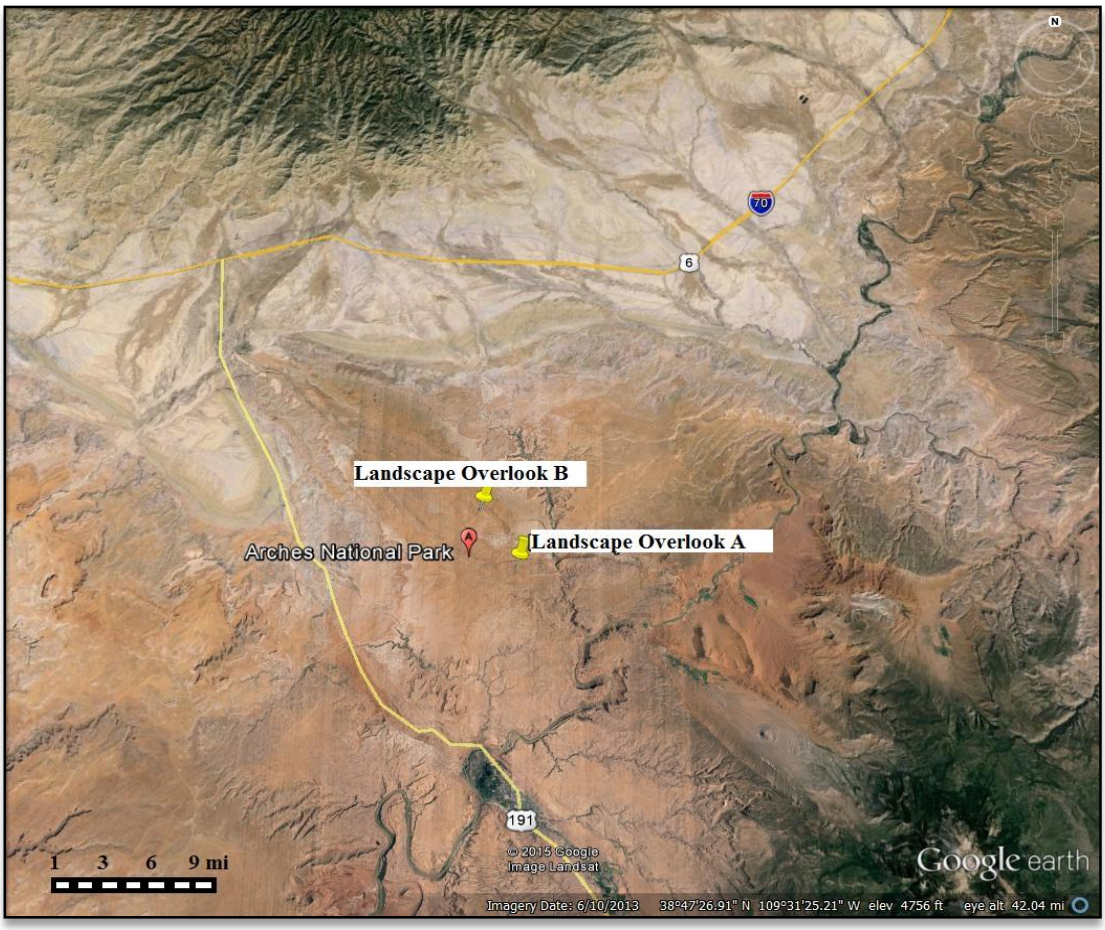


Figure 7.56 Topographic Map of Landscape Overlooks Sites A and B

This portion of the EOA study area is located off of the Arches NP Scenic Drive at an elevation of 5,100 feet, with Fiery Furnace to the east of Landscape Overlook B. The Double O Arch and Dark Angel formations are found a few miles northwest of Landscape Overlook B area. Landscape Overlook B allows for a discussion of landscapes and connections between culturally significant places, some existing in the park and others located beyond initial park

boundaries (See Figure 7.47). It is also an opportunity in the EOA to revisit earlier experiences in the park and add thoughts not formerly shared. Landscape Overlook B was chosen not as a site for place specific interpretation, but more for discussions regarding cultural connections and open ended cultural discussions.

7.8.1 Natural Setting

The following section provides the reader with a brief overview of the geology and ecology of Landscape Overlook B. The information provided below is designed to help frame comments made by Southern Paiute representatives during data collection events.

Geology

Landscape Overlook B is located on top of a high area near Devils Garden (Figure 7.57). This mesa is covered with low growth shrubs, large Entrada Sandstone boulders, and a cliff where wind and water have eroded the edge of the mesa. The viewscape from this location illustrates a wide variety of geological features within the park and the surrounding mountains and canyons.



Figure 7.57 The Devils Garden

Salt Valley can be seen to the northwest, continuing several miles to the southeast from Landscape Overlook B. The Devils Garden is clearly visible from the Landscape Overlook B site to the northwest, and Fiery Furnace can be viewed to the southeast. Protruding sandstone fins are likewise visible, and are most noticeable when facing southeast toward the La Sal Mountains (Figure 7.58). The Abajo Mountains are visible to the southwest, although they appear much further away than the La Sal Range (Figure 7.59).

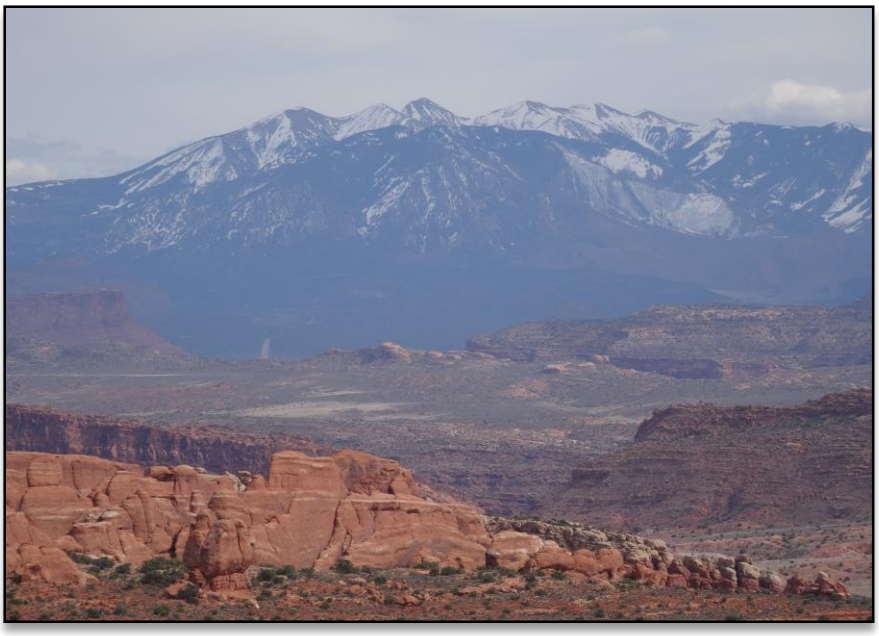


Figure 7.58 The Fiery Furnace, the La Sal Mountain Range, Castle Valley, the Colorado River Drop-off from Landscape Overlook B



Figure 7.59 View of the La Sal and Abajo Mountains

Other unique geological formations around the EOA study area include large hills of igneous rock, Mancos Shale, and other mineral deposits. Towering sandstone hoodoos can be seen across the landscape. The colorful orange and red hues of the Arches NP landscape draw attention to many of the unique geologic forms and canyons cut by rivers and streams.

Ecology

Landscape Overlook B is part of the Inter-Mountain Basins Mixed Salt Desert Scrub vegetation community (NPS 2011). This community is an open-canopied shrub land typical of saline desert basins and alluvial slopes of the Colorado Plateau. The soils in this vegetation community are often saline and calcareous alkaline rich soils, which are the preferred habitats for one or more species of fourwing saltbush, rabbitbrush, big sagebrush, Indian tea, juniper, wolfberry (*Lycium* ssp.), Indian ricegrass, and yucca (West 1982). The height of the juniper trees and size of the berries was significant for the Southern Paiute representatives visiting the area, who found these to be indicators of a spiritually powerful place (Figure 7.60).



Figure 7.60 Southern Paiute Representative Identifying Plants at Landscape Overlook B

The presence of juniper and pinyon trees at this site is a testament to the dramatically higher elevation of Landscape Overlook B than the surrounding areas. Low growth shrubs of sage and various types of cacti were also identified growing in and around the large rock formations on the western and eastern sides of Landscape Overlook B.

7.8.2 Special Features

Landscape Overlook B was selected as a place to review the EOA study areas because it has an unobstructed view of many other cultural and landscape features located in and around Arches NP (Figure 7.61). From the Landscape Overlook B site, many of the EOA study areas are visible, as well as the Abajo and La Sal Mountains. These mountain ranges, the Colorado River, smaller springs, and perennial streams provide water for the Moab Valley.



Figure 7.61 View of Salt Valley from Landscape Overlook B

The panoramic viewscape serves as an important component in the integrated cultural landscape discussions. This type of location was the last to be visited with each tribe during the EOA study in order to provide tribal representatives with an opportunity to discuss the park as a whole. Landscape Overlook B offers a view of many key cultural features, enabling discussions about how they are all culturally interconnected. This includes visible features throughout the surrounding region, especially mountains, valleys, and rivers.

7.8.3 Native American Comments

Southern Paiute representatives visited this EOA study area in May and September of 2015. The information presented below reflects the thoughts and opinions of the Southern Paiute representatives who commented on the viewscapes from this EOA study area. These comments especially contribute to a synthesis and overview of Arches NP.

Southern Paiute representatives discussed Native American villages in the area.

- *The whole landscape is important. I can just imagine American Indian people all over here, and they probably had Indian names for each one of these* [rock features]. *They probably even found some that were spiritual, because some of them look like people, there are some animals. Plus, the Colorado River is close to this place.*

- *I think this whole area was spiritual because they have not found any dwellings, or pottery sherds, or human bones, or anything around here. I think that is what this was used for.*

Southern Paiute representatives discussed ceremonies associated with the EOA study area.

- *We came to this area to pray and have a spiritual connection. If there are no bodies, no burials, then that tells me that this was only a place for spiritual things. This was a place to come and pray. This was a place to come and have visions. This was a place to gather songs, a special place for receiving songs or dreams even. Interpreting dreams at some of these different places is important. They lived by dreams, they were told by dreams what they needed to do and where they needed to go.*

- *Being here is like going on a vision quest. This is something that you want to do carefully. You have to prepare, think, and reflect.*

Southern Paiute representatives discussed songs associated with the EOA study area.

- *What can we do to remind our next generations of our songs, our history, and our job that we need to do? If we could come out to places like this and listen for those songs, that knowledge, they would come back.*

- *We had songs here. All the Paiutes have songs for this place, but we have forgotten.*

- *The water makes things grow. The importance of the plants, animals, water, we need to teach our children. Birds and insects, all these things have a place in our songs. Somebody is going to come back here and remember everything from the past.*

Southern Paiute representatives talked about connections between the EOA study area and the surrounding rivers, creeks, springs, and washes.

- *The Colorado River is the blood of Mother Earth, it is always moving.*

- *This is like a trading route in this area. Because you had all these tribes that came through, Ute, Hopi, Zuni, Paiute, probably Shoshone came through here too. So it is like a trading area in a sense. So yeah, I think there should be signs here that say, well 'this plant was used by the Paiutes for this', or 'the hoodoo stone is a significant part of the Paiute legend, culture.' Things like that. 'And you see these hoodoo stones down south in Southern Utah, Southern Paiute Country. And the Colorado River is a significant part of the Paiute Culture,' because we have significant stories where we were on the Colorado River down by the Grand Canyon, in that area, so how it relates from there to here. Yeah, something like*

that. Its things like that, even the plants the animals, how mountain sheep, how that is a significant part of our life too.

- *When it rains and snows, it is probably like a watershed. It goes down to the Colorado River. It replenishes the Colorado River with run-offs and floods when it rains.*

Southern Paiute representatives mentioned connections between this EOA study area and any other places or events that had not been previously discussed.

- *The old Paiutes, they had all this area to travel across, the rocks, the land, they went all over the place. The Old Ones were watching them,* [and] *they are watching us now, I am sure.*

- *We are the same people that were here so long ago. We have this history, we are tied to this land. This is a region that my grandfather used to sing songs about.*

- *We have the story in Zion that the people used to go down there to pray and talk to God. That was a sacred area, like this area here. But you had to be a reverend and had to be careful not to destroy anything, because if you did you would get punished. Something would happen to you or your family. If anything happened it was because you did something you shouldn't have, and* that to me was scary, *because the unknown for me, being young and not understanding what they believed in, it was kind of hard for me. I could not understand that. I can now, but at the time I could not. I can now because I know and I believe in the old ways* (Figure 7.62 and Figure 7.63).



Figure 7.62 Southern Paiute Representatives at Landscape Overlook B



Figure 7.63 Southern Paiute Representatives at Landscape Overlook B with the Klondike Buffs and the Devils Garden to the North

- *The foundation that you establish as a Nuwuvi* [Southern Paiute] *person occurs the day you separate from your mother. We bury the umbilical cord of our children, and they are connected from that day forward with the land. These are our lands, our home, we are connected with this place.*

- *It is probably a place where people stopped to camp and meet up other bands or different groups to trade, to have socials. A place to find a wife at one of their gatherings.*

7.8.4 Ethnographic Comments

Landscape Overlook B is located at a higher elevation than the surrounding area. It offers clear, 365 degrees views of the landscape, including the mountains, valleys, arches, and hoodoos. Significant features located at other EOA study areas are visually linked to this overview point, and cultural connections have been made over time through songs and prayers.

While visiting Landscape Overlook B, a Southern Paiute representative explained the connection between the land and the people (Figure 7.64). The area that is now Arches NP has been used as a place for Southern Paiute people to receive songs, visions, and tend to their spiritual needs since time immemorial. The unique geographic features, especially the rock formations, across the landscape at Arches NP serve as places that Southern Paiute people may have come to for vision questing and ceremonies. The view of the Colorado River from many points in the area adds to the significance of this region as a special place.



Figure 7.64 Southern Paiute Representative at Landscape Overlook B

Other important landscape features within Arches NP are the fertile valleys, supported by small hydrological systems that feed into the Colorado River. Salt Wash and Cache Valley are visible to the south from the Landscape Overlook B. Villages or camps would have dotted the fertile valleys. Southern Paiute representatives reflected on their ancestors use and occupation of this region since time immemorial. They also emphasized the contemporary and historical ties between Ute and Southern Paiute families in this region. They explained the importance of returning to Arches NP with tribal youths to reconnect with their heritage. By bringing out the next generation to visit culturally and spiritually significant places like Arches NP, the tribal elders hope to instill a sense of connectedness with this sacred place in the younger generations (Figure 7.65).



Figure 7.65 Paiute Representatives Describing Ways Their Tribes Could Reconnect with Arches NP

Landscape Overlook B provided an opportunity to discuss Arches NP as a whole rather than each area as an individual feature. Southern Paiute representatives who participated in the EOA study agreed that Arches NP could be used as a place for ceremony, songs, and vision questing. The Southern Paiute people would like to visit Arches NP as a way to reconnect with the land and reclaim lost ceremonies, songs, and educate their tribal youths about traditional Southern Paiute culture.

CHAPTER EIGHT
MANAGEMENT RECOMMENDATIONS AND ACCESS REQUESTS

Arches National Park (Arches NP) protects an abundance of natural and cultural resources (Figure 8.1). Five Ethnographic Overview and Assessment (EOA) study areas were visited by participating tribes and pueblos and UofA researchers. These sites were chosen because together they encompass a comprehensive collection of natural and cultural resources that are of interest to the tribes, pueblos, and the park. Each tribe or pueblo that participated in this EOA study believe Arches NP to be a very powerful place, and are interested in opportunities to return with other members for private camping, reconnecting with the land, and ceremony. Ethnographic fieldwork provided an opportunity for some associated tribes and pueblos to interpret not only the meaning of the place, but also to evaluate the condition of several locations and the natural and cultural resources present at each place. This chapter highlights some of the responses given by representatives from the following locations and EOA study areas: Arches NP visitor center for orientation, The Windows Section, Courthouse Wash, Wolfe Ranch and the Ute Panel, Salt Valley Overlook, and Landscape Overlook A and B. Some of the comments that were provided are site specific, while others can be applied to the park as a whole.



Figure 8.1 Courthouse Towers Area, Near Courthouse Wash

Some of the EOA study areas have more in-depth management recommendations and access requests than others, however, the park as a whole has cultural significance for each of the participating tribes and pueblos. Representatives look forward to future studies that will interpret more specific natural and cultural resources, like plants, to document their extensive Traditional Ecological Knowledge (TEK). Because Arches NP has so many unique resources, the participating tribes and pueblos would like to be consulted in management decisions.

8.1 Summary of Management Recommendations and Access Requests

Representatives from the six participating tribes and pueblos at Arches NP provided recommendations on managing the park (Figure 8.2). Although there was some variation in how tribal and pueblo representatives evaluated the condition of the park, the general consensus was that Arches NP is well protected and is being properly managed. Some of the things that created general concerns included rock climbing, graffiti, and other damages caused by visitors. All of the participating tribes and pueblos requested opportunities for their members to return to Arches NP. The discussions about management recommendations and access were guided by a series of potential conversation topics. Tribal and pueblo representatives were given the opportunity to respond to as many or as few of the topics as they felt necessary.



Figure 8.2 Participating Tribes and Pueblos During Fieldwork at Arches NP

Some of the EOA study areas have more in-depth management recommendations and access requests than others, however, the park as a whole has cultural significance for each of the participating tribes and pueblos. Tribal and pueblo representatives look forward to future studies that will target more specific natural and cultural resources, like plants, to document their extensive TEK. Arches NP has many culturally central resources, therefore the participating tribes would like to be consulted in management decisions.

Potential recommendations for ways that the park can prevent further damage included controlled burning, more in-depth interpretation about how to respect the resources, and the installation of protective barriers at culturally sensitive locations, like the rope at the Ute Panel. The participating tribes and pueblos requested an opportunity for their individual cultural perspectives to be included in the larger park interpretation. Representatives from each participating tribe and pueblo also expressed significant interests in cooperating with the park to set up private opportunities to return to Arches NP for ceremonial purposes. Together, the park and each tribe or pueblo could locate a place of cultural significant that would not be disrupted by park visitors, as it is important for these camping and ceremonial times to be quiet and uninterrupted. Tribal and pueblo representatives were pleased to visit Arches NP and provided their cultural interpretations of this special place.

8.2 Site-by-Site Recommendations for Arches National Park

Overall, the tribal and pueblo representatives were impressed by the condition of the park and expressed an interest in returning to interact more with the place. The management recommendations and access requests are organized by EOA study area and are not specific to any tribe or pueblo. The following statements were recorded at the various EOA study areas, and reflect the wishes of the participating tribes and pueblos.

8.2.1 Orientation and Visitor Center

Representatives were given an orientation at the beginning of their individual field session. Some representatives had immediate interpretations of the park as a whole, and brought up their desire for future access. The following is a summary of the management recommendations. Below the summary are quotes provided by participating representatives during field visits.

- An overall concern with the lack of American Indian perspectives and representation in the orientation video, *Windows in Time*.
- The small exhibit on American Indian history in relation to the Moab Valley area and Arches NP should be updated with new text and cultural affiliation information.
- The photograph labeled “Ute” at the visitor center is incorrectly marked and should be updated as Navajo or replaced to correspond with the label.

Do you think Indian people would want to have access to this place?

- *Yeah, I think Indian people would want to visit Arches. I know a lot of them pass through here, and I know some of them have been in the park, like me. I have passed by here I do not know how many times over the years.*

- *This park is part of our traditional lands; it is part of our language and part of our culture and traditions that we are trying to build back up.*

- *Before there were any boundaries, a lot of the places that are now inside that park were open, and no boundaries or restrictions existed. So Indian people were able to go there at a certain time of the year for whatever, maybe some spiritual or ceremonial event that was going to take place in that area. I think that if they have access to those places it would regenerate some of the spirituality for the people. If they knew they were able to come back and do that in some places, for instance here, they would be interested. I know a lot of our young people are beginning to ask questions and get some kind of idea of what is it we did in places like this. Maybe an elder will say this is what my grandfather or my great grandfather told me happened here, this is what we did here, and teach other people in our tribe. It would not be as it was, but similar to it.*

8.2.2 The Windows Section EOA Study Area

The Windows Section EOA study area has unique geology, and was interpreted as being a sacred place by the participating tribes and pueblos. Some representatives had concerns about its physical condition, while other were impressed with how the park manages this site. The following is a summary of the management recommendations. Below the summary are quotes provided by participating representatives during field visits.

- An overall concern of visitors climbing on geologic features at the Windows Section EOA study area was shared.
- Visiting representatives were generally satisfied with the condition of the Windows Section EOA study area.
- Tribes and pueblos would like private access to the Windows Section EOA study area to teach youth about significant geologic features, such as hoodoos, and Creation.
- The Windows Section EOA study area is a place tribes and pueblos would like to have private access to for prayers, vision questing, and healing ceremonies.
- Participating tribes and pueblos request access to the Windows Sections EOA study area to sing songs without interruption by visitors.
- There was a general interest in camping at or near the Windows Section EOA study area.

How would you evaluate the condition of this place and natural resources?

- *Humans see the beauty here. They are not really impacting it. It is something they have never seen before. Everything is perfect, and I think the people are respecting it.*

- *I think it is very, very nice. It is kept up just beautifully. I tip my hat to the Park Service for keeping it so nice and free of garbage.*

- *It is in good condition, as far as I can tell. It has probably been in better condition, but with all the people here, they have treated it well. There is no trash or ugly things laying around.*

- *The arches are fading away. You know, they are sandstone, and they will stand there as long as they can.*

Is there anything affecting the condition of this place?

- *Weather erosion, human erosion, and human presence are affecting this place. When they walk on the features and trample the dirt they cause damage.*

- *This place is pretty well worked over and used. It really does storm out here and with the wind and the rain and the sand, which makes the arches and hoodoos decay really fast. That is how you get these formations in the first place.*

- *I see people climbing on the rocks. I do not think my people would climb these rock features. They thought some of them were people and animals, so I do not think they would disrespect. Our people do not disrespect the things they see that Mother Earth has given them. They would be too afraid to disrespect anything. They would be afraid they would get hurt. They know they would be doing something that would be against what they believe in, and they know they should not mistreat anything. I know they would have also done a lot of prayers and blessings for things that they saw at certain places. That would be just their way for showing their respect to whatever mountain, arch, or hoodoo.*

What would be your recommendation for protecting this place?

- *Well when there is too much damage from erosion, or when there has been too much trampling and graffiti, the park probably should fence it off, or even put a fence out there so they cannot come up this far.*

- *I think there needs to be more rangers up in there. Watching people and seeing what they do, because I think some people are going where they should not go. And some of these people like to scratch their names in the rocks. I have not seen*

one ranger up here. Except for those four that were on the bottom when we started up, that we thought were going to give a tour or something.

Do you think Indian people would want to have access to this place?

- *If Arches National Park would allow or give permission to Native peoples to gather here I would travel from the Shivwits Reservation to do that. Indian people today, as they did in the past, travel great distances to get medicine plants and foods. I travel as far as Colorado to get medicine plants if I am unable to trade with the Cree people. Today, Native people will even travel as far as Mexico for peyote or travel to the west coast for shells.*

- *I think people would probably want to come out here and say a prayer. A man would come out here and do it on his own to pray for himself and his family. They would come as early in the morning as possible, or as late at night as possible. Maybe bring someone with them that is ill. They will have them lay there and say a prayer. Women always have to be near water during prayer.*
- *I want to come back and bring my family. This place is very nice and very spiritual to me.*

- *I think they would if they had the chance.*

- *The ancestors were here before us. I just feel how lucky they were to have this place to come to for all of their spiritual needs and their blessings. If there were eagles here it would be an even more special spiritual place. Even hunting here would have been special for them, being able to get food here to survive, and getting signs or visions. I know back in those days they had a lot of visions and they believed in the signs, whether it was good or bad. Maybe someone left signs to go this way for somebody new, or they would see a pile of rocks and know somebody had been here, or maybe somebody would say I piled some rocks, I have been there and you can go that way. That is how they left messages to let people know that they have been through there. I remember my grandpa asking men if they had ever been to a certain place. Even Powell had some guides that were Paiutes and they left marks to show that they had been there, so if we went there we could see, but we would not touch it. We leave it alone because it was left there for a reason. You just see it and know that it is true that your ancestors had been there.*

Are there any special conditions that must be met for Indian people to use this place?

- *In order for us to be able to use this place, we would need an hour or two hours with peace and quiet, so we can teach the youth the significance of peace and quiet in areas like this, and to talk to them. We would tell them what a significant place this was for the way of life back then, and maybe to sing some songs when it is quiet.*

- *I have not seen it yet, but there would be a specific place. We would need a map first to know where they have human remains, or if they found human remains, because we do not want to camp on a human remains site. That is a no-no in our tribe. We would have to see where the good places are to camp, where there are not any arches, but there is a camping area.*

8.2.3 Courthouse Wash EOA Study Area

The Courthouse Wash EOA study area is a large and complex location with a variety of unique natural and cultural resources. Tribal and pueblo representatives provided significant interpretations and traditional resource uses. Because this location is so close to the park entrance and Moab, Utah, tribal and pueblo representatives provided several management recommendations and access requests. The following is a summary of the management recommendations. Below the summary are quotes provided by participating representatives during field visits.

- There is a general interest in gathering traditional use plants that grow along Courthouse Wash.
- The sign at the Moab Panel could be more comprehensive and include interpretations from participating tribes and pueblos.
- The roads create visual and auditory pollution, which impact the Moab Panel and Courthouse Wash.
- Representatives noted severe vandalism at the Moab Panel, and suggested removing the trail up to the panel.
- There is a request for access to the Moab Panel to teach tribal and pueblo youth about respect for natural and cultural resources, cultural practices, and rock painting and pecking interpretations.

How would you evaluate the condition of this place and natural resources?

- *In between perfect and not so perfect, so I would say the condition is fair. For this day and age, I would say it was fair.*

- *I would say it is in excellent condition, because of what I see today. People respect it too, because they throw their things in the garbage. People have done well; it is beautiful. I have seen places where people did not do those things, but here it is a different story. And that is all I would want from people, is for them to respect it.*

Is there anything affecting the condition of this place?

- *There are a lot of roads going through, but I can still see vegetation everywhere.*

- *There are too many roads in this little valley. We cannot do anything about it, but they could take the old road out and look into a range management unit. There are three sets of roads and a bike path.*

- *One thing that ruins this place* [Moab Panel] *is the tourists coming. So if you put signs up and actually tell them not to come up here that could help. Right now it almost advertises the site.*

- *The deterioration of the paint caused by vandalism and the weather are impacting the panel.*

What would be your recommendation for protecting this place?

- *Doing away with the trail by putting some cactus through so it would not be so obvious that there is something in this area would help protect the place. It seems like they should build a fence, so no one can come here.*

- *Either add more to the interpretive panel, or talk to the people. It would be nice to have a Paiute group to talk about this panel. Moab is Paiute land.*

- *We do not want to have someone come along and draw over it because that loses the meaning of the figures themselves. I think through time it is going to disappear. So now, through photographs, I think we can try to preserve it as much as possible.*

- *Visitors should not be allowed to pass the sign.*

- *It is important not to climb on this panel.*

- *One sign is good. It helps protect it.*

Do you think Indian people would want to have access to this place?

- *For me it is very humbling to come to areas like this, because of what is here and because of what our ancestors left behind as reminders of our past. It is enjoyable and very humbling to walk in the area where our ancestors walked, the same rocks that they used to come up here is how we came up. So it is very important that we do come and identify places like this because now this report will go out and our children, our people back home, even though they are not here, they will learn about places like this because of the work that we do.*

- *Hopi Tribe should come back and see this place.*

- *It would be nice to gather plants.*

- *Yes, I think our tribe would want to come back for educational purposes. For Native American kids going to school, they could come up and see this, and through education, learn what it means, and even what different tribes have to say*

about this panel. It is important just to learn that. I think it should be open for that.

- *At the bottom of the panel, teach the kids about giving offerings because that is a part of their culture, and how to be respectful at this place. It would be a place to teach them not to holler and not to yell. See, it is like the cars down there. You hear that all the time. So when they come up here, and then they go out into a peaceful area, they can distinguish between what they are being taught. See they can go out there and see another panel, and they can pray and talk to that panel, and see how peaceful it is and how they feel. So they can distinguish between the feelings of that and the peaceful feeling, or these encroachment feelings where you see cars and people go by. Bringing youth here would be a teaching experience.*

- *I think people from my tribe would want to visit this place during the day, so they can see around and get an idea of the surroundings. There are the trails that they can walk if they wanted to, and the kids can hike around.*

- *Our ancestors lived here and were farmers. They had themselves, their work, their songs, their prayers, stories, places they have been, things they have seen, spiritual things they have experienced. The visitors should know about that. They should be respectful to everything; the mountains, and all the rock formations. We are all humans. We just happen to have different nationalities. Our beliefs are strong, a lot of people do not have any, a lot of people do but they do not go by it. I strongly feel that the Paiutes should be recognized in this area, and our tribe would want to come back to this place.*

- *Yes, this is a place where we would want to come and spend time, that spiral that we found here* [Moab Panel] *explains that we have been here before.*

- *All of these places that you are taking us are places we want to take the youths. There are some of the kids that will grasp it, some of them want to learn. They will have stories that their uncles told them, everybody will have different stories.*

Are there any special conditions that must be met for Indian people to use this place?

- *The necessary conditions would depend on who comes. If it is regular tribal members, I think they would come to see some of the sites. If they were ceremonial people, they might come here maybe do a ceremony somewhere within the park, privately. I guess you can call them ceremonial or spiritual people or practitioners. But they would want privacy, some place and time here within the park if they can be given that opportunity to do so. I think a lot of them would try come back. In general, I think a lot of tribal members would like to come back. They would like to see the sites and remember some of the stories that was told to them.*

8.2.4 Wolfe Ranch and Ute Panel EOA Study Area

The Wolfe Ranch and Ute Panel EOA study area has a lush ecosystem, unique geological formations and mineral deposits, special viewscapes, and a powerful rock pecking panel. This location was of great interest to the representatives from each participating tribe and pueblo. The following is a summary of the management recommendations. Below the summary are quotes provided by participating representatives during field visits.

- There is a general interest in gathering traditional use plants that grow at the Wolfe Ranch EOA study area and the nearby streams and springs.
- The Wolfe Ranch and Ute Panel EOA study area was regarded as being in good condition.
- Tribal and pueblo representatives approved of the fence structure that protects the Ute Panel. It does not disrupt the view, but keeps visitors at a safe distance.
- Representatives suggested planting native cacti between the fence and the Ute Panel to discourage any visitors from crossing the fence and to help prevent erosion.
- There was a recommendation for traditional burning to be practiced regularly to promote healthy plant growth in the area.
- There was a consensus that the Wolfe Ranch and Ute Panel EOA study area would be an ideal place to return for a multi-day, all-age camping and ceremonial visit. They request that the area be closed off to the public and that they have access to nearby springs.

How would you evaluate the condition of this place and natural resources?

- *I think it is in good shape, despite all the people that come here. I think it is still in relatively good shape.*

- *The rocks are in good shape. They have a little wear on them, but out here with winter and rain, the water comes on it.*

- *I would say the condition is fair, good I guess. In a sense, they built a fence around the petroglyphs, and the other one is too high that. It is good that people cannot touch them.*

- *I would say it is in excellent condition. They have taken really good care of this place. People come and they respect it. It is clean here. Even the roads and the highways coming in are well taken care of. It is just clean.*

- *I think it is in good shape, because people respect it. I think that is what it is all about. It is earth, it is mother.*

- *The Wolfe Ranch and Ute Panel should have a limited number of visitors. I guess the park wants a lot of people to go there, because they are improving the trail. I think that is inviting more destruction to the sites and pictographs. People do not always obey the signs. Just leave it alone, just leave it like it is.*

Is there anything affecting the condition of this place?

- *That water is dirty and needs to get cleared up somehow. The plants, you could not eat it right away, as they are now. You would need to boil them.*
- *Rock climbing and vehicles are making a negative impact.*

What would be your recommendation for protecting this place?

- *I think the fence is good in this situation, because right now you see there is a trail that leads through there and there are a lot of people that come through here. I would say the fence is a good thing. The whole area is in fairly good condition.*
- *The current fence is protecting the panel, but what I would recommend is they put cactus and native plants that are sharp on the other side of it, so if visitors jump over the fence they still have that obstacle to go through. That would further prevent someone from going across that and putting their name or something on it.*
- *This little rope here, it protects it, which is good. It keeps people from climbing all over it.*
- *A rope is good. It does not scar up anything.*
- *I think they should burn the thorn brushes and clean it out so there is better grass.*
- *I think they have already done a good job of protecting this place.*
- *I would like to have more interpretation. I do not know how many personnel they have here at the park, and I know they are too short handed to have an interpretive person at each site, but if they had someone that would go around, visit some of these sites, and give an interpretation, I think that would be good. Maybe one here for half the day, and half the day on the other side of the hill at the arches, and another person would come up and talk about the arches back here, balanced rock, and all that good stuff up along the Salt Valley. Yeah, they do not have interpretive rangers here, or anywhere in this park. How about sometimes they get part time employees that would be interpretive? Volunteers in summer. Right now they would not interpret culture, only geology, kind of like that film* [in the visitor center].

Do you think Indian people would want to have access to this place?

- *The clans that came through here should come back to find songs or stories. They would need four days at the Wolfe Ranch, or somewhere with a water source, for us to reconnect. Somewhere isolated would be best.*

- *It would be good to do something with the kids. Their uncles might have told them stories too to share with you guys that would be good to get the information. My uncle would tell me things, so maybe that would be good for the youth too.*

- *I think when the time comes, the people managing this place will see things that are effecting it and understand they need to do more. It might be okay for now, later on I think if it keeps getting people like this, a whole bunch, then probably a better controlling system would be good. I would like to see our people come down and get some of that purple sage that you are talking about, or maybe some of those willows growing along the river there. We could speak to our elders and see what they are used for. Like we said before, we do not come down and pick everything. We just do it when we need it. Hopefully the park service will allow us to come in and take what we need when we need it. We are not going to come down in big trucks and haul it off. That was never our philosophy. And this place would be a good place to bring the youth to camp. We would have to have our modern day equipment, like a camp stove, but everything is here.*

- *It would be good to get some elders out here to tell some stories. The time that we tell stories is between the winter solstice and the spring equinox. That is the time that we tell story about our culture.*

- *I think our tribe would want to return here mostly for youth education, and also the seniors. It is easy for them to get around and come see this, because I am sure there are some that have never seen it, like me. The youth, being young, they can get around faster and easier than the older people. It is important to teach them that, at one time, their people were here, and this is what they lived with, these beautiful mountains, the rocks that are designed different, and the other spiritual elements. I know at night it would be very spiritual.*

8.2.5 Salt Valley Overlook EOA Study Area

The Salt Valley Overlook EOA study area is the largest archaeological site within Arches NP. There is also an abundance of traditional use plants growing at this location. The views and resources present at this place had an impact on the tribal and pueblo representatives. The following is a summary of the management recommendations. Below the summary are quotes provided by participating representatives during field visits.

- Tribal and pueblo representatives were impressed by the anonymity of this special place. The lack of signage and fencing prevents tourists from walking around, subsequently protecting the cultural resources.

- It was mentioned that visiting tribal and pueblo members would like to have access to Salt Valley Overlook EOA study area for prayer and to leave small offerings.
- Salt Valley Overlook EOA study area encompasses different cultural and natural resources and views that would be beneficial for teaching youth.
- There is a concern about rain causing erosion, revealing cultural resources at this site.

How would you evaluate the condition of this place and natural resources?

- *It is a good thing that this is not really a stand-out place* [for visitors]. *Only the park and archaeologists know where it is, so the people visiting around here would never stop here. It is less disturbed and more protected from the visitors. It is a good place, but if we say we have to have it protected and put a fence around it, everyone would know what it is. Let us just leave it like it is.*

- *Until we came through, there were no footprints that I saw. I would say it is good.* [Tourists] *do not know about it. They do not know it is here, so that is good.*

- *Right now, what we saw this morning, there is no way we can control the tourist coming in and out or where they go, so if we can manage them somehow or limit how many can come in during the day, we can kind of control where they are going. That will help to make sure they will not ruin some of the rock features or some of the other habitats, like the wetlands.*

- *If there is a permanent water source, maybe have that area kind of closed off so the animals can have access to it all year long. I am pretty sure they are getting used to the number of tourists coming in, so it does not bother them as much, like the deer we saw this morning. We got pretty close to it before it kind of spooked out. Being able to give them their time to get a drink of water is important. The animals usually drink water in the morning or before the sun goes down. Around those times at least, visitations to those areas should be limited. In the afternoon they could open it back up to tourists. What we are looking out for too is springs. To us, that is an important place because the earth is giving us that water to use. We usually make offerings to that source, to wherever it is coming out from, so it can replenish itself, heal, and survive. Water is a big part of what we do today.*

- *It is okay right now, because most of the tourists like to stay on maintained trail systems. Sometimes you get the occasional one that will walk all over and destroy a habitat. Most of the areas we are concerned about are the wetlands, because those plants need certain kinds of conditions in order to survive. Limiting those areas of having tourists going off into the areas and walking around would be good.*

- *We should think of the wildlife first, because they are here all the time. Tourists come and go. We should give animals the opportunity to get to the water source, get to the grazing areas without having to go a certain way, or change their routes by putting in a fence or a roadway or something like that.*

- *Tourists should have limited access, but if tribes would want to come and see, we should get the first opportunity to access different areas, water sources, springs, plant gathering areas, the minerals, and the different types that we saw. We should have access to those without having to pay a fee. It would also be good to have a ranger with us while we are doing our thing, just to keep others away until we complete what we are trying to do.*

- *The landscape is going to always be changing, so some of the protection should be just for the safety of the tourists. You never know when something will collapse, or shift, or something. Some of the rock features may have important meaning to different tribes. Those pillars out there could be used for ceremony, or if somebody goes out and visits it that is how they identify certain things, by the geology and the landscape.*

- *I think it is in pretty good shape.*

- *This is a pretty place. It has a lot of meaning to it. It feels lonely, but it is alive.*

- *The way I see it, it is right where the road is. It is a clean place. I have never seen any garbage laying on the side. If it is like that forever, that is good. It is good that there is not a sign for this place.*

- *I would say it is managed just perfectly. There is not any trash. People really take care of this place.*

- *Well I did not see a whole lot of trailing or people walking around out there other than us so I would say that it is good. But the condition of artifacts, tools are not here. Tools for making those chippings are not here.*

Is there anything affecting the condition of this place?

- *The management recommendation would be not to have visitors walking around here, because the traffic and then the rain would start eroding everything. Things might come out. If there was rain suddenly, something might appear on the road.*

- *It looks really nice here. On the reservation, we do not have any of the* [arches and hoodoos] *like this. These rocks are shaped just like humans, or something that you know, or shaped like windows; they are like a rainbow.*

- *I do not think there are very many people who get off and will walk around here. I think it is pretty safe from the humans.*

What would be your recommendation for protecting this place?

- *Get rid of the pullout at Salt Valley Overlook, to keep people from taking lithic artifacts, whatever from that site.*

Do you think Indian people would want to have access to this place?

- *Yeah, it would be good to have access somewhere in that area where you can put your tent for at least two or four days.*

- *We would like to have access to come in and do our offerings, because we see everything in the world as living, even the rocks. By giving our offering to them it shows that we are still thinking of them, and says that this is for you guys here and we want you do to okay so you can help us in the future.*

- *It is hard to tell. They may or may not because of the traffic. I think they might come here to visit and maybe look around. That is about it. There is too much traffic here to do anything substantial. Maybe a dozen to a half a dozen people could be brought here and take a look at this place at different times, you know, not all at once. To come here after the rain has come and washed some of the soil away might reveal some more artifacts.*

- *I am coming back, and I would like to bring my husband and my daughter, I would love for them to see this place. My son-in-law, I think he would like to see this too. My son-in-law is a traditional dancer. If I tell him about this place, he will come over and maybe he will see something we have not.*

Are there any special conditions that must be met for Indian people to use this place?

- *We would like just having that open door policy for us, and the park letting us know what they have planned for the future projects, like where they are going to put certain things, and how it is going to impact the surrounding. If there are going to be new trails leading up to things or new roads, we would like to know, kind of like a management update of their projects and what they are going to be doing that way we can put our input in. Maybe we will have to tell them no you cannot put that in, because this certain plant is here if we use that for our ceremonies, or something. More consultation would be good. We wish that we could get more people to come up to see what we saw, including the youth. The youth are our future, and they need to learn this stuff in order to pass it on.*

- *Yeah, I think it is a lot of traffic here. We would prefer some place more isolated.*

8.2.6 Landscape Overlook A and B

Landscape Overlook A and B were key locations where tribal and pueblo representatives reflected on Arches NP as a whole. Many representatives described these two locations as being places where members of their tribes and pueblo would want to come for songs; powerful elements, like the views, plants, animals, and wind, have the ability to reconnect living people with their ancestors through song. Some representatives had interpretations of the park as a whole, and brought up their desire for future access. Representatives from the participating tribes and pueblos request opportunities to return to these places. The following is a summary of the management recommendations. Below the summary are quotes provided by participating representatives during field visits.

- There was an overwhelming sense that Landscape Overlook A and B are spiritual places used for vision questing, song acquisition, and other ceremonies.
- Representatives requested private access for their tribal and pueblo members to return to these locations, particularly for teaching tribal youth.
- Many places in the park provide different ethnobotanical resources, which the participating tribes and pueblos would like to have access to gather.
- There is an overall request to be informed of any new construction or changes to management practices, and the opportunity to participate in these discussions.

Do you think Indian people would want to have access to this place?

- *It is very hard to find what they are singing about. It was a different language when our ancestors were here. The old songs we have are in a different language. Maybe someone from our tribe would hear it while visiting this place and it would come back.*

- *A song maker, like my father, could picture something in his mind, like a bird singing, then he put a song together. He could just look at something, and then it became a song. If someone came here to make songs, they would sit and listen for some time, and it would come to them.*

- *Birds, insects, and all these things have a place in our songs. Somebody is going to come back here and remember everything from the past; maybe they have dreamt about it.*

8.3 Concluding Thoughts

Each participating tribe and pueblo identified numerous culturally central features located throughout Arches NP. Similar themes are found in the data between the visiting groups, such as plant resource use, youth education, and condition of the park. The following quotes are examples of the themes that were consistent between EOA study participants:

- *Everything has a story to tell, and it is our duty to keep those stories alive from generation to generation by bringing the youth out. It keeps our story strong, and it ties us to the land.*

- *I think the park, this area as a whole, is in good shape, because people respect it. I think that is what it is all about. It is earth, it is our mother.*

- *Our tribe would want to come here to teach the youth. It is important to teach them how the water settles in the rocks and how you drink the water, teach about the different types of plants, teach about the different types of rocks, teach about the hoodoos, talk about how close this is to the Colorado River. This place is part of their Creation story.*

Overall, visiting representatives are interested in a continuous government-to-government relationship and opportunities for future American Indian research within Arches NP. Future consultation between tribal and pueblo governments and Arches NP staff will further develop current interpretations of natural and cultural resources within the park.

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APPENDIX A
LEGAL DOCUMENT REVIEW

The Moab Valley and surrounding area has been the traditional lands of American Indian groups since time immemorial. Traditional Ute territory spanned from eastern Colorado to western Utah, to the northern borders of New Mexico (Figure A.1). The *Seuvarits* (also known as *Sheberitch* or *Sahyehpeech*) Utes were documented during early European contact as living in the valleys north of the La Sal Mountains, particularly around Castle Rock and current day Moab, Utah.

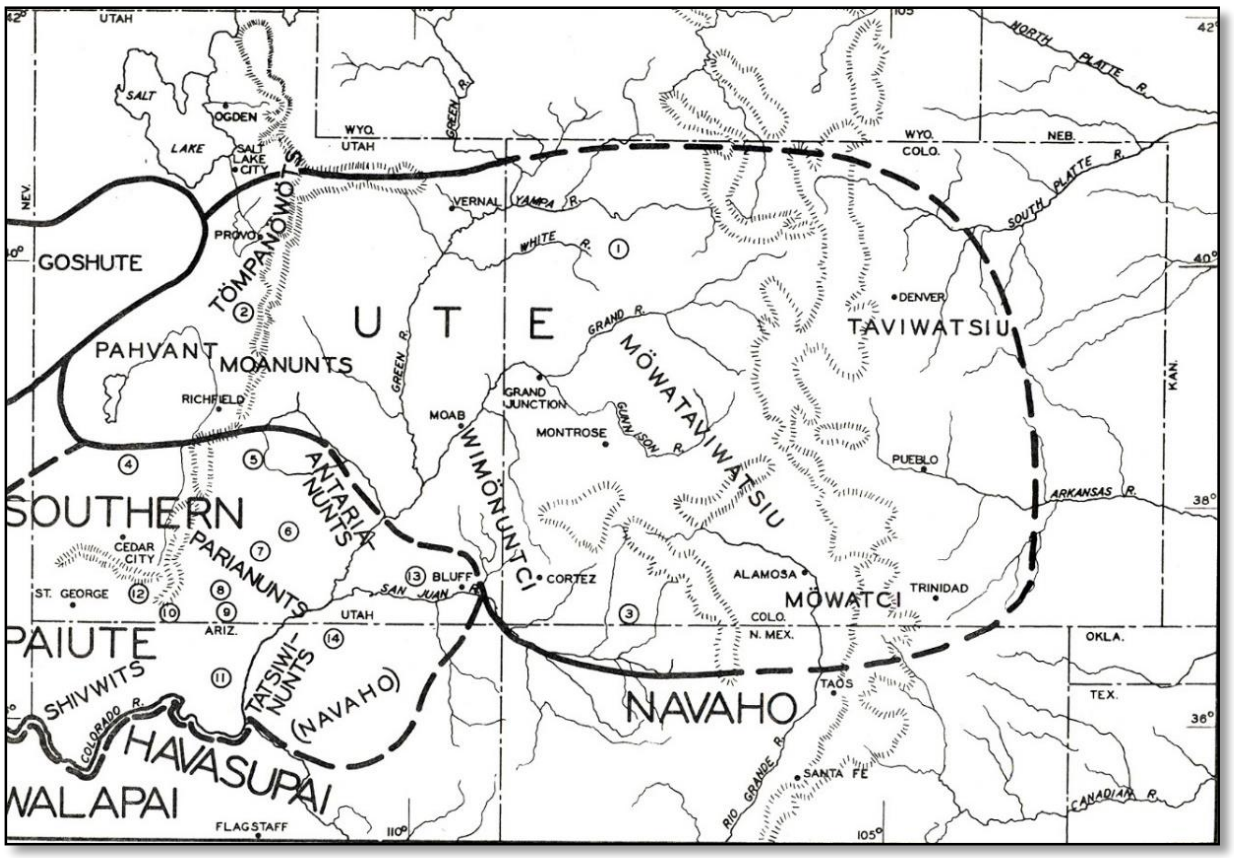


Figure A.1 Ute Traditional Territory as Documented by Omer C. Stewart

After European contact, Ute populations in the Moab area were drastically reduced as a result of Euro-American encroachment and disease. Today, these people continue to be affected by treaties and policies, set in place by the American Government, involving land rights (Figure A.2).

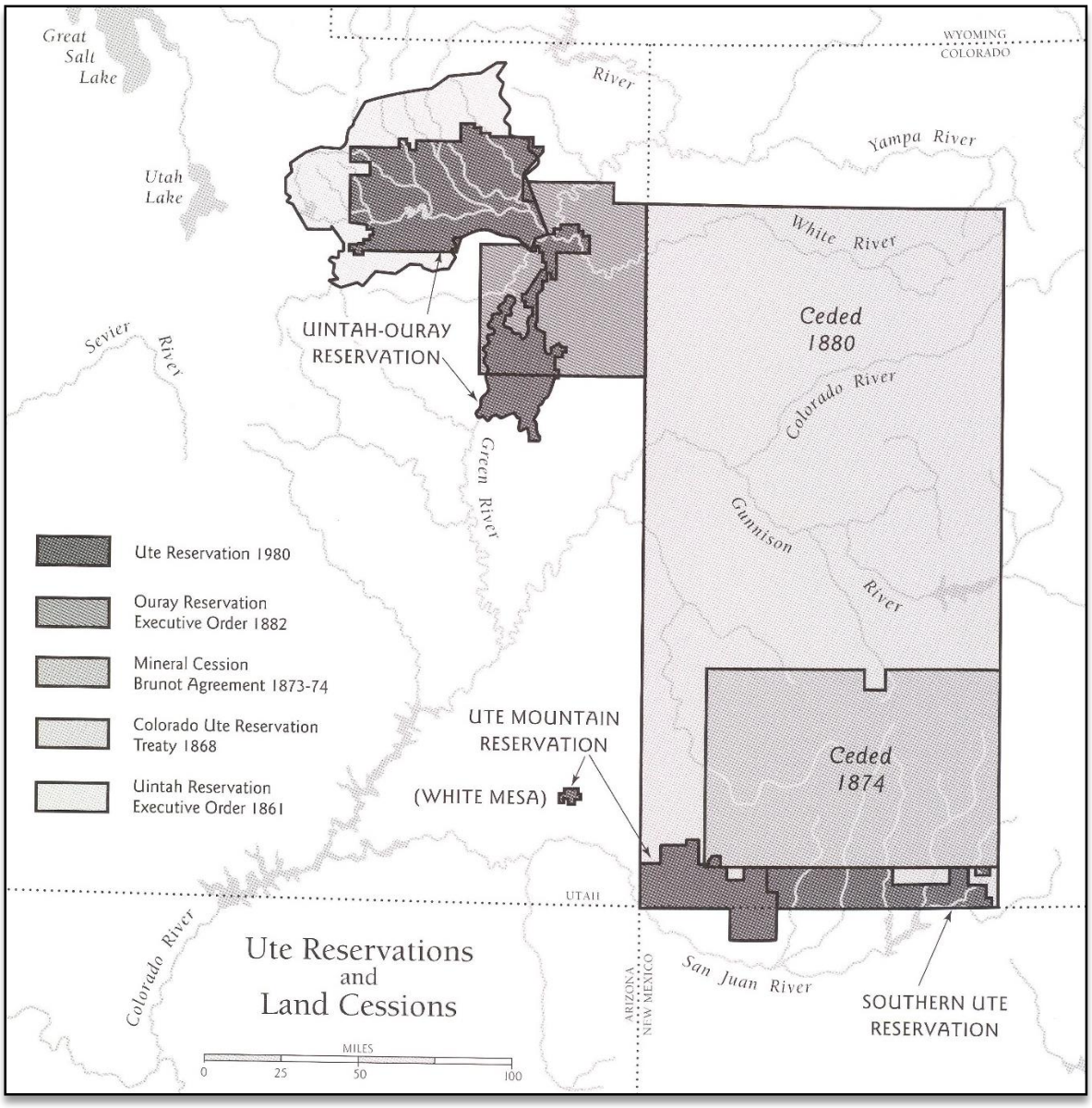


Figure A.2 Ute Reservations from 1861-1980 (Wroth 2000)

Appendix A outlines noteworthy treaties and agreements that took place following Euro-American contact. The majority of these legal documents sought to establish land rights and amity between nations. However, the motivation for the establishment of these treaties was often related to a Euro-American desire for access to valuable resources, such as water, ranch lands, and minerals. Key treaties and agreements are presented in chronological order in Table A.1. The years provided are when the treaties or agreements began; many of these actions were long and drawn out, taking decades to fully implement.

Year	Treaty/Agreement
1786	Treaty between Moache Utes, Comanche, and Spanish
1849	Treaty with the Utah
1863	Treaty with the Utah
1868	Treaty with the Ute
1874	Acts of Forty-Third Congress – First Session
1880	Acts of Forty-Sixth Congress – Second Session
1885	Ute Removal from Colorado

Table A.1 Timeline of Treaties and Agreements

Although a number of legal documents and policies exist in relation to American Indian presence in the greater Moab area, this appendix focuses on the treaties and agreements related to the Moab area and American Indians that traditionally occupied those lands. A detailed analysis of the treaties and agreements presented by Table A.1 can be found in the following sections.

Treaty between Moache Utes, Comanche, and Spanish, 1786

As Euro-American explorers and settlers filtered into the traditional Ute lands, the Utes had an increasing number of conflicts with their neighboring ethnic groups, including frequent skirmishes over territory, horses, trade areas, and other resources throughout southern Utah, northern New Mexico, and areas of Colorado. Spanish explorers in the region first recorded their encounters with Utes in 1626, with the first Ute-Spanish conflicts occurring in 1637 (Schroeder 1965:1).

Spanish officials living in the region saw the Ute and Comanche aggressions toward one another as an opportunity to gain assistance from the Ute in defeating the Comanche. Early in 1779, the Moache Utes and the Jicarilla Apaches were asked to join Governor Juan Bautista de Anza in his campaign against the Comanche, which the Ute joined willingly and quickly defeated Comanche chief, Cuerno Verde (Schroeder 1965:2).

In 1786, only six years later, Moara, the principal chief of the Moache Utes, traveled to Santa Fe, New Mexico, with Pinto and others to discuss rumors that the Spanish were making peace with the Western Comanche (Martin 1986). A heated discussion took place between the Utes and Governor Juan Bautista de Anza, but the Ute chief could not discourage the Spanish officials' attempts at peace with the Comanche, resulting in Moara requesting a presence in the meeting between Anza and the Comanche.

Treaty with the Utah, 1849 (Utahs of Abiquiú, New Mexico)

The first treaty between the Utes and the United States government was the 1849 Treaty with the Utah (Pettit 1990:102). The treaty with the Utes of Abiquiú, drafted by agent James S. Calhoun in 1849 and ratified in 1850, was the acknowledgement of the Abiquiú Utes as being under the jurisdiction of the United States. The treaty included the cession of hostilities and called for peace and amity to exist between the tribe, government, and allies. Captives and stolen property, according to the treaty, were to be returned to the agent at Abiquiú by March 1, 1850,

and Utes were bound to make restitutions for any destroyed or consumed properties (Simmons 2000:16).

Laws, current and future, were enforced to regulate trade and peace with the American Indians, and the territory occupied by the Utes of Abiquiú was annexed to New Mexico. The treaty granted free passage through Ute territory to United States citizens and American allies. The government, in an effort to preserve tranquility, established military posts and authorized trading-houses. Finally, the government designated a territory for the Utes to live, to which they were confined unless permitted to leave; required them to cultivate the soil on their lands; and provide presents, donations, and implements to the people within that territory (Oklahoma State University Library N.d.). At the time of the treaty, no boundaries were defined (Rockwell 1998).

Treaty with the Utah – Tabaguache Band, 1863

This treaty, written by agents Simeon Whiteley and Lafayette Head in 1863 and ratified in 1864, was the acknowledgement that the Tabaguache Utes reside within and live under the supremacy of the United States, along with the Mohuache Band of Utes. As part of this agreement, the United States held the right to regulate all trade and interaction with the Tabaguache Utes. Additionally, the trade of any implements of war to other tribes or nations not in amity with the United States was banned.

Another purpose of this treaty was to establish a reservation boundary and relinquish any rights to lands outside of that agreed upon reservation, as well as designating hunting grounds for the Tabaguache Utes. Within these established territories, military posts, roads, railroads, and highways could be constructed as necessary. Mining in these territories would still be allowed to any citizen of the United States. This treaty extended the laws of the United States to the peoples of the Tabaguache Band and noted that any stolen property, specifically horses in this case, were to be returned or compensated. For a period of ten years, as directed by the Secretary of the Interior, the Tabaguache Utes were to receive $10,000 worth of goods and $10,000 worth of provisions. Also, for the improvement of their horse breeds, they were to receive five American stallions within a year after the ramification of this treaty. Finally, upon the request of the people residing within the reservation, the Secretary of the Interior was to provide the means for agricultural and pastoral pursuits (Oklahoma State University Library N.d.).

Treaty with the Ute, 1868 (Tabaguache, Muache, Capote, Weeminuche, Yampa, Grand River, and Uinta)

This treaty reaffirmed provisions made in the 1863 treaty with the Taviwach Utes of Colorado. The treaty set the reservation boundaries for the Tabaguache, Muache, Capote, Weeminuche, Yampa, Grand River, and Uinta Bands of Utes and relinquished all claims and rights to land outside of these reservation boundaries (Simmons 2000:21). Upon the establishment of this new reservation, two agencies were to be built: one on White River for the Grand River, Tampa, and Uintah bands and another on Rio de los Pinos for the Tabaguache, Muache, Weeminuche, and Capote bands. Each agency would have a warehouse costing no more than $1,500, an agent's residence costing no more than $3,000, and a building for a carpenter, farmer, blacksmith, and miller, costing no more than $2,000 apiece (Oklahoma State University

Library N.d.). The treaty also required a school-house be built at a cost no more than $5,000, and a water-powered saw-mill for no more than $8,000. An agent must live on site, and deal with complaints made about and from the Utes. If the head of any family wished to cultivate the land, the agent would assist the individual and give them land to cultivate on, not exceeding 160 acres. Any individual over 18 years of age may do the same, but only be allocated 80 acres. Seeds and implements would be provided to any farmer by the agency for up to four years of successful cultivation.

As a requirement of the treaty, children between the ages of seven and eight were obligated to attend school; every 30 students who attended school would have a school-house and teacher provided by the government. At any time after the first ten years of this treaty being implemented, the United States could withdraw the farmers, blacksmiths, carpenters, and millers. A sum, not exceeding $30,000 in 30 years, would also be expended for clothing, blankets, and other articles of utility; another sum, also not exceeding $30,000 in 30 years, shall supply food to the Utes. A sum of $45,000 would also be spent in the first year to provide each lodge or head of house with one American cow and five head of sheep. The treaty also stated that, in the case of public interest, roads, highways, and railroads would be built through the reservation. Cession of land could not take place without at least three-fourths of all adult male American Indian's signatures. The treaty ended by explaining that any chief that makes war with the United States shall forfeit his position and all rights designated in the treaty, and any Ute who remains at peace shall continue to be entitled to these rights (Oklahoma State University Library N.d.).

Acts of the Forty-Third Congress – First Session, 1874 (The Brunot Agreement)

In 1872, negotiations between the Secretary of the Interior and the Ute Indians regarding lands entitled to the Utes in the 1868 treaty began. This was the result of the discovery of gold in the San Juan region and trespassing of prospectors onto the Ute reservation. Chief Ouray opposed the relinquishing of Ute land back to the United States. In a conversation between Chief Ouray and Felix Brunot, Ouray told Brunot about his son who had been kidnapped by the Sioux. Brunot worked to track down Ouray's son as a favorable negotiation for the relinquishing of Ute land. In August 1873, Utes gathered to meet with Brunot, the new commissioner, to renegotiate the terms of the land in the San Juan Basin. Brunot did not arrive until September 5, 1873, and explained that he had been tracking down Ouray's son and promised to continue doing so. On September 8, 1873, the treaty was agreed upon to relinquish the lands. Brunot kept his promise to Ouray and brought him together with his son, Friday, who was raised Arapaho, a natural enemy to the Utes. Despite the efforts of Ouray, Friday returned to his reservation believing he was Arapaho. As part of the agreement, Ouray was to receive $1,000 annually and the Ute tribes were to receive $25,000. When the United States failed to provide the agreed upon $25,000, many tribal members turned on Ouray (Rockwell 1998).

The goal of the treaty was to relinquish lands within the San Juan Basin. The Ute Indians were still permitted to hunt on the lands as long as they were at peace with the Euro-American settlers. The United States agreed to pay a sum of $25,000 annually to the Ute Indians, forever. Proper buildings and an agency were to be erected for the Weeminuche, Muache, and Capote bands of Ute Indians on the southern part of the reservation. The 1868 agreement was unaltered

and continued to be enforced. Chief Ouray collected $1,000 annually for a total of ten years (Oklahoma State University Library N.d.)

Acts of Forty-Sixth Congress – Second Session, 1880 (Confederated bands of the Ute tribe)

The Ute Treaty of 1880 was drafted as a consequence of the events surrounding the White River Agency Massacre, where the agent of the White River Agency, Nathan C. Meeker, and other agency employees were killed by Utes following the command of Douglass, a Ute chief. The massacre was the result of ongoing tensions between the Utes of the White River Agency and Meeker, who was pushing an unpopular program started by his predecessor Reverend Danforth, to encourage farming among the Utes. An initiative to continue plowing land for farming lead to a dispute where Johnson, a Ute chief, assaulted Meeker at his home. Meeker wrote a letter to the Commissioner of Indian Affairs asking for protection for himself, his family, and employees at the agency. Major T. T. Thornburg was sent to the agency with 140 men and 33 wagons; spotted by Utes and advised to proceed with just five soldiers to the camp, Thornburg ignored these requests and continued his expedition. Two days later, the cavalry was ambushed, Thornburg was killed, and the remaining troops cautiously held their position awaiting reinforcements. Rankin, a courier who escaped at night, rode to Rawlins, Wyoming, to give news of the ambush on Thornburg's men. General Wesley Merritt assembled a force of approximately 350 men in Rawlins and marched towards the remaining soldiers, arriving three days later, and rescued the remaining solders. On the same day as the ambush, Douglass led the massacre of Meeker and other agency employees. After the attack on Meeker, his wife, daughter, and Mrs. Price and her two children were taken hostage. Charles Adams, a former agent at the Los Piños Agency, was made a special agent and sent to retrieve the hostages from Douglass' men, carrying direct orders from Chief Ouray. The attackers in the ambush of Thornburg were not prosecuted; Douglass was sent to prison at Fort Leavenworth for the massacre at the White River Agency, however, no other aggressors were punished (Rockwell 1998).

The massacre and ambush brought about the subject of moving the Utes from their lush reservation lands at White River, something the people of Colorado had been wanting for some time. Initially opposed by Chief Ouray, the treaty that would remove the White River, Uncompahgre, and Southern Utes from their reservation lands was agreed upon and got Ouray's support. The treaty would remove the White River Band of Utes from Colorado completely, placing them on the Uintah Reservation in northeast Utah. Uncompahgre Utes were reassigned to the convergence of the Colorado River and Gunnison River, present day Grand Junction, and the Southern Utes were reassigned to agricultural lands along the La Plata River. Ouray set off to the Southern Ute Agency to attempt to gather the needed three-fourth of votes to pass the treaty on August 14, 1880. Ten days later, Ouray unexpectedly died of an illness. All hope of passing the treaty was almost lost when Otto Mears, a member of the five-man commission team tasked by President Grant to get the necessary signatures, privately paid two dollars cash to every Ute that signed the treaty. George Manypenny, chairman of the commission, would not endorse the treaty, and charges of bribery were brought up against Mears with Secretary of the Interior, Carl Schurz. That fall, Garfield was elected President, and Kirkwood replaced Schurz as Secretary of the Interior. In the 1881 trial of Mears, Kirkwood asked Mears for the bill of money paid to the Utes, ordered the government reimburse Mears, and thanked him for his services. When the commission was tasked with establishing the exact locations of the new reservations, an initiative

to move the Uncompahgre Band out of Colorado ended in the misinterpretation of treaty text and the placement of the Uncompahgre Utes in Utah. The text in the treaty read:

> The Uncompahgre Utes agree to remove to and settle upon agricultural lands on Grand River, near the mouth of the Gunnison River, in Colorado, if a sufficient quantity of agricultural land shall be found there, if not then upon such other unoccupied agricultural lands as may be found in that vicinity and in the Territory of Utah (Oklahoma State University N.d.).

Commissioners Meacham and Manypenny argued against the misrepresentation of this text to mean the commission could place the Uncompahgre Utes as they see fit, however, they were beat by a three-to-two majority rule (Rockwell 1998). The treaty also granted all funds that would be allocated to the White River Band of Utes, except for the funds needed for removal and settlement, would not be paid to them but instead given to victims of the massacre for 20 years (Rockwell 1998).

Removal of Utes from Colorado to Utah

In 1885, the process of removing the Utes from their reservation in Colorado began with Senate Bill No. 769. This bill, introduced by Senator Henry Teller of Colorado, was the result of rising tensions between gold miners and Utes to the north of the Southern Ute reservation (Figure A.3). At the time, this bill did not specify where the Utes should be relocated. In 1886, three Southern Ute leaders headed to Washington D.C. to discuss a resolution to the conflict. Senator T. M. Bowen of Colorado proposed the relocation of the Southern Utes to the existing Uintah and Uncompahgre reservation in eastern Utah. The Southern Ute leaders rejected this proposal and no resolution was found at that time (Thompson 1981).

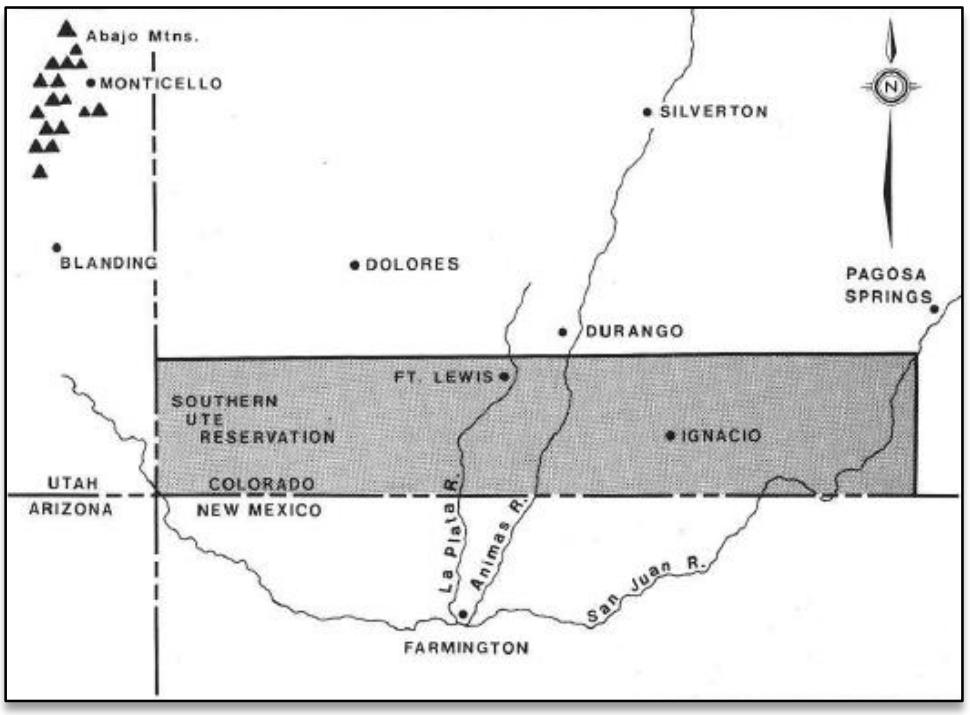


Figure A.3 Southern Ute Reservations from 1879 to 1894 (Thompson 1981)

A subsequent bill, Senate Bill No. 1916, continued relocation efforts and proposed that the Southern Utes be moved from Colorado to San Juan County, Utah (Figure A.4). This bill did not pass but was instrumental in future negotiations, including two bills that proposed Ute relocation to Utah. Neither of these bills passed, however, some content was included in an unrelated bill regarding American Indians in Montana that did pass in Congress. As a result, three government officials were appointed to negotiate the approved relocation of the Southern Utes to San Juan County, Utah. In 1887, the three appointed officials arrived at the Southern Ute reservation and accompanied Southern Ute leaders to their proposed reservation in Utah. Conflict ensued, resulting in the death of a Capote Ute; the remaining Capotes returned home. When the party reached Carlisle Ranch, the Southern Ute leaders agreed to relocate to this proposed reservation (Thompson 1981).

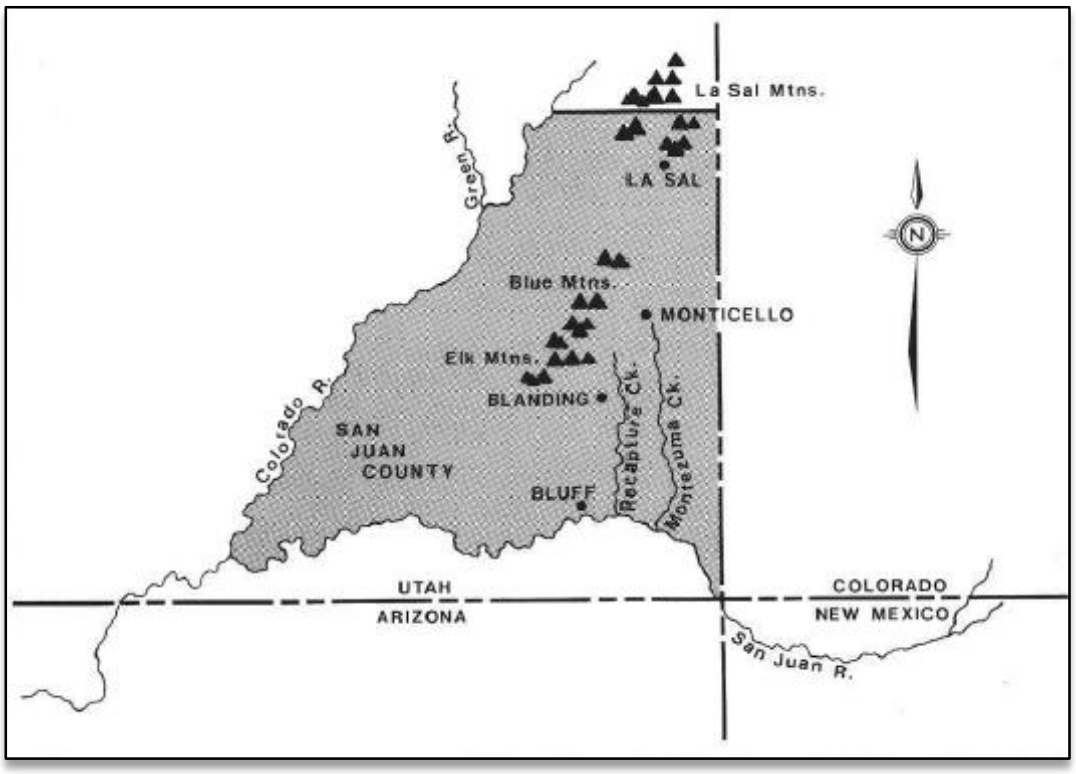


Figure A.4 Proposed Southern Ute Reservation in San Juan County, Utah, 1887 (Thompson 1981)

Upon returning to the agency, the new agreement was signed. In this agreement, the reservation boundary was reduced from the original boundary proposed in Senate Bill No. 1916 (Figure A.5) (Thompson 1981). The new boundaries were moved south of the La Sal Mountains. This agreement also allotted, "$50,000 in ten annual payments, $20,000 worth of sheep, a new agency, and permission to hunt on and around the unoccupied land of the La Sal Mountains" (Thompson 1981:198).

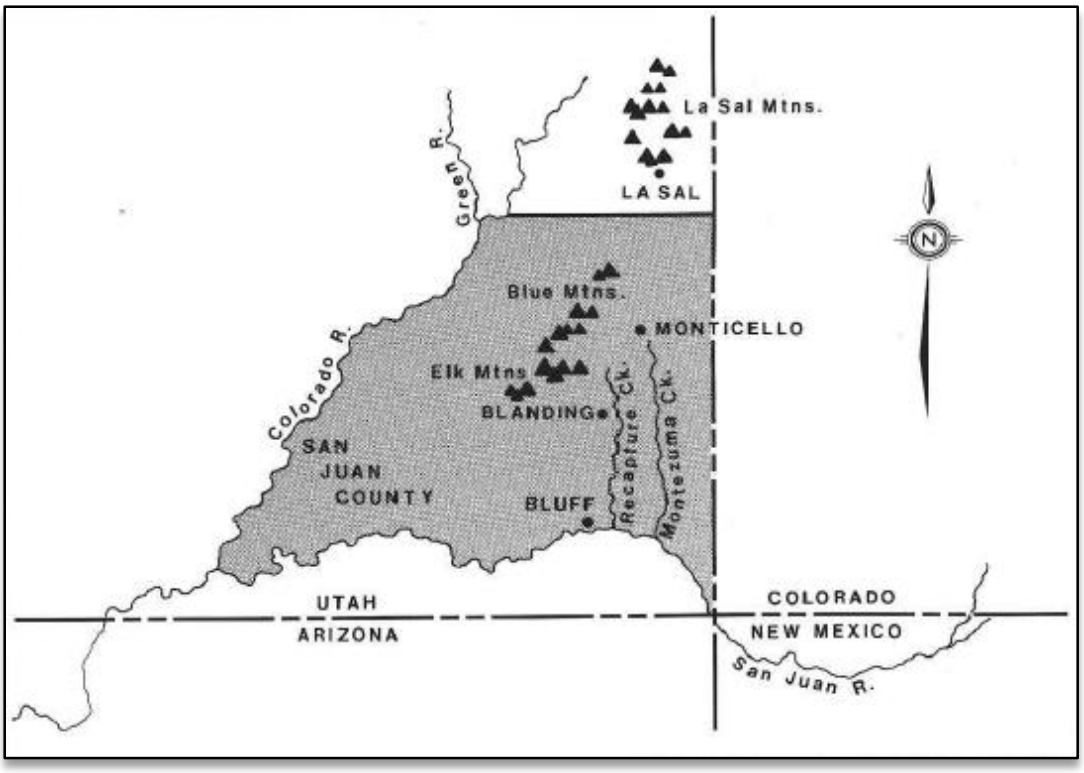


Figure A.5 Proposed Southern Ute Reservation in San Juan County, Utah, 1888-89 (Thompson 1981)

Following the approved reservation proposal, settlers and ranchers of San Juan County, Utah, began to oppose this action. Many of these individuals wrote letters to congress opposing the move. Among the arguments presented in opposition of the relocation, the strongest was by the Indian Rights Association representative C. C. Painter, who argued that similar conflicts that led to the relocation of the Southern Utes would continue between the Southern Ute and ranchers and farmers around the La Sal Mountains (Thompson 1981). After much debate, it was determined that the efforts to relocate the Southern Ute reservation were "impractical, much too expensive, and violated both the intent and practice of national American Indian policy," (Thompson 1981:201). Land disputes continued and in 1894 House Committee on Indian Affairs member Andrew J. Hunter proposed voiding the 1880 Ute Agreement and opening reservation lands to settlement; the bill passed in 1899 (Thompson 1981).

Last Indian War of 1923

By the turn of the 20th century, Ute, Southern Ute, and Paiute reservations had been established throughout the southwest and Great Basin. Most native people were forcibly relocated to these reservations, however, some small bands maintained living within their traditional lands. Mancos Jim and his leading warriors, Posey and Polk, continued to live in southeast Utah with their band of Utes and Paiutes (Lacy and Baker 2014). Although they were able to evade relocation, conflicts between the band and Euro-American settlers escalated. These conflicts led to what is deemed as the Last Indian War, when Posey stood up against encroachment and relocation.



Figure A.6 Picture Identified as Posey and his Sons Heading to Thompson Springs (Schenck and the Museum of Moab 2013)

William Posey was a Paiute leader, belonging to a band of Utes and Paiutes called Bronco Indians due to their resistance of relocation to the Weeminuche reservation (Lacy and Baker 2014). Although they were able to resist relocation, Euro-American encroachment sparked conflict between the band and neighboring non-Indian communities. Grayson (now Blanding), Utah, was established in 1905, intruding on the band's hunting grounds; as a result, years of tension and violence ensued from both parties, which eventually led to the Last Indian War (NaNation 2000).

By 1923, occurrences of altercations between Posey and Euro-American settlers were at an all-time high. Though different sources give different accounts of the crime that took place, a group of young members of Posey's band was accused of an attack on a sheepherder camp. The boys willingly surrendered and stood trial, however, before they could be sentenced an incident took place between the sheriff and one of the boys (NaNation 2000, Lacy and Baker 2014). The boys returned to their band, where Posey led a final defense against the Euro-Americans. This conflict, which took place in February 1923, marked the end of the Last Indian War (NaNation 2000, Lacy and Baker 2014). Posey was shot during the incident. One month later, Posey's body was found. It is believed that he died of infection caused by the gunshot wound (NaNation 2000).

Indian Claims Commission

The Indian Claims Commission (ICC) was a judicial panel established under the Indian Claims Act in 1946. The purpose of the commission was to hear claims made by American Indians against the United States Government in regards to land rights. Land adjudication was based on aboriginal use, which is defined as the occupation of land at the time of United States cession (Oklahoma State University Library ICC: N.d.). Advice and testimony from expert

witnesses were recorded and evidence of aboriginal land use was presented to the commission. After counter arguments were presented, the commission ruled on each individual case and, where the commission saw fit, compensated tribes accordingly for these lands (Figure A.7) (Sutton 1985).

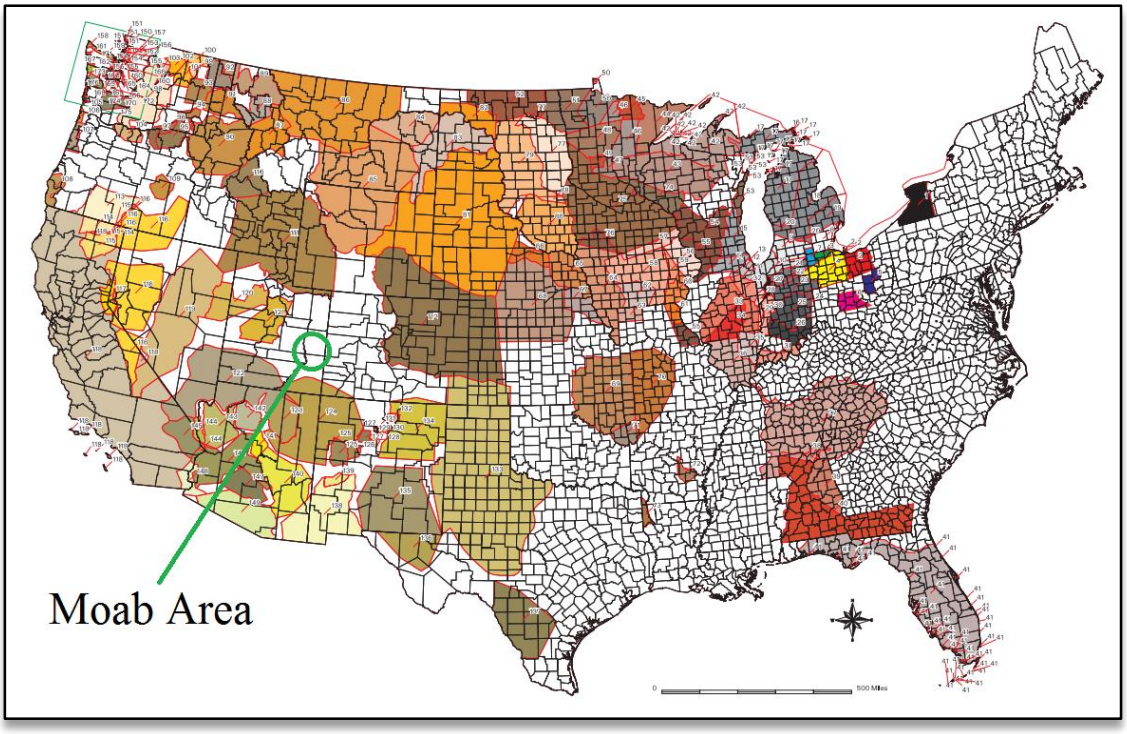


Figure A.7 American Indian Land Area Judiciously Established 1978 with Moab Area Highlighted (NPS N.d.)

The Moab area, as highlighted in Figure A.7, was not awarded to any tribes by the ICC. Sutton explains that the empty areas on the map reflect, "cases never heard, or those lost by tribes or dismissed by the ICC," (Sutton 1985:11). Evidence was examined to establish the presence of Seuvarits Utes in the Moab region, and the ICC states in Docket No. 44, "it is highly possible that [the Seuvarits] used the portion around the La Sal Mountains which is outside of the area claimed" (ICC Docket No. 44 1957:26). However, the presence within the Moab region was problematic for the ICC. In the document, it is argued that the Seuvarits used southeastern Utah as a region of refuge, not a primary subsistence area. More information on the region of refuge is available in the Ute Chapter of this report. Additionally, there was a lack of sound evidence that this area was exclusively used by Seuvarits. In Volume 5, Docket No. 44, the Uintah Ute Indians of Utah v. the United State of America, the final ruling of the ICC stated:

> It is not the desire of this Commission to ignore the recognized authorities in the field of ethnology. However, in considering the exhibits and testimony introduced in this case, we are unable to conclude that the plaintiffs have carried the burden of proof necessary to establish exclusive aboriginal use and occupancy of a definable area east of the Wasatch Mountains as claimed for the Seuvarits (ICC Docket No. 44 1957:26).

Though it was "highly possible that [the Seuvarits] used the portion around the La Sal Mountains which is outside of the area claimed" (ICC Docket No. 44 1957:26), the evidence was not strong enough to adjudicate the area. Despite this decision of the ICC to exclude the area east of the Wasatch Mountains as a Ute aboriginal area, there is an overwhelming amount of evidence that places the Seuvarits Utes in the Moab region.

Multiple sources provide documentation of previous American Indian occupation of the Moab region.

- Powell and Ingalls claimed that the Seuvarits inhabited an area between the Sanpete and Sevier valleys in western Utah, and around the Green and Colorado rivers in eastern Utah, around present day Canyonlands National Park (Fowler and Fowler 1971:98)

- Hodge (1907:514), in the Handbook of American Indians North of Mexico, places the Seuvarits in Castle Valley, just east of present day Moab.

- Swanton (1952:373) locates the Seuvarits in east central Utah, at Castle Valley and the headwaters of the San Rafael River.

- According to Simmons (2000:20), some of the Seuvarits went to the Uintah reservation while others went south to Arizona.

- Stewart accounts for some of the displaced Seuvarits that joined the Koosharem band of Southern Paiutes (Indian Claims Commission 1974).

As previously mentioned, encroachment and disease had diminished Ute populations and disbursed the remaining Seuvarits. According to ICC volume 5, Docket 44, some of the Uintah Utes are the descendants of Seuvarits Utes (ICC Docket No. 44 1957), which is confirmed by Hodge (Hodge 1907:514) and Simmons (2000:20), whereas Stewart accounted for some of the displaced Seuvarits to Southern Paiute bands (Indian Claims Commission 1974).

While the Moab area was not adjudicated by the ICC, this area has a long standing history of ties with multiple tribes. Disputes over American Indian occupation of the Moab area continue today, and this report aims to gain a better understanding of the connections associated tribes have to the region. These connections have lasted since time immemorial.

Discussion

The Moab area was documented by early Euro-American settlers as being located within Ute traditional territory. The area is also located on the Old Indian Trail at the American Indian Crossing of the Colorado River (AICC), which contributed to complex interactions between other tribes in the surrounding regions. After European contact, disease and displacement removed the Utes from their traditional lands and placed them on reservations. As demonstrated in this appendix, conflicts resulted in further displacement from and removal of reservations designated by agreement.

APPENDIX B
INVENTORY OF TRADITIONAL AND CONTEMPORARY USE PLANTS IDENTIFIED BY TRIBAL REPRESENTATIVES AT ARCHES NATIONAL PARK

This appendix is a compilation of data for the identified tribal and pueblo traditional and contemporary use plants found growing at Arches National Park (Arches NP). The purpose of this appendix is to provide a comprehensive and easily accessible plant guide for use plants growing in Arches NP (Figure B.1). The plants are arranged alphabetically by scientific name. Columns within the table list each of the four ethnic groups participating in the study and a mark is placed in each tribal or pueblo column if visiting representatives noted it as an ethnobotanical resource.



Figure B.1 Southern Paiute Representatives Demonstrating How to Make Rope using Dogbane

The data presented in this appendix was provided by tribal and pueblo representatives during their field visits in the Arches NP Ethnographic Overview and Assessment (EOA) study. However, some of the information was supplemented by the existing ethnographic sources that offered detailed ethnobotanical use information.

	Scientific Name	**Common Name**	Hopi	Paiute	Ute	Zuni
1	*Allium ssp.*	Wild Onion		X		
2	*Amaranthus ssp.*	Pigweed				X
3	*Amelanchier utahensis*	Utah Serviceberry		X		
4	*Apocynum* ssp.	Dogbane		X		
5	*Artemisia ssp.*	Sagebrush	X	X	X	X
6	*Asclepias* ssp.	Milkweed		X		
7	*Astragalus mollissimus*	Wooly Locoweed	X			
8	*Astragulus ssp.*	Astragulus		X		
9	*Atriplex canescens*	Fourwing Saltbush	X			
10	*Atriplex ssp.*	Saltbush				X
11	*Castilleja* ssp.	Indian Paintbrush	X	X		
12	*Cercocarpus ssp.*	Mountain Mahogany				X
13	*Chrysothamnus ssp.*	Rabbitbrush	X	X	X	X
14	*Cleome* ssp.	Beeplant	X			
15	*Coleogyne ramosissima*	Blackbrush		X		X
16	*Cryptantha flava*	Plateau Yellow Cryptanth	X			
17	*Datura wrightii*	Sacred Datura/Angel's Trumpet		X		
18	*Ephedra* ssp.	Indian Tea	X	X	X	X
19	*Equisetum* ssp.	Horsetail		X		
20	*Eremocrinum albomarginatum*	Sand Lily		X		
21	*Eriogonum inflatum*	Desert Trumpet	X	X		
22	*Fraxinus anomala*	Singleleaf Ash		X		
23	*Gutierrezia* ssp.	Snakeweed	X	X		
24	*Juniperus ssp.*	Juniper	X	X	X	X
25	*Mentzelia multiflora*	Blazing Star		X		
26	*Oenothera* ssp.	Evening-primrose		X		
27	*Opuntia ssp.*	Prickly Pear Cactus	X		X	
28	*Oryzopsis hymenoides*	Indian Ricegrass	X	X	X	X
29	*Penstemon* ssp.	Penstemon		X		
30	*Phragmites australis*	Common Reed				X
31	*Physaria newberryi*	Newberry's Twinpod	X			
32	*Pinus edulis*	Two-needle Pinyon		X	X	X
33	*Poliomintha incana*	Purple Sage	X	X	X	X
34	*Populus ssp.*	Cottonwood	X	X	X	X

	Scientific Name	Common Name	Hopi	Paiute	Ute	Zuni
35	*Purshia mexicana*	Cliff-rose	X	X		
36	*Quercus ssp.*	Oak	X	X	X	
37	*Rhus trilobata*	Skunkbush Sumac	X	X	X	
38	*Salix ssp.*	Willow	X	X	X	X
39	*Sambucus ssp.*	Elderberry		X		
40	*Sarcobatus vermiculatus*	Greasewood	X	X	X	
41	*Sphaeralcea ssp.*	Globemallow	X	X		X
42	*Sporobolus cryptandrus*	Sand Dropseed	X			
43	*Stanleya pinnata*	Prince's Plume	X	X		
44	*Stipa comata*	Needle-and-thread Grass	X			
45	*Typha ssp.*	Cattails		X		X
46	*Yucca ssp.*	Yucca	X	X		X
Total Plants Identified By Tribe			26	34	13	17

Table B.1 Comprehensive Plant List for Arches NP EOA Study

It is important to note that the participating tribal or pueblo representatives visited Arches NP at different times of the year, therefore the seasonal availability of plants varied greatly for each group. The following table is by no means exhaustive of all the ethnobotanical resources utilized by the participating tribal or pueblo communities.