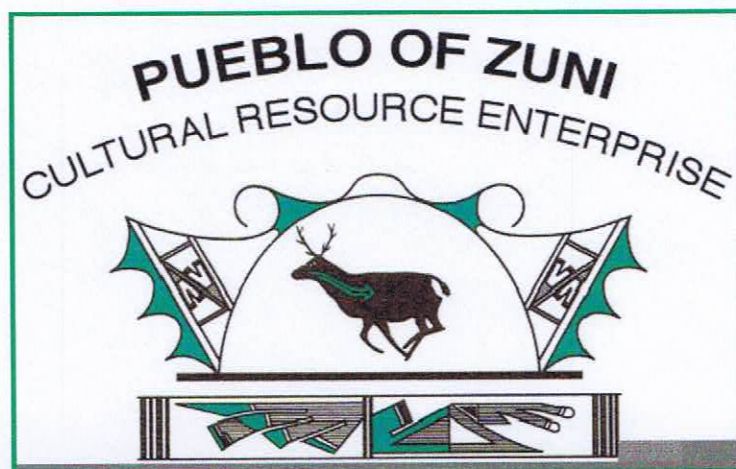


Pueblo of Zuni
2016 Cultural Resource Monitoring of
The Colorado River Ecosystem
Through Grand Canyon



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Executive Summary

Between 20 and 29 April 2016, the Zuni Cultural Resource Enterprise, on behalf of the Pueblo of Zuni, conducted a film documentation and monitoring river trip on the Colorado River through Grand Canyon from Lees Ferry to Diamond Creek. The purpose of the river trip was to provide the Zuni religious leaders and cultural advisors an opportunity to inspect the health of the Colorado River ecosystem through Grand Canyon as part of the long-term monitoring program that is associated with the Glen Canyon Dam Adaptive Management Program (GCDAMP). An additional purpose of this river trip was to generate film footage documenting the importance of the Grand Canyon, Colorado River, and Little Colorado River, and Zuni ancestral sites from a Zuni perspective as part of a long-term educational program to be use in the Zuni school system. The Zuni Cultural Resource Enterprise, on behalf of the Pueblo of Zuni, is funded (Contract R13AP40003) by the Bureau of Reclamation, Upper Colorado Regional Office, through the Zuni Cultural Resource Enterprise, to implement the Zuni monitoring program. The Bureau of Reclamation is also providing funding through contract R13AP40003 to support the filming in the Grand Canyon. The 2016 Zuni monitoring and filming river trip was conducted under the authority of the Grand Canyon National Park permit GRCA-2016-SCI-0010.

This report presents the findings of the 2016 river trip, the impressions of the Zuni religious leaders and cultural advisors on the health of the resources that comprise the Colorado River ecosystem, and Zuni recommendations to the Department of the Interior (Bureau of Reclamation and Grand Canyon National Park) concerning management of the cultural, physical and biological resources located within the Colorado River corridor ecosystem through Glen and Grand Canyons. This report also describes film documenting activities conducted during the Zuni river trip through Grand Canyon. In addition, three (3) days of producing film footage documenting the Zuni cultural landscape between Zuni Pueblo and the Grand Canyon occurred between 17 and 19 April 2016 and are described in this report. This report represents a material deliverable to the Bureau of Reclamation as part of Reclamation's funding to the Zuni Cultural Resource Enterprise (ZCRE) for participation in the Glen Canyon Dam Adaptive Management Program and is a progress report detailing activities accomplished toward the completion of the Zuni Associative Values Project.

Six (6) Zuni representatives participated in the 2016 Zuni monitoring river trip representing 3 medicine societies, 5 kiva groups, and the Rain priesthood. The Zuni representatives ranged in age from 48 to 63 with a mean age of 53.2 and a median age of 55.5.

During the 2016 Colorado River monitoring trip, Zuni river trip participants stopped at 14 places of traditional cultural importance for the primary purpose of film documenting the importance of these places as part of the Zuni associative values project. This report briefly describes the filming of the Zuni cultural advisors at important places on the Zuni cultural landscape between the Pueblo of Zuni and the Grand Canyon. The report also describes the Zuni filming activities during their 2016 river trip and the 14 locations within the Grand Canyon at which filming occurred for the Zuni associative values project.

As a result of the Zuni monitoring trip the following eight (8) management recommendations are provided to the Bureau of Reclamation and Grand Canyon National Park. The first two recommendations are directed toward the Bureau of Reclamation and involve the engagement of the Zuni cultural advisors in the ethnographic and archaeological research for the purpose of interpreting archaeological resources in Grand Canyon. These two recommendations are then followed by six management recommendations that are primarily directed to the Grand Canyon National Park Service regarding the management of natural and cultural resources located within the Grand Canyon.

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Grand Canyon is sacred and is where many spirits of Zuni ancestors reside.

George Yawakie 2011

INTRODUCTION

Between 20 and 29 April 2016, the Zuni Cultural Resource Enterprise, on behalf of the Pueblo of Zuni, conducted a monitoring river trip on the Colorado River through Grand Canyon from Lees Ferry to Diamond Creek. The purpose of the river trip was to provide the Zuni religious leaders and cultural advisors an opportunity to inspect the health of the Colorado River ecosystem through Grand Canyon as part of the long-term monitoring program that is associated with the Glen Canyon Dam Adaptive Management Program (GCDAMP). An additional purpose of this river trip was to generate film footage documenting the importance of the Grand Canyon, Colorado River, and Little Colorado River, and Zuni ancestral sites from a Zuni perspective as part of a long-term educational program to be use in the Zuni school system. The Zuni Cultural Resource Enterprise, on behalf of the Pueblo of Zuni, is funded (Contract R13AP40003) by the Bureau of Reclamation, Upper Colorado Regional Office, through the Zuni Cultural Resource Enterprise, to implement the Zuni monitoring program. The Bureau of Reclamation is also providing funding through contract R13AP40003 to support the filming in the Grand Canyon. The 2016 Zuni monitoring and filming river trip was conducted under the authority of the Grand Canyon National Park permit GRCA-2016-SCI-0010.

This report presents the findings of the 2016 river trip, the impressions of the Zuni religious leaders and cultural advisors on the health of the resources that comprise the Colorado River ecosystem, and Zuni

recommendations to the Department of the Interior (Bureau of Reclamation and Grand Canyon National Park) concerning management of the cultural, physical and biological resources located within the Colorado River corridor ecosystem through Glen and Grand Canyons. This report also describes film documenting activities conducted during the Zuni river trip through Grand Canyon. In addition, three (3) days of producing film footage documenting the Zuni cultural landscape between Zuni Pueblo and the Grand Canyon occurred between 17 and 19 April 2016 and are described in this report. This report represents a material deliverable to the Bureau of Reclamation as part of Reclamation's funding to the Zuni Cultural Resource Enterprise (ZCRE) for participation in the Glen Canyon Dam Adaptive Management Program and is a progress report detailing activities accomplished toward the completion of the Zuni Associative Values Project.

PURPOSE AND METHODS

The primary purpose of the Zuni monitoring river trip is to provide the Zuni Cultural Resource Advisory Team (ZCRAT), other Zuni religious leaders, and cultural advisors an opportunity to inspect ancestral archaeological sites and Zuni traditional cultural properties that may be experiencing impacts from erosion, presence of humans, other natural forces, and/or flows released from operations of Glen Canyon Dam. The Zuni monitoring program is designed to collect empirical data that is utilized in identifying adverse effects resulting from these forces on Zuni traditional cultural properties situated along the Colorado River corridor through Grand Canyon. The Zuni monitoring data is employed to guide measures taken by the federal agencies to preserve Zuni traditional cultural properties in place for their continued use by ancestral and contemporary Zunis, and future Zuni generations. Each annual Zuni monitoring river trip provides the Zuni representatives an opportunity to identify and ascertain the overall health and abundance of certain plant and animal communities of traditional cultural importance. It also provides an opportunity for the Zuni representatives to collect certain culturally important plants, minerals and water from springs and other areas for religious and ceremonial purposes.

Additionally, and perhaps more importantly, the annual monitoring river trips provide the Zuni religious leaders, Rain priests, Bow priests, Kiva members and members of medicine societies an opportunity to directly experience the place where the *A:shiwi* emerged (Ribbon Falls) from the fourth underworld into this world and ascended out of the Grand Canyon in search of the Middle Place. The cultural, biological, and physical resources located within the Grand Canyon are held most sacred by the Zuni as a result of their association with the Zuni emergence, migrations, and enduring ceremonies. Zuni *weltanschauung* is a relational one that presumes a personal responsible relationship with all life forms (i.e., animal and plant) that exist within the natural world. Embedded within this perspective is a Zuni mindfulness of honoring the primacy and validity of direct personal interaction with the ecosystem. This spirit of deliberate care is one of the hallmarks of the Zuni ethic of environmental stewardship. It is through this direct personal interaction with the Colorado River ecosystem through Grand Canyon that provides the Zuni monitoring team with its foundation for understanding and evaluating the health and well-being of the Colorado River ecosystem through Grand Canyon.

In addition to visiting and making observations regarding the wellbeing of natural and cultural resources of traditional Zuni importance within the Grand Canyon, the annual Zuni monitoring river trip provides the Zuni Cultural Resource Enterprise with vital information regarding the condition of ancestral archaeological sites and Register-eligible Zuni traditional cultural properties located along the Colorado River corridor within Glen and Grand Canyons. This information is essential to the Pueblo of Zuni's participation, as a consulting signatory, in the Programmatic Agreement on the Operations of the Glen

Canyon Dam (GCDPA) pursuant to the National Historic Preservation Act of 1966, as amended and the Bureau of Reclamation's compliance responsibilities and as a stakeholder in the GCDAMP.

In the past, the Zuni monitoring program has annually identified archaeological sites to be assessed as Zuni traditional cultural properties, defined specific sampling activities within designated archaeological sites, and identified which Zuni traditional cultural properties were to be monitored. Listing of proposed Zuni TCPs, archaeological sites, and sampling locations proposed for visitation during a river trip are provided to the Grand Canyon National Park Service as part of their permitting process and to the Grand Canyon Monitoring and Research Center who make possible the river trip. Archaeological sites of cultural importance to the Zuni were visited and inspected by the 2016 Zuni monitoring river trip for the purpose of assessing their condition from a Zuni traditional cultural perspective. These places were also identified for utilization as important locations to film document Zuni religious leaders because of their ability to convey the Zuni emergence and migration history.

Then, Now, and Forever: The Zuni Grand Canyon Film Project

In order to mitigate, in part, the adverse effects caused by operations of Glen Canyon Dam on those characteristics that make Zuni ancestral (archaeological) sites Register-eligible under criteria A and B, Reclamation consented to fund a Zuni effort to document the importance of the Grand Canyon, the Colorado and Little Colorado Rivers, and Zuni ancestral sites from a Zuni perspective as part of an educational development program for use in the Zuni school systems, for the general Zuni public, and stakeholder participants in the Glen Canyon Dam Adaptive Management Program. Successful completion of this project is envisioned as achieving, in part, Reclamation's Section 106 responsibilities for mitigating potential adverse effects caused by Glen Canyon Dam operations to Zuni traditional cultural properties in Grand Canyon.

In 2015, Reclamation provided funding to ZCRE for the purpose of implementing the Zuni Grand Canyon Film project (also known as the Zuni Associative Values Project). ZCRE shortly thereafter entered into a subcontractual relationship with Skyship Films, an independent film production company. Daniel Byers, Director, Skyship Films traveled to Zuni in January of 2016 to work with the Zuni Cultural Resource Advisory Team and ZCRE in completing phase 1 of the project consisting of developing the story board, script, and shot list. During this time the central Zuni story and themes to be conveyed in the film were identified, discussed, and finalized. Additionally, integration of the Zuni Map Art project was considered and determined appropriate especially through the demonstration of the cultural contrast between a USGS topographic quadrangle representation of space with that of the Zuni cultural perspective of space.

The Zuni themes and storyboard determined by the Zuni Cultural Resource Advisory Team are presented below. The locations for filming were also discussed and identified, both within the Grand Canyon and in important places between Zuni Pueblo and the Grand Canyon that distinguish the Zuni cultural landscape. Zuni individuals to be interviewed and filmed, both on the river and at places between Zuni and Grand Canyon, were identified.

Kurt Dongoske initiated communication with the Grand Canyon National Park Service and the Coconino National Forest to obtain the necessary permits for filming in the Grand Canyon and on adjacent forest service lands. Permission and the appropriate permits were received by ZCRE from the Grand Canyon National Park Service and the Coconino National Forest (Temporary Special Use Permit SR3Coconino1604140360).

Major Film Themes:

Establishment of Origins

- Asserting Zuni historic connection as an affirmation tool for Zuni's place in the land.
 - Other groups are claiming a historic connection to the Grand Canyon and thus being given special consideration regarding its treatment and management.
 - Putting more Zuni information out has led to more recognition and interest by Federal agencies. It's a bold step for Zuni that must be taken carefully, but it is bearing fruit.
- Examples of Zuni historic connection as first people in the Grand Canyon.
 - Zuni oral history establishes primacy connections and is directly substantiated by archaeological sites in the Grand Canyon.
 - Cushing's documentation of a trip to gather Hematite with Zuni religious leaders is further historic evidence of the unbroken Zuni connection. Cushing's account of the Abode of Souls.
 - Zuni are still in possession of material and spiritual artifacts from the Grand Canyon that were created soon after emergence.
 - The rain dance is a reenactment of the migration time.
- Archaeology and origins
 - Scientific studies corroborating the Zuni history by substantiating their original presence; for example, the presence of turquoise predating other tribes.

Emergence and Migrations

- Emergence from Ribbon Falls, the Zuni origin point, to which the Zuni annual migration trip returns.
- Emergence is depicted throughout Grand Canyon in petroglyphs and pictographs, such as the Whitmore Wash panel.
- Recent consultation efforts by Zuni religious leaders confirms that the Zuni aboriginal lands far exceed what was previously known by Anglo-Americans (federal agencies, museums, universities, state agencies, archaeologists, etc).
- After emergence, the water strider gave Zuni instructions on how to find the Middle Place – only there would it drop its heart. Other Zuni aboriginal sites represent the migration search for that place, and stops along the way. Ancient trails are umbilical connections between these sites.
- Three groups separated at Chavez Pass, going South, North, and East.
- Habitation sites and petroglyphs were left by the ancestors to educate their descendant children.

Stewardship and Environmental Ethics

- The Zuni relationship to the Grand Canyon is a very personal one (personal sense of stewardship), and the land and resources should be treated with proper respect.
- Interference with the natural landscape.
 - The unsubstantiated killing of trout. Reclamation and Park Service saw it as protecting endangered native fish and restoring natural habitat, but failed to fully comprehend the Zuni perspective: they were introducing death into the confluence, which is a place of Life. Reclamation and Park Service demonstrated a lack of proper respect for life.
 - The damming of rivers, done without consultation of the Zuni, has damaged Zuni lives and livelihoods.
 - Proposed Uranium mining at South Butte could poison the Grand Canyon aquifers. Water used in Zuni comes from the aquifers it threatens.

- There has been significant damage to archaeological (ancestral) sites that are open to the public by visitors who do not properly respect these places, and better management and visitor education about the Zuni connection to the river by the National Park Service is needed.
 - Zuni chose not to exploit the coal near Zuni Salt Lake in order to stay true to their ethical treatment of mother earth.
 - Navajo attempts to build an escalade for tourists at the confluence in Grand Canyon; capitalistic enterprise offensive to Zuni sensibilities.
- Water and springs
 - “Nothing is stronger than water” – water is life, through its never-ending process of circulation from your brow to the clouds to the rain to the plants.
 - Water is also a taker of life if you don’t respect it. Respect it as though it was sitting with you here, water is alive.
 - Many Zuni ceremonies are done with spring water, and offerings are made to active springs to continue forever. Spring water is used to wet the paint for prayer sticks to give them spiritual life.
 - Spring water is used in the purification of homes and people, as medicine by medicine men, and for fields and gardens.
 - From the Green River to the Gulf of Mexico, the Colorado River is a Zuni TCP, all the dams in that area affect it.

Cultural Knowledge

- Sacred plants, animals, minerals, and water from the Grand Canyon are all connected to Zuni ceremonial practice.
- Plants (such as willow, phragmites, mahogany), animals, and minerals collected in the Grand Canyon are essential parts of Zuni ceremonies.
 - Collecting of materials is always done with an offering to show respect for living beings and respect for mother earth.
 - The plants and trees used to come up to this world (Spruce, Pine, Aspen, phragmites) are still being used in ceremonies today, and historically in the construction of houses.
 - The alkaline soda paste at the Confluence.
- Animals and ancestors
 - Ancestors come back as deer and elk. If killed and brought into a house, that ancestor is coming to visit, and must be respected. They are often dressed in traditional attire. No part of the animal is wasted from a hunt.
 - Deer and bighorn sheep in the Grand Canyon are greeted in Zuni language.
- *Etdo:we* is the Zuni word for ancestor. The Zuni heritage sites in the Grand Canyon have many Anglo-American names (Fremont, Salado, Anasazi, etc.) but they are Zuni ancestors and should be called by the correct Zuni word.
- On emergence there were no clans – these were given to the Zuni later to strengthen their people.
 - Some discussion of clans could be given to educate.

Ongoing Ceremonies, Living Connection

- The contemporary Zuni connection to the Grand Canyon has never been broken.
 - Because outside people and agencies don’t know about the Zuni connection, they have ignored it in actions and policy. This film can be a tool to educate and inform them, and

reinforce the need for a Zuni perspective in how the Grand Canyon is treated and managed.

- Rivers
 - Connecting Zuni origins in the Grand Canyon to the Middle Place are like blood in the veins connecting to the Heart. The Zuni rivers confluence with the Little Colorado River (LCR) and the LCR's confluence with the Colorado River in Grand Canyon are a spiritual umbilical connection between Zuni Pueblo and the place of emergence.
 - Even with the Zuni River dried up, the prayers connecting the Pueblo of Zuni to the Grand Canyon are still performed.
 - Zuni were never thanked for waters at Founders Day celebration by the Mormons, who dammed the Zuni River, living in Ramah.
- Women and the Grand Canyon
 - Women are unable to go to the Grand Canyon area, but could still experience it through this film.
 - Historical footage of bread making could be shown alongside remains of ancestral bread making structures in the Grand Canyon
- Education
 - The main focus for this film is the Zuni youth, as a cultural and heritage educational tool.
 - Not only young but many older Zuni people have been losing cultural knowledge and would benefit from this film.
 - Just as past photographs and documentation are helping modern Zuni rediscover parts of their heritage, this film can serve to help educate in the future.

Six (6) Zuni representatives participated in the 2016 Zuni monitoring river trip representing 3 medicine societies, 5 kiva groups, and the Rain priesthood (Figure 1). The Zuni representatives ranged in age from 48 to 63 with a mean age of 53.2 and a median age of 55.5 (Table 1).

Name	Age	Religious Societal Affiliation	Religious Position
Ronnie Cachini	50	Wide Wall Kiva/Eagle Plume Down/Lt. Rain Priest	Leader/Member
Octavius Seowtewa	63	Galaxy Society (ZCRAT)/Eagle Down Society/Wide Wall Kiva	Leader/Member/Member
Eldred Quam	54	Small Kiva/Head Kiva	Spokesperson
Cornel Tsalate	51	Eagle Down/Brain Kiva/Ant society	Leader/Member/Leader
Titus Ukestine	48	Koyemshi Group/Corn Kiva	Member/Member
Jim Enote	Unk	A:shiwi A:wan Museum and Heritage Center/Small Kiva	Director/Member

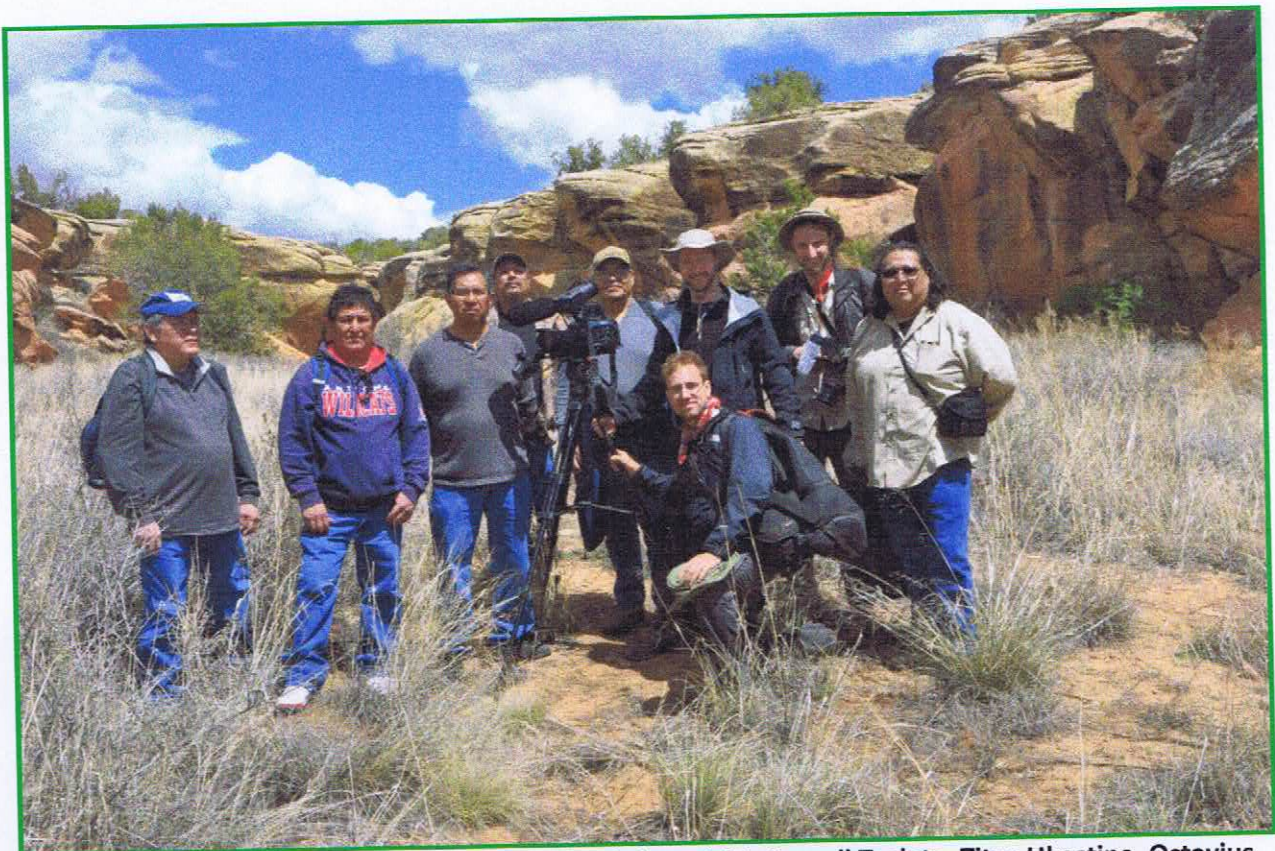


Figure 1. Zuni 2016 River Trip Participants. From left to right: Cornell Tsalate, Titus Ukestine, Octavius Seowtewa, Eugene Bowekaty (did not go on river trip), Eldred Quam, Zachary Ludeschar, Sam Eilertsen , Ronnie Cachini and Daniel Byers (kneeling). Picture taken in Hardscrabble Wash by K. Dongoske.

Accompanying the Zuni cultural advisors were Daniel Byers, Director, Zachary Ludeschar, Director of Photography, and Sam Eilertsen, Production Coordinator, Camera of Skyship Films. Skyship Films was subcontracted by ZCRE to produce a film in cooperation with the Zuni Cultural Resource Advisory Team about the importance of the on-going relationship between the Zuni people and Grand Canyon. Also, accompanying the Zuni cultural advisors was Ms. Jan Balsom, Acting Director, Science Center, Grand Canyon National Park. The Zuni monitoring river trip was carried out by Mr. Kirk Burnett, boatman, and Ms. Tiffany Cooper, boatman assistant, both from the Grand Canyon Monitoring and Research Center.

The Grand Canyon and all the resources within it are culturally significant to the Zuni people (*A:shiwi*). The following is a brief narrative summary of the history of the Zuni ties to the Colorado River corridor through Grand Canyon, the Little Colorado River and how this traditional history is intertwined with Zuni cultural beliefs to establish the appropriate context for understanding the Zuni perspectives provided in this report.

ZUNI AND THE SACRED GRAND CANYON LANDSCAPE

From the time that the Zunis (*A:shiwi*) emerged on to the surface of the Earth, the Grand Canyon, and the Colorado River have been sacred. According to the narratives that describe the emergence of the Zuni people (*A:shiwi*) from Earth Mother's fourth womb, sacred items that identify the Zuni people, the

Etdo:we, *Kya Etdo:wa*, *Chu Etdo:wa*, and *Mu Etdo:wa/La Etdo:wa* (sacred bundles) and *Eledeliwe*, were the first to emerge; the people then came out into the sunlight world at a location in the bottom of the Grand Canyon near present day Ribbon Falls. The creation narratives also describe the Zunis' (*A:shiwi*) subsequent search for the center of the world, *Idiwan'a* (the Middle Place). The people moved up the Colorado River and then up the Little Colorado River, periodically stopping and settling at locations along these rivers. At the junction of the Little Colorado and the Zuni Rivers, many of the supernatural beings, or *Koko*, came into existence. After a long search the Zunis located the middle of the world and settled there. The Middle Place is located in today's village of Zuni. From the Pueblo of Zuni, the *A:shiwi* continue to maintain very strong cultural and spiritual ties to the Grand Canyon, Colorado River and the Little Colorado River because of their emergence and migration narratives.

The creation and migration narratives of Zuni (*A:shiwi*) are learned by rote, word for word, and passed on from generation to generation exactly as they were told hundreds of years ago. Anthropologists have collected portions of these narratives over the past hundred years, transcribing the oral recitation. In so doing, scholars have marveled at the fact that the narratives have remained virtually unchanged over so many years. These narratives not only describe the locations of shrines and especially sacred areas, but also explain why areas such as the Grand Canyon are sacred. Zuni prayers often contain long lists of sacred areas, shrines, springs and other places of religious significance to the Zuni people.

The practice of Zuni religion is not limited to one day a week. Zunis have an amazingly complex organization of clans, medicine societies, kiva groups and priesthoods; all interlocking and overlapping. Similarly, each part of the Zuni universe is interconnected. Plants, animals and colors are associated with the various cardinal directions. Minerals, clay, rocks, plants and water are used in prayers to the supernatural beings. Prayers are accompanied by offerings of prayer sticks, which are made with the feathers of many birds attached to carved sticks, which in turn are painted with ceremonial pigments. It is no wonder, then, that virtually the entire environment at the bottom of the Grand Canyon is sacred to the Zuni. The animals, the birds, insects, rocks, sand, minerals, plants and water in the Grand Canyon all have special meaning to the Zuni people.

Trails used by the Zunis for religious purposes have special significance and are cared for by means of particular blessings and prayers. The trail from Zuni to the Grand Canyon thus has a continuously important religious meaning to the Zuni people. Once a trail is blessed, it remains blessed permanently. The Zuni people have important concerns regarding the ancient Zuni trail from their village to the bottom of the Grand Canyon.

To a great extent Zuni ceremonial activity is carried out in order to ensure adequate rainfall. Zunis pray not only for their own lands, but for all people and all lands. Their prayers are especially aimed at bringing precipitation to the Southwest. In order to successfully carry out the prayers, offerings and ceremonials necessary to ensure rainfall for crops and a balanced universe, Zunis must collect samples of spring water, plants, soil, rocks and other materials from various locations. Samples of spring water from the bottom of the Grand Canyon carried in sacred gourds during Zuni ceremonials have special significance to Zuni religious life and a very special meaning to the Zuni people.

In summary, the Zuni River, Zuni Heaven (*Ko'tu:wala:wa*), the Little Colorado River, the Colorado River and the Grand Canyon have been important to Zuni culture and religion for many centuries. Zuni religious beliefs, narratives, ceremonies and prayers are intrinsically tied to the entire ecosystem of the Grand Canyon, including the Zunis' familial relationship with the birds, animals, soils, rocks, vegetation and water. The Grand Canyon is very sacred and the Zuni people are concerned with activities that may

affect the resources in this sacred place. Similarly, the Zuni people are concerned about activities that take place within the Grand Canyon that may have an impact on Zuni.

TRADITIONS AND PRACTICES OF THE ZUNI PEOPLE (A:SHIWI)

The Zuni beliefs, customs and traditional values originated subsequent to the creation of the world during and after the emergence of the *A:shiwi* from Mother Earth's womb. Zuni culture through its religion exists to be in harmony with the natural elements of Mother Earth and to provide fertility and welfare for the Zuni people. Zuni traditional and religious leaders take on the responsibility of carrying out the intricate rituals and ceremonies that are the framework of Zuni traditions and practices, but only after many long years of preparation and training.

These traditions and practices have been handed down through oral teachings over many generations from the ancestors. The intricate rituals and ceremonials performed at present day Zuni pay reverence to these ancient ancestral sites, shrines and other sacred places in the context of spiritual associations. Even if these places are over a hundred miles away, they are no less significant than those within proximity that are used on an annual, seasonal or intermittent basis.

All Zuni ancestors play a tremendously significant role in Zuni culture in that present day Zunis request assistance and guidance from them in the course of their daily life. Zuni ancestors, following their trails, travel to Zuni along with the rain clouds that provide the sustenance for all things that live on the earth. The homes, shrines and other materials of the Zuni ancestors must remain undisturbed so that they may fulfill the purpose for which they were placed on the landscape. Disturbance to burials, cultural items, and traditional cultural places disrupts the balance of the universe, Zuni traditional cultural values, and the ability of the Zuni ancestors to fulfill their important role.

ZUNI CULTURAL AFFILIATION

The Pueblo of Zuni claims cultural affiliation to all prehistoric and many historic properties throughout much of the Southwest region of the United States. Cultural affiliation claims to all prehistoric cultures and their properties are based on Zuni traditional history of ancestral Zunis migrating and settling throughout this geographical area in their search for *Idiwan'a*, the Middle Place of the world, which is now Zuni Pueblo (Statement of Cultural Affiliation dated July 11, 1995; revised 11/21/97). Thus, traditional history of the Zuni people provides the cultural context and basis for understanding Zuni traditional cultural properties (TCP's).

The *A:shiwi* (or Zuni) trace the search for *Idiwan'a* from the origin point, *Chimik'yanakya de'a* (Ribbon Falls in Grand Canyon). The ancestral Zunis, collectively known as the *Enodekwe*, embarked from the origin point and left many markers of their passing. These markers consist of the trails, habitation sites, campsites, burials, sacred shrines and other offering places established during the migration epoch. During their ancient journeys, specific events occurred during which ancestral Zunis named mountains, buttes, springs and other natural landmarks. These places remain rooted in Zuni's traditional history and culture (i.e., songs, prayers, and ceremonies since time immemorial).

The *A:shiwi* began their journey throughout Arizona, New Mexico, Utah, and Colorado in search of *Idiwan'a*, the Middle Place of all oceans of the world, the middle of all heavens of the universe. They traveled and settled in the deserts and canyon lands of the Southwest leaving behind the archaeological sites and sacred shrines to which they claim affinity today. The *A:shiwi* settled in places for four days,

four days meant four years or four hundred years. From the place of emergence, the *A:shiwi* journeyed to the top of the San Francisco Peaks and there they received medicinal plants to assist them in their search for the Middle Place. They continued eastward and settled for awhile at *Kumanchi An:ahlakwa* (Chavez Pass). This is the place where the *A:shiwi* separated into three groups.

At *Kumanchi An:ahlakwa*, an ear of corn and two eggs were offered to the *A:shiwi*. Those that picked the macaw egg were given half of an ear of corn and followed the macaw southward in search of the Middle Place to the "land of the everlasting sun." They were asked to send word to the *A:shiwi* that picked the raven egg when they had indeed found the Middle Place, so that if one group found the Middle Place they would reunite. These people that journeyed south are the Zuni ancestors who reside in Mexico and South America and are known as *Che:be:ye:nule:kwe*, *Ts'ilubiya:kwe*. In part, these people also represent the cultures that are defined by modern day archaeologists as Hohokam, Mogollon, Mimbres and Salado. They are referred to by the *A:shiwi* as *Enoh:de:kwe ishade:ma dek:kyt:na:kwin ahwakonna*, the "ancient ones that journeyed to the land of the everlasting sun." Today, Zunis do not divide the ancient ones into groups or cultures like archaeologists; rather, they are perceived as all one people as they were when they emerged from the womb of Mother Earth.

The *A:shiwi* (Zuni people) that picked the raven egg continued eastward crossing the Little Colorado River or *Kya:wana:ahononnai* (Red River). From there they journeyed eastward to *Denatsali im'a*, present day Woodruff Butte near Holbrook in northeastern Arizona. There they gathered more medicinal herbs and continued to *Ko'tu:wala:wa* at the confluence of the Little Colorado River and the Zuni River. *Ko'tu:wala:wa* is the place where the *Kok'ko* were created and this is the place where the spirits of the *A:shiwi* people go to live at the end of life. From *Ko'tu:wala:wa*, they traveled to the canyon of *Hantibinkya* where Zuni clans received their names, and event memorialized in the petroglyphs still visible at the location (Ferguson 2007:385). From here, the *A:shiwi* moved into the Zuni River Valley, eventually finding the Middle Place and settling there.

The Zuni Tribe's cultural affiliation claims are not limited to specific and narrow regions because the boundaries and places of the migrations by these ancestral groups were not restricted to a narrow route but reflect an affiliation to an extensive cultural landscape.

ZUNI TRADITIONAL CULTURAL PROPERTIES AND RESOURCES

Zuni traditional cultural properties or TCP's encompass a wide variety of cultural sites including, but not limited to, ancestral habitation (archaeological) sites, culturally significant archaeological/historic features, pictographs and petroglyph sites, collection areas for plants, water and minerals, natural landmarks, prominent topographic features (e.g., mountains, buttes, and mesas), shrines, sacred sites, and pilgrimage trails and routes. Below is a brief description of each of these categories of TCPs.

Archaeological Sites

All archaeological sites, including but not restricted to pictographs, petroglyphs, habitation areas, artifact scatters, special use areas, isolated occurrences and other archaeological manifestations are considered ancestral sites which imbue great cultural and religious significance to the Zuni people. For Zuni, these archaeological sites have never been abandoned, but continue to maintain life and spiritual forces significant to the *A:shiwi* people.

These archaeological sites are interconnected to one another by trails and these trails connect the sites to the Zuni Pueblo. As such, the sites and trails act collectively as spiritual umbilical cords between Zuni ancestors and present day Zunis; connecting the places that define and maintain the spiritual connection to Zuni cultural landscape. Trails also link other sacred areas, shrines and archaeological sites situated within the Zuni aboriginal territory, as well as to ancestral sites established during the migrations of the *A:shiwi* people.

The Zuni Cultural Resource Enterprise consider ancestral archaeological sites to be TCP's because these sites are tangible monuments validating Zuni emergence and migrations which play a fundamental role in sustaining Zuni individual and collective cultural identities. ZCRE also asserts that archaeological sites are Register-eligible Zuni TCP's per the definition provided by Parker and King (1989) in *National Register Bulletin* 38 (e.g., Ferguson et al. 1995:14-15; Anyon 1995; Dongoske et al. 1997).

Sacred Shrines and Offering Places

Religious shrines are used by the Zuni to mark their land claim boundary and these shrines, today, are considered sacred. Shrines are also established at other places of significance within the Zuni cultural landscape. Natural landmarks that define Zuni land boundaries and other important locations are marked by the Zunis placing clearly visible War God Shrines, pictographs of masks, Zuni fetishes, prayer sticks, turquoise, shells, pottery or other materials clearly identifiable as Zuni. The Zuni people preserve and maintain these "markers" or locations by making regular visits or pilgrimages to deposit offerings and to ask blessings upon the land.

Describing the importance of shrines to the Zuni people, whether they are regularly attended to or not, Governor Simplicio (1985) wrote:

Both these shrines [located a top Mt. Graham] are within the traditional use area of the Zuni people and are consequently of importance to our well-being and culture. It is important that two aspects of these shrines are clearly understood. The first is that the location is central to the purpose of the shrines. Thus, to disturb or move the shrines would be incompatible with the essence of their location with respect to the areas and the people they protect. Second, these locations have religious significance to the Zuni people, whether or not they appear to have been used recently. Once established they continue to provide their protection in perpetuity.

Pandey (1995:20) points out that shrines and other sacred cultural markers act in Zuni culture like maps, charts, and other documents do in a literature society. The distribution of shrines on the landscape act as cognitive maps for the Zuni when visiting these places and they serve to reaffirm their cultural tradition and beliefs. Sacred shrines and offering places were utilized by the Zuni ancestors, the *Che:be:ya:nule:kwe* and the *Enoh:de:kwe*. Sacred shrines and offering places are often related to archaeological sites and are of great cultural and religious significance. These shrines and offering places are also imbued with life and spiritual forces. Shrines hold great significance to the Zuni and are considered sacred.

Landforms

Landforms can be geologically and/or topographically prominent features on the landscape that are important in Zuni religion and culture. Landforms are natural landmarks such as specific mountains or specific geological formations, including waterfalls, caves, rock arches, hoodoos, etc. A landform may be

part of an archaeological site, a shrine or an offering place, but it is a distinct geological or topographical feature that is imbued with cultural significance (e.g., Woodruffe Butte, Red Butte, Mt. Taylor, ect.).

Trails

The Zunis have many named places across their cultural landscapes that are interconnected with a series of trails. These trails often follow uplands where visibility of the surrounding landscape was enhanced. Trails are important to Zuni culture because they connect many different resource procurement and use areas of the Zuni throughout their aboriginal use area. Trails are also considered important because they act as spiritual umbilical cords that maintain strong and continuous connections between the heart of the Pueblo of Zuni and many culturally important distant places on the Zuni landscape.

Trails can often lead to shrines and offering places. Trails are blessed before their use, and once blessed, they are blessed in perpetuity. For the Zuni there are many prayers and offerings that are required to be made prior to a trip and during a trip, along the trail to *Chimik'yana'kya'de'a* and the Grand Canyon. The prayers provide those Zunis going to *Chimik'yana'kya'de'a* with guidance on what route is to be followed, and on the religious actions that are necessary along the trail. Whether travel was made by foot, horses, or burros, it was a very religious occasion and required serious preparations. Prayers and offerings were made at springs and shrines along the trail. The trail, the springs, and the shrine area are all sacred.

Most curing societies went to the Grand Canyon as part of their expeditions to Hopi, where they went to dance. A long time ago, according to Zuni elders, when travel was by foot and burro, Zunis took a traditional trail to the Grand Canyon and along the trail they had shrines. Even though the mode of travel was by foot, the Zunis had to plant feathers at streams and shrines along the way. These streams, shrines, and the trails themselves are sacred. *Heshodawe* ("house," i.e., archaeological sites) located along the trail are also sacred, being the homes of Zuni ancestors. The trail to the Grand Canyon is sacred and will also be used in the afterlife. Activities in the afterlife require use of trails made in this world.

Plants

Plants are perceived by the Zuni as a vital part of the landscape. Plants are sacred to the Zuni people. All plants were given to the Zuni by the ancestral, celestial, supernatural beings. The Zuni view all plants as the off-spring of Mother Earth because it was she who gave the plants to the Zuni (Stevenson 1993:2).

Native plants at *Chimik'yana'kya'de'a* are especially sacred as a result of their association with the Zuni emergence and migration. Zuni fraternities and esoteric groups consider these plants significant because of their past and present cultural importance and usage. These plants are collected and used for ceremonial, religious, subsistence and medicinal purposes.

Zunis use literally hundreds of plants for medicinal, cultural or religious purposes. Stevenson (1914) documented 123 plants used for various purposes. This amount vastly underestimates the true number of plants and their respective uses, because not all the uses of all plants are known to all Zuni people. General plant usage is commonly known by most Zunis for consumption or other every day use. Whereas, knowledge about some plants may be known to only the members of a particular religious or medicine society, or in some cases, specific esoteric knowledge by a particular Zuni individual.

Plants played key roles in aiding the Zuni during their search for the middle place as recounted in the Zuni emergence and migration narrative.

Today, even with the availability of modern hospitals and medical care, the Zunis continue to rely on medicinal plants, herbs, fetishes, and other remedies which have served them through the ages. Camazine (1978) indentified nearly 100 plants still used by Zunis for medical treatments. As a result of four previous monitoring trips through Grand Canyon, the Zuni elders preliminarily indentified 32 plants of cultural importance as a result of the season in which these trips were taken (Table 2).

Table 2. Plants of Zuni Cultural Importance in the Grand Canyon			
Common Name	Zuni Name	Scientific Name	Major Use
Devil's claw	Dashonchi	<i>Acacia greggi</i>	Dye
Agave	ładewa:we	<i>Agave</i> sp.	Medicinal
Prostrate Pigweed	Wiwa	<i>Amaranthus blitoides</i>	Religious, coloring
Goatshead	Mowa dapba	<i>Tribulus terrestris</i>	Religious
Fringed Sagewort	A:ku	<i>Artemisia frigid</i>	Religious, tea, folklore
Big Sagebrush	A:ku	<i>Artemisia tridentate</i>	Religious
Milkweed	łabishsho	<i>Asclepias</i> sp.	Edible
Fourwing Saltbrush	Ke'ma:we	<i>Atriplex canescens</i>	Medicinal, edible, religious
Fremont Barberry	Dalupts'i	<i>Berberis fremontii</i>	Religious, folklore, dye
Blue grama	Bets'i kowa	<i>Bouteloua gracilis</i>	Brooms, brushes
Reed grass	Showe	<i>Phragmites</i> sp.	Religious
Parry Bellflower	Yuda li'anna	<i>Campanula parryi</i>	Medicinal
Wholeleaf Indian Paintbrush	Ts'uyan tsitsinakya	<i>Castilleja integra</i>	Dye
Netleaf Hackberry	łala:du	<i>Celtis reticulate</i>	Religious
Mountain Mahogany	Dak'wi	<i>Cercocarpus montanus</i>	Religious
Fernbrush	Ibina	<i>Chamaebatiaria millefolium</i>	Religious
Goosefoot	Hadekya	<i>Chenopodium</i> sp.	Edible, medicinal, folklore
Rabbitbrush	Hak'oha łupts'ina	<i>Chrysothamnus</i> sp.	Basketry, dyes
Buffalo gourd Pumpkin	Mobali	<i>Cucurbita foetidissima</i>	Edible, medicinal
Datura (sacred)	Aneklakya	<i>Datura meteloides</i>	Religious
Spectacle Pod	Ha:k'olokda	<i>Dithyrea</i>	Tea, medicinal
Hedgehog cactus	Shunepba ts'ana	<i>Echinocereus engelmannii</i>	Edible, textile
Indian Tea	Tsipbo'sho	<i>Ephedra nevadensis</i>	Tea, medicinal
Scouring Rush (Horsetail)	Dotchipba	<i>Equisetum tacene</i>	Game call
Horseweed fleabane	Ham udeyanne	<i>Erigeron calvas Canadensis</i>	Medicinal
Wild Buckwheat	Hasuski	<i>Eriogonum</i> sp.	Medicinal
Wallflower	Hasi'kyatdo:we	<i>Erysimum</i> sp.	Medicinal
Spurge	Ikwik'yakya	<i>Euphorbia</i>	Medicinal
Winterfat	Banashdu	<i>Eurotia inata</i>	Medicinal

Table 2. Plants of Zuni Cultural Importance in the Grand Canyon			
Common Name	Zuni Name	Scientific Name	Major Use
Barrel cactus	Shunepba	Ferncactus sp.	Edible
Ocotillo	K'oshi	Fouquieria splendens	Religious
Many flowered Gilia	Hasilili	Gilia multiflora	Medicinal
Gilia	Ummok'yanakya	Gilia spp.	Medicinal
American Licorice	Bahnashdu (Chikwa)	Glycyrrhiza lepidota	Medicinal
Broom Snakeweed	K'yaha'bokk'o	Gutierrezia sarothrae	Medicinal
Common Sunflower	Omattsaba	Helianthus annis	Medicinal
Hymenoppapus	Ha:uheya:we	Hymenoppapus	Medicinal
Leadtree	Ummok'yanakya	Luecaena ericoides	Medicinal
Flax	Duna:w A:wan Ak'wanne	Linum spp.	Medicinal
Puccoon	K'ema:we	Lithospermum sp.	Medicinal
Cardinal Flower	Waya:siwulu	Lobelia cardinalis	Medicinal
Deer Vetch		Lotus wrightii	Medicinal
Wolfberry	K'ya:bu'li	Lycium sp.	Edible, religious
Aster	Kwimi Lokk'yan Hamobiya:we	Machaeranthera sp.	Medicinal
Horse Mint	Udeya ibitdo	Mentha arvensis	Religious, edible
Stickleaf	Mil'an ibatchikya mih'an	Mentzelia pumila	Medicinal, folklore
Four O'clock	Shikkwamu	Mirabilis officinale	Medicinal
Catnip	K'yashima Mattsa	Nepeta cataria	Edible
Tobacco	Anade	Nicotiana sp.	Religious, clan name (A'na:kwe)
Bear Grass	T'sishshuk howe	Notina microcarpa	Religious
Evening Primrose	Udeya:w K'ohakwa	Oenothera sp.	Religious, medicinal
Hooker Evening Primrose	Kwimi Shilowa	Oenothera sp.	Medicinal
Prickly Pear	Mek'yaba' Metdanne	Opuntia sp.	Edible
Whipple Cholla	K'oshi	Opuntia whipplei	Edible
Chinchweed	Hambassa	Pectis papposa	edible
Beardtongue	Bok'yan Kwiminne	Penstemon sp.	Folklore
Juniper Mistletoe	Ohtibo'li	Phoradendron juniperinum	Edible, medicinal
Common Reed	Shodoyan:we	Phragmite sp.	Religious
Pinyon Pine	He'sho Datdanne	Pinus edulis	Religious, edible
Ponderosa Pine	Ashek'ya datdanne	Pinus ponderosa	Religious
Western Clammyweed	Asibitdo:we	Polanisia dodencondra	Religious, medicinal
Bush Mint	K'yashima mattsa (la:mattsa)	Poliomintha incana	Edible
Fremont Cottonwood	Bola	Populus fremonii	Religious
Douglas Fir	K'yalats'ilo ts'itdo:we	Pseudotsuga menziesii	Religious
Paperflower	Ha:ts'oklik'o	Psilostrophe tagetina	Ceremonial
Scurf Pea	Ha:ts'ana	Psoralea sp.	Religious

Table 2. Plants of Zuni Cultural Importance in the Grand Canyon			
Common Name	Zuni Name	Scientific Name	Major Use
Coneflower	Yak'onakya	Ratibida sp.	Medicinal
Squawbush	K'ose Wotdanne	Rhus trilobata	Basketry, ceremonial
Wild Currant	Kelashi:wuna	Ribes sp.	Edible
Dock	K'wimi Idobanahna	Rumex sp.	Edible, religious, medicinal
Willow	Bila Ławe	Salix sp.	Religious, cultural
American Bulrush	Doselu	Scirpus americanus	Religious
Buffalo Bur	Mok'yachiba	Solanum rostratum	Medicinal
Golden Rod	Hachitdo:we	Solidago sp.	Medicinal
Globe Mallow	K'owi K'owhi	Sphaeraelcea sp.	Medicinal, cultural
Grass Dropseed	Bishshu'liya:we	Sporobulus sp.	Weaving, religious, cultural
Desert Plume	Kwimi Łupts'inna	Stanleya pinnata	Medicinal
Common Cattail	Owelu	Typha sp.	Religious
Common Cocklebur	Mok'yachiba Be:mok'yachiba	Xanthium sp.	Medicinal, edible
Banana Yucca	Ho:k'yaba	Yucca baccata	Edible, religious, cultural
Narrowleaf Yucca	Ho:ts'ana	Yucca sp.	Religious, cultural

Minerals

The Zuni people do not differentiate between organic and inorganic materials, but consider all things to be living: the earth, the stones, and minerals, as well as the plants and animals. Thus, the collection of minerals is as important to the Zuni people as the collection and use of plants. Mineral sources are used to carry out religious activities, including the preparation of important ceremonial pigments.

Although Zunis may not have traveled specifically to the Grand Canyon solely for the purpose of collecting plants or animals, they did and do make numerous journeys there for the purpose of procuring minerals for religious ceremonies.

Edward Curtis (1922) documents the extensive trade in minerals between Zuni and the “. . . tribes near the Grand Canyon.”

“ Even in prehistoric times the pueblos of Cibola [Zuni] maintained constant communication with other and relatively distant people. A well-marked trail led eastward to the Rio Grande valley and the Tiwa villages, with a northerly branch to Zia. Another extended to the Hopi and on to the Grand Canyon.... The blue paint of the Zunis was famous, as were several other pigments. Groups of men would travel long distances from Zuni to trade their paints, turquoises, and skins for feathers and other paints. For instance, the trade with the Havasupai at the bottom of the Grand Canyon, probably involved, on the Zunis' part, blue paint and stones found from the Zuni mine which was in Bluewater district of contemporary New Mexico, between Acoma and Zuni while the Havasupai had equally valuable items to trade in return.”

Parsons (1939) also mentions “certain sacrosanct stones” that Zunis believe had “. . . come up with the people.” The use of paint made from minerals brought from *Chimik’ yana’ kyade’a* in such a diversity of prayers and ceremonies signals the importance of these minerals in Zuni ceremonialism. Zunis have a tremendously developed and exact oral tradition, reflected in many prayers and ceremonies, that underscore the importance of mineral use from *Chimik’ yana’ kyade’a*. Table 5 lists the various minerals that derive cultural importance for the Zuni that are acquired from the Grand Canyon.

Table 3. Minerals of Zuni Cultural Importance in the Grand Canyon		
Common Name	Zuni Name	Major Uses
Yellow Ochre	Helupts’ikwa	Religious
Specular Hematite	Tsuhaba	Religious
Galena	Hetsuhaba	Religious
Red Hematite	Ahok’o	Religious
Salt	Ma:k’ose	Religious, edible
Land Snail Shells	Ts’uwe, Shodo:we	Religious
Obsidian	Abats’ina	Projectile points, tools
Turquoise	ti’akwa	Religious, fetishes
Azurite	Akwati	Religious
Crystal Cola	Mafaluk’o	Religious
Clays	Hekk’yacho	Religious, ceremonial
Silt	Hedefa	Religious
Schist	Asalala:we	Religious, cultural
Sandstone	A:we	Cultural
Conglomerate	Aflashshi	Religious
Basalt	Upk’winnakkyia	Religious, cultural
Quartzite	Sayakuma	Religious, cultural

KYA:WE – Water, Colorado River, Springs

From the Zuni perspective, the earth is circular in shape and is surrounded on all sides by ocean. Under the earth is a system of covered waterways all ultimately connecting with the surrounding oceans. Springs and lakes, which are always regarded as sacred, are the openings to this system (Bunzel 1932:487). All springs and sources of water are sacred to the Zuni because they provide the life-giving substance, water that is necessary to maintain life within the Southwest’s harsh environment.

All water is deemed sacred to the Zuni, with springs “considered to be the most precious things on Earth” (Hart 1980: Vol. 1, 4). Springs within the Zuni territory are utilized among all religious groups for traditional and religious practices. Springs and seeps are also considered sacred to the Zuni. The Grand Canyon contains numerous springs that play an integral role in water collecting by the Zuni people for ceremonial use.

In the broadest sense, all sources of water are culturally important to Zuni. All springs, washes, ponds, pools, lakes, and rivers are sacred places in Zuni religious practice. This is because Zuni religion is focused on the blessings of water, a gift that is considered to be the ancestors themselves (Chimoni and Hart 1994:2). Zunis pray for water; they pray at water sources; and they use water in religious ceremonies. Cushing wrote, the Zuni “consider water as the prime source of life” (Green 1979:241). As Dickie Shack explained, “The whole world has water and it’s all precious to us. We get it and bring it here

for our religious stuff. We use it in paint for our prayer sticks—it's so important to get rain. So this water is precious to us. If I go to the Grand Canyon, I'll get me water there. I believe the rain is our fathers. Anywhere there are springs we hold out hand and say, 'come with us to Zuni village' and we pour the water on our heads." Mr. Shack added, "In my Rain Priest doings, we pray for all directions, to the ocean, to our grandfather, *Ko'lowisi*, the serpent, in all directions. We say prayers so that they'll help us with rain. So all this water around the world, even the ponds, it's very important to us, for us to say prayers because we need rain in Zuni (as quoted in Colwell-Chanthaphonh and others 2010:36)."

The waters of the Colorado River are "definitely sacred," according to Alex Seowtewa. The aquatic life in the river is connected to the Zuni religious societies and orders—prayers are made for the animals that live there, and the animals' existence helps the Zunis in their prayers. Even in dry washes, such as the Paria, are important. The Zunis deem them "passageways" for water, whether or not water flows year-round.

Long before the Americans first ever saw and named the Colorado River, the Zuni named this watercourse *K'yawan' A:honanne*. The name itself speaks to a time before the American government dammed the river, when its waters flowed red from the crimson-hued soils its currents carried. This traditional cultural property begins in the Colorado Rockies and ends at the Sea of Cortez, and extends from bank to bank. Zunis feel a general sense of sacredness for this body of water. As Octavius Seowtewa explained, "Our respect, our heritage and traditions believe this river has significance for our religion and way of life."

The river is associated with the Zuni people's emergence and first migrations; it is home to aquatic life that is important to Zuni traditions; the water from the river is used in ceremonies; and the waterway is a literal trail and a metaphorical umbilical cord that is linked directly to the Zuni home area via the Little Colorado River (Hart 1995:8). Seowtewa continued, "My medicine society talks about all the water life; it's all mentioned in my prayers. So any disturbance of water life impacts my religion and way of life. I was taught to respect all life and now damming the river and pumping water [creates] ...a spiritual impact on our medicine practices. When you are a religious head you have to take care of even the lowliest form of life, even the stink bug, even the rocks, anything that is on the land." This statement parallels previously documented Zuni values of the river. As Dongoske and others (2010:135) have written, "The Colorado River itself is regarded as an important conscious living being that has feelings, and is expressive of calmness and anger. The river can offer happiness, sadness, strength, life, sustenance, and the threat of death. According to many of the tribal beliefs, if a land and its resources are not used in an appropriate manner, the Creator will become disappointed or angry and withhold food, health, and power from humans."

Further emphasizing the importance of all water life to the *Ne'we:kwe* Medicine Society, Seowtewa shared an excerpt from one of their ceremonial prayers:

"When the world was created, within the four Great Oceans and waterways (North Pole, South Pole, and Atlantic, Pacific Oceans)
Our Father that stayed behind and flourished
The Feathered Serpent
The Water Snakes
The Fish
The Turtle
The Tad Poles

The Toads
The Frog
The Water Boatman and all aquatic life

And all the protectors of the waters
The Crain
The Geese
The Ducks
The Coots
The Grebes
The Orioles
The Mocking birds
The Nut Hatch
The Wren
The Egrets
The Father Sun – Mother Moon
The Creator
These are the givers of the breath of life
The Aged and the Wisdom
The Water of Life
The Seed of Life
The belongings of life
The Off springs of life
The Strength
And the rest of the givers of life

I ask for their breath
If all goes accordingly and the breath of our feathers are respected
We will all see our fathers rising and setting sun
Arm in Arm
Strength in connection
We will all grow old in wisdom
Now I ask the fathers for that Breath
For the Breath of life for all.

Speaking about Glen Canyon Dam, Seowtewa stated, "They put the dam in without consultation, and . . the dam restricted the umbilical cord (the Colorado River). It's like when you're in your mother's womb and there's a knot in the cord, then there's a problem (as quoted in Colwell-Chanthaphonh and others 2010:54)."

Animal Resources (Animals, Fish, Birds, Insects & Reptiles)

Animals play a vital role in Zuni culture and religion. In the Zuni belief system, as Winston Kallestewa explained, "All animals are our ancestors that have come back to life in a different form- that's why all living beings, even the smallest insect, are important to the Zuni people." Dickie Shack explained that common animals such as lizards play a role in Ant Medicine Society prayers, prayers so ancient that they are spoken in an ancient language, learned when the Zunis were migrating with those people.

All animals came out of the underworld with the Zunis. They are all important because they have a purpose explained in Zuni religion and **cannot be killed indiscriminately**. Wild life animals are the spiritual beings of the ancestors for the Zuni people and are mentioned in prayers and songs.

Birds

Birds are incorporated into nearly every aspect of Zuni life (Ladd 1963). Because they are viewed as messengers from the ancestral celestial beings, their appearance is closely watched. Consequently Zunis are generally excellent ornithologists. In discussing the cultural importance of birds with Zuni cultural advisors one becomes quickly amazed at the accuracy and consistency with which they distinguish closely related species, and are able to relate precisely the seasons when each species is present.

Throughout the migration of the Zuni people to find the Middle Place, they were also helped by birds: a raven took the bitterness away from the corn the Zunis had harvested and made it palatable; an owl helped them by making the corn which they had harvested soft enough to eat.

Common Name	Zuni Name	Scientific Name	Direction	Associated Color
Oriole	Onohli'kya	Icterus parisorum	North	Yellow
Steller's Jay	Maya	Cyanocitta stelleri	West	Blue
Macaw	Mula	Ara spp.	South	Red
Black Billed magpie	K'yade:dasha	Pica pica	East	White
Barn Swallow	Hel'onsedo	Hirundo rustica	Zeinth	All colors
Purple Martin	K'yaw luki	Progne subis	Nadir	Black

Table 4 presents a list of all birds of Zuni cultural significance that inhabit the Grand Canyon. A note of caution about this and other lists in this section of the report: only a limited number of the hundreds of culturally important plants and animals in the Grand Canyon have been identified by Zuni cultural advisors. This disparity exists for several reasons: (1) Zuni cultural advisors have been down into the Grand Canyon for only a limited number of visits; (2) these previous river trips did not encompass all the different seasons when certain plants would be flowering (and thus more easily recognizable) or certain migratory birds would be present; (3) the past river trips stopped at a limited number of sites in the Grand Canyon; and (4) much Zuni religious knowledge is proprietary, and only a select few individuals possess certain bits of information and it may be considered proprietary. Because representatives from all the religious societies which might have knowledge about a certain plant, animal or mineral have not yet participated in a past river trip, many species undoubtedly have not yet been identified.

Common Name	Zuni Name	Scientific Name	Major Use
Pied Billed Grebe	Haba' ochabekya	Podilymbus podiceps	Religious
Great Blue Heron	K'olokda	Ardea herodias	Religious, clan representative
White Faced Ibis	Ts'uuya tana	Plegadis chihi	Religious
Canada Goose	Owa	Branta Canadensis	Religious, ceremonial
Mallard	Eya	Anas platyrhynchos	Religious, ceremonial
Northern Pintail	Eya	Anas acuta	Religious, ceremonial,

Table 5. Birds of Zuni Cultural Importance in Grand Canyon			
Common Name	Zuni Name	Scientific Name	Major Use
			Newekwe Society
Northern Shoveler	O'do k'yaba	Anas clypeata	Religious, Newekwe Society
Cinnamon Teal	Eya	Anas cyanoptera	Religious, Newekwe Society
Blue-winged Teal	Eya	Anas discors	Religious, Newekwe Society
Green-Winged Teal	Eya	Anas crecca	Religious, Newekwe Society
American Wigeon	Eya	Anas Americana	Religious, Ceremonial, Newekwe Society
Turkey Vulture	Shu:ts'ina	Carhartes aura	Ceremonial
Bald Eagle	Ba'k'oha	Haliaetus leucocephalus	Religious, ceremonial
Northern Harrier	Shok'yabiso	Circus cyaneus	Religious, ceremonial
Sharp-shinned Hawk	Hachu ts'ana	Accipiter striatus	Religious
Cooper's Hawk	Anefawa	Accipiter Cooperii	Religious
Red-tailed Hawk	Bipbi	Buteo jamanicensis	Religious, ceremonial
Golden Eagle	Boshkwa	Aquila chrysaetos	Religious, ceremonial
American Kestrel	Tsililik'o	Falco sparverius	Religious
Merlin	Tsililik'o Łana	Falco columbarius	Religious
American Coo	Hilu'kya	Fulica Americana	Newekwe Society
Killdeer	Dolowa	Charadrius vociferous	Religious
Sandpiper	Homa k'ossa	Sandpiper spp.	Religious
Mourning Dove	Nishabak'o	Zenaida macroura	Edible, religious
Greater Roadrunner	Boyyi	Geococcyx californicus	Religious, ceremonial
Great Horned Owl	Muhukwi	Bubo virginianus	Ceremonial
Burrowing Owl	Muhukwi ts'ana	Speotyto cunicularia	Ceremonial
Common Poor-will	Mewishokk'wa	Phalaenoptilus nuttallii	Religious, ceremonial
Common Nighthawk	Awadi Łana	Chordeiles minor	Religious, ceremonial
White throated Swift	K'upchi k'o	Aeronautes saxatalis	Ceremonial
Broad-tailed hummingbird	Tsu ya	Selasphorus platycercus	Religious, ceremonial
Black-chinned hummingbird	Tsu ya	Archilochus alexandri	Ceremonial, religious
Calliope hummingbird	Tsu ya	Stellula calliope	Religious, ceremonial
Rufus hummingbird	Tsu ya	Selasphorus rufus	Religious, ceremonial
Northern flicker	Hokwisho	Colaptes auratus	Ceremonial, religious
Lewis' woodpecker	Hokwisho k'winna	Melanerpes lewis	Religious
Hairy woodpecker	Dumdununu	Picoides villosus	Religious
Downy woodpecker	Dumdununu	Picoides pubescens	Religious
Say's Phoebe	Its'u wakkyā	Sayornis saya	Religious
Cassin's Kingbird	Its'uwakkyā Łana	Tyrannus vociferans	Religious
Ash-throated flycatcher	Its'uwakkyā K'yade kon'ona	Myiarchus cinerascens	Religious, ceremonial

Table 5. Birds of Zuni Cultural Importance in Grand Canyon			
Common Name	Zuni Name	Scientific Name	Major Use
Horned lark	Silo	<i>Eremophila alpestris</i>	Ceremonial, religious
Stellers' Jay	Maya	<i>Cyanocitta stelleri</i>	Religious, ceremonial
Scrub Jay	Chaya' a	<i>Aphelocoma coerulescens</i>	Religious, ceremonial
Pinyon Jay	A' akkya	<i>Gymnorhinus</i>	Religious
Clark's Nutcracker	Lohaya Bo'ya	<i>Nucifraga columbiana</i>	Ceremonial
American Crow	Kwa la shi	<i>Corvus brachyrhynchos</i>	Ceremonial
Common Raven	Kwa la shi	<i>Corvus corax</i>	Ceremonial
Mountain Chickadee	Danaya Wi'wishkya	<i>Parus gambeli</i>	Religious, ceremonial
White breasted Nuthatch	K'ohanna No'dekla banilen'ona	<i>Sitta carolinensis</i>	Ceremonial
Red-breasted Nuthatch	Shilowa' No'dekla Banilen'ona	<i>Sitta Canadensis</i>	Religious
Rock Wren	Ts'ilisho	<i>Salpinctes obsoletus</i>	Ceremonial
Canyon Wren	Chalawisho	<i>Catherpes mexicanus</i>	Ceremonial
Ruby-crowned Kinglet	Ts'apba	<i>Regulus calendula</i>	Religious
Golden-crowned Kinglet	Bits'its'i	<i>Regulus satrapa</i>	Religious
Blue-grey Gnatcatcher	Its'uwakky	<i>Polioptila caerulea</i>	Folklore
Black-tailed Gnatcatcher	Its'uwakky	<i>Polioptila melanura</i>	Folklore
Western Bluebird	łaluk'o	<i>Sialia mexicana</i>	Religious, ceremonial
Mountain Bluebird	łah lu ko'	<i>Sialia currucoides</i>	Religious, ceremonial
Northern Mockingbird	K'yaycho'wa	<i>Mimus polyglottos</i>	Religious
Sage Thrasher	Dasisho	<i>Oreoscoptes montanus</i>	Religious, ceremonial
American Robin	Kwi shabak'o	<i>Turdus migratorius</i>	Religious, ceremonial
Yellow-rumped Warbler	Tsap ba	<i>Dendroica coronata</i>	Religious
Yellow Warbler	Tsap ba	<i>Dendroica petechia</i>	Religious, ceremonial
Wilson's Warbler	Tsap ba	<i>Wilsonia pusilla</i>	Religious
Grace's Warbler	Tsap ba	<i>Dendroica graciae</i>	Religious
Yellow-breasted Chat	Tsap ba	<i>Icteria virens</i>	Religious
Western Tanager	Onohtikya	<i>Piranga ludoviciana</i>	Religious, ceremonial
Lazuli Bunting	Onohtikya łi'anna	<i>Passerina amoena</i>	Religious, ceremonial
Black-headed Grosbeak	O'do łana	<i>Pheucticus melanocephalus</i>	Religious, ceremonial
Green-tailed Towhee	K'ewiya	<i>Pipilo chlorurus</i>	Religious, ceremonial
Rufous-sided Towhee	Kewiya	<i>Pipilo erythrophthalmus</i>	Religious, ceremonial
Brown Towhee	Kewiya	<i>Pipilo fuscus</i>	Religious, ceremonial
Lark Sparrow	Ketakoikwa	<i>Chondestes grammacus</i>	Religious
White-crowned Sparrow	Ts'uts'u'a	<i>Zonotrichia leucophrys</i>	Religious
Vesper Sparrow	Wi'wishkya	<i>Pooecetes gramineus</i>	Folklore
Song Sparrow	Wi' wish kya	<i>Melospiza melodia</i>	Folklore
Dark-eyed Junco	Tsupiya	<i>Junco hyemalis</i>	Folklore
Northern Oriole	Onoh li' kya	<i>Icterus galbula</i>	Religious, ceremonial

Table 5. Birds of Zuni Cultural Importance in Grand Canyon			
Common Name	Zuni Name	Scientific Name	Major Use
Western Meadowlark	Da'chilchi	<i>Sturnella neglecta</i>	Religious
Yellow-headed Blackbird	Bala'du	<i>Xanthocephalus xanthocephalus</i>	Religious, ceremonial
Brewer's Blackbird	K'etcho	<i>Euphagus cyanocephalus</i>	Religious, ceremonial
Great-tailed Grackle	Kya de dasha	<i>Quiscalus mexicanus</i>	Religious, ceremonial
Lesser Goldfinch	Tsu tsua	<i>Carduelis psaltria</i>	Religious, ceremonial
House Finch	Ts'uts'u'a	<i>Carpodacus mexicanus</i>	Folklore
House Sparrow	Wi' wish kya	<i>Passer domesticus</i>	Folklore

Other Animals

Although birds are probably the most important animals to Zuni, they are far from the only animals that Zunis view as religiously or culturally important. All animals have their place of reverence in Zuni cosmology (Tyler 1964). As mentioned above, even if Zunis did not need to collect any of these animals, their appearance is emblematic and auspicious of natural events, or man's response to them.

During the Zunis effort to emerge and reach the upper world, they were helped by four small creatures: a locust who, like the three birds before him, attempted to reach the upper world, and a spider, and a water strider, who eventually direct the Zuni people to *Halona-itiwana*, the Middle Place.

Zunis have a special relationship with water creatures, and this stems from events during their search for the middle place. During the migration (probably across the Colorado River), many Zunis children were released by their parents into the river and turned into water snakes, fish, frogs, and other aquatic life. The fact that Zuni children turned into aquatic wildlife establishes a lasting familial relationship between contemporary Zunis and all aquatic life in the Colorado River and other water sources. In the late nineteenth century, Frank Hamilton Cushing (1884, 1896, 1988) recorded this historical event as it was narrated to him by the Zuni. Cushing labeled the event as the "Abode of the Souls" and the following is a condensed version of that event:

"Shortly after Emergence, men of the Bear, Crane, and Seed clans strode into the red waters of the Colorado River and waded across. The men of the clans all crossed successfully. The women travelling with the men carried their children on their backs and they waded into the water. Their children, who were unfinished and immature (because this occurred shortly after Emergence), changed in their terror. Their skins turned cold and scaly and they grew tails. Their hands and feet became webbed and clawed for swimming. The children fell into the swift, red waters. Some of the children became lizards, others turned into frogs, turtles, newts and fish.

"The children of these clans were lost to the water. The mothers were able to make it to the other side of the river, where they wailed and cried for their children. The Twins heard them, returned, and advised the mothers to cherish their children through all dangers. After listening to the Twins, those people who had yet to pass through the river took heart and clutched their children to them and safely proceeded to the opposite shore.

“The people who successfully made it out of the river rested, calmed the remaining children, and then arose and continued their journey to the plain east of the two mountains with great water between. Thence they turned northward to camp on the sunrise slopes of the uppermost mountains.”

Table 6. Animals of Zuni Cultural Importance in the Grand Canyon			
Common Name	Zuni Name	Scientific Name	Major Use
Pronghorn Antelope	Mawe	Antilocapra Americana	
Coyote	Suski	Canis latrans	
Rocky Mountain Elk	Oh no' le	Cervus elaphus	
Black tailed Prairie Dog	Kushi	Cynomys ludovicianus	
Javelina	Kudebaidoh Bitsudi	Dicotyles tajacu	
Porcupine	Chibi	Erethizon dorsatum	
Mountain Lion	Hokdidasha	Felis concolor	
Bobcat	Debi	Felis rufus	
Black-tailed Jackrabbit	Bokya	Lepus californicus	
White-throated Woodrat	Kochi	Neotoma albigula	
Mule Deer	Tsi lu si	Odocoileus hemionus	
Bighorn Sheep	Haliku	Ovis Canadensis	
Raccoon	Wedasha	Procyon rotor	
Cotton Rabbit	Okshiko	Sylvilagus auduboni	
Squirrel	Yashi	Tamiasciurus spp.	
Badger	Donashee	Taxidea taxus	
Grey Fox	Tlaniko	Urocyon cinereoargenteus	
American Black Bear	Anshi	Ursus americanus	

Table 7. Fish, Amphibians and Reptiles of Zuni Cultural Importance in the Grand Canyon			
Common Name	Zuni Name	Scientific Name	Major Use
Fishes	Kyh' shida		
Frogs	Dok'kya	Anura Ranidae	
Horned Toads	Lahoohokyaba		
Lizards	Me'sho	Sauria Lacertidae	
Rattlesnakes	Chit'do'la	Crotalus spp.	
Tadpoles	Modolikya		
Turtles	Ed'dowa		
Water snake	Mi'kyali		
Water Striders	Gyan Asdebi		

2016 Zuni Colorado River Monitoring and Filming Trip Findings

The Zuni Colorado River monitoring trip occurred between 20 and 29 April 2016. Fourteen (14) places along the Colorado River ecosystem through Grand Canyon were monitored by the Zuni cultural advisors. Additionally, the film documenting of the Zuni cultural advisors at these places facilitated the expression and recording of the message the Zuni cultural advisors wanted to send the Zuni youth. Three days (17-19 April 2016) prior to launching on the Colorado River, the Zuni cultural advisors and

Skyship Film crew visited and recorded important Zuni traditional cultural places on the Zuni cultural landscape between Pueblo of Zuni and Grand Canyon. These important traditional cultural places are also described below.

Impressions and reflections on the health of these places were recorded by each of the Zuni cultural advisors in their respective river trip journals. These river trip journals are the source for the information presented in this report. Each specific place visited during the monitoring trip is described in the narrative below including a detailed account of the Zuni cultural advisors' observations, comments, and concerns when provided.

Hantibinkya (Hardscrabble Wash)

Site description: *Hantibinkya* is the place where the Zuni clans were named during the migrations to find the Middle Place. The petroglyph symbols of the clans are still visible in the sandstone canyon of *Hantibinkya*, where they were carved in ancient times. Also at *Hantibinkya*, the *Ahayuda*, or twin gods of war, were created by the Sun Father in the foam of a water freshet cascading over the steep cliffs of the canyon (Ferguson and Hart 1985:23).

Zuni 2016 Field Trip Observations: Many of the Zuni advisors were emotionally moved by visiting the place where the Zuni clans received their names and being in a location that is part of the Zuni migration history. Ronnie Cachini expressed his excitement at seeing all the Zuni clan symbols etched into the rock. Many of the Zuni advisors stated that the clan symbols on the rock in Hardscrabble Wash are the same type of symbols as the petroglyphs observed in the Grand Canyon.



Figure 2. Petroglyphs at Hardscrabble Wash. Photo by D. Byers.

Kotu/wala:wa (Zuni Heaven)

Site description: *Kotu/wala:wa*, located at the confluence of the Zuni and Little Colorado Rivers, near St. Johns, Arizona, is the destination of a Zuni religious pilgrimage that is made every four years by Zuni religious leaders who are asking for rain and portentous signs concerning the future. This place is

especially import to the *Koyemshi* and is an ancestral site in the Zuni migration narrative. All Zunis go to *Kotú/wala:wa* after death (Ferguson and Hart 1985: 125).

Zuni 2016 Field Trip Observations: Mr. Titus Ukestine and Eldred Quam were interviewed and film recorded by Skyship Films about *Kotú/wala:wa* while they stood along the side of U.S. 180, a highway that runs south of and parallel to the Little Colorado River. The Zuni cultural advisors decided not to physically enter *Kotú/wala:wa* because of the spiritual preparation and observances that are necessary. They also, subsequently, decided to not permit pictures or film footage of *Kotú/wala:wa* to be included in the film.

Denatsal Im'a (Woodruff Butte)



Figure 3. Denatsal Im'a (Woodruff Butte) near Holbrook, Az. Photo by K. Dongoske

Site description: Woodruff Butte was once a 500 foot high cinder cone that is a very sacred place mentioned in Zuni migration narratives and a place name in the *Kyaklo* prayer. Known as *Denatsal Im'a* in the Zuni language, it was also used for the collection of herbs, flowers, and medicinal plants. Throughout the 1990s, *Denatsal Im'a* was under private ownership and was used as a commercial material source for many road projects causing an enormous level of harm and destruction to the cinder cone. According to Hart (1995:7), it would take the Zunis four days to reach *Denatsal Im'a* by wagon and horseback from Zuni Pueblo. Historically, Zunis would go to *Denatsal Im'a* anytime in the year for religious purposes; however, the Zuni caretaker of *Denatsal Im'a* noted that he could not identify the appropriate herbs for collection until September. *Datura* was often collected by Zunis from *Denatsal Im'a*.



Figure 4. *Datura* (*Datura stramonium*)

Zuni 2016 field trip observations: Titus Ukestine explained that only Zuni medicine men can go onto Denatsal Im'a and that this is a very special Zuni place. Ronnie Cachini expressed his sadness at seeing how much damage the past and continuing mining has done to the butte. Octavius Seowtewa pointed out that their shrine was still intact and the group then wondered whether the owner of the butte would allow members of the Newe'kwe fraternity to access the shrine on *Denatsal Im'a* and present offerings.

Chavez Pass Archaeological District (*Kumanch'an Alakkwe'a*)

Site description: The Chavez Pass Archaeological District [AZ. O:4:2 (ASM)/AZ. O:4:1 (ASU)] is located on the Coconino National Forest. The Chavez Pass Ruin, consisting of the South West Pueblo and the North Pueblo, the main feature of the archaeological district, contains in excess of 1,000 rooms, and is comprised of three primary room blocks, numerous smaller room blocks, and a vast system of agricultural terraces, linear grid systems, check dams, reservoirs, isolated field houses, and other extramural features (Upham et al. 1981). According to archaeologists, this pueblo complex was continuously occupied from at least A.D. 1100 to 1400, with a probable extension into the mid-fifteenth century.

Archaeologists have interpreted the abundant and diverse ceramic types identified at the Chavez Pass Ruin as evidence for active participation in regional exchange. Ceramic material from virtually every part of the Southwest, except the Salt-Gila drainage, is present in the archaeological deposits at the Chavez Pass Ruin supporting this interpretation. According to Upham et al. (1981) approximately 14% of the decorated ceramics at the Chavez Pass Ruin was a White Mountain Redware (St. Johns polychrome). White Mountain Redwares also occur at the largest secondary archaeological sites in the Chavez Pass Archaeological District settlement system, such as Kinnikinnick Pueblo, Grapevine Pueblo, and the Pollock sites (Upham et al. 1981).



Figure 5. Filming at Chavez Pass. Photo by K. Dongoske

Zuni 2016 field trip observations: Even though aspects of the Chavez Pass Ruin have been given different site designations, they are treated here as one large habitation complex. For instance, the South West Pueblo is labeled as NA 659/AR-03-04-07-21, the North Pueblo is given the site number NA 658/AR-03-04-07-20, and the two petroglyph sites have been labeled as the "Puma" petroglyph site (NA 20,262/AR-03-04-07-0130) and "Electric Man" petroglyph site (AZ. O:4:12 (ASU)/AR-03-04-07-0149).

The Zuni advisors spent the afternoon inspecting the Chavez Pass Ruin. Previous field visits to Chavez Pass Ruin by a Zuni field research team identified two (2) shrines on the surface of the site. One shrine consists of approximately fourteen (14) rocks arranged in a circular shape (Figure). According to the Zunis, turquoise and shell are commonly found in shrines and indicate their use. Generally, shrines are built by Rain Priests and other ceremonial leaders of the former inhabitants of this site.

The Zunis emphasized the importance of shrines by stating that the Zuni do not have to visit these places, or any other shrines found on prehistoric sites, because the shrines can exist as sacred and spiritual entities on their own. Zuni ceremonies performed at Zuni are not just done for those shrines located in Zuni, but for the whole universe and all the shrines contained within it. The Zuni field research team recommended that the best management for these two shrines is to leave them as they are with no disturbance.

Shrines are also used by Zuni to mark their affiliation to the landscape and these shrines, today, are considered sacred. Shrines have also been established at other places of significance within the Zuni aboriginal lands. Natural landmarks that define Zuni land boundaries and other important locations are marked by the Zunis placing clearly visible War God Shrines, pictographs of masks, Zuni fetishes, prayer sticks, turquoise, shells, pottery or other materials clearly identifiable as Zuni. The Zuni people preserve and maintain these "markers" or locations by making regular visits or pilgrimages to deposit offerings and to ask blessings upon the land, all the people, the world, and the universe.

Talking about the importance of Chavez Pass to the Zuni people and their migration history, Mr. Ronnie Cachini stated:

"I know the whole place is sacred, what really moved me was the mural that I drew¹. I didn't know anything about Chavez Pass. The migration story is the *Kyklo's* tale of how our people made and found the middle place. I was told by my Grandpa the water strider is very sacred. I now know where my people were separated. This was our ancestral land and still is. When the two eggs were picked, the wood fetish along with the Sword Swallowers went north, that is why the northern areas have the coldness but Chavez Pass is that area where this event happened.

"I say that our people were always in contact with each other, but they were here (Chavez Pass) for a long, long time. The War Gods are out there to protect the world but they help to find the middle place. This place (Chavez Pass) is connected to all sites all over the Southwest. The northern migrators came back here because of the origination of other medicine societies, the songs are all about these areas. The petroglyphs are like stories of which the ancestors wrote for the next people so that they will know of what was seen or witnessed."

The Chavez Pass Ruin, including the petroglyphs, has been identified by the Zunis to be a sacred Zuni historic site because it is believed to be the place where the ancestral A:Shiwi people separated. This place represents a time in Zuni history when only the medicine societies were present and the *Koko* spirits had not yet originated at Zuni Heaven (*Kofuwala:wa*). The ball court at Chavez Pass Ruin, according to the Zuni field research team, was most likely used by the Rain priests along with the medicine societies for games. Chavez Pass is most definitely a very sacred place which is significant in Zuni migration history and should be considered a Zuni traditional cultural property.

Supai Man Petroglyph (AZ:C:6:5)

Site description: This site consists of a sandstone bedrock petroglyph panel with three pecked figures. The panel is approximately 1.6 m². The petroglyph elements were in excellent shape, with minimal wind/water erosion, during their initial recording in the early 1990s. The figures include an anthropomorph, a pecked line, and an abstract element shaped like a flying "U" (Fairley and others 1994:219).

Zuni Interpretation: The Zuni believe the anthropomorphic figure with long earrings depicted in the rock art is the supernatural being (one of the War Twins) that led the Zuni out from the underworld. The figure of the head has also been said by some Zunis to look like *Paiyatamu*, one of the Zuni *Kokko*. *Paiyatamu*, a flute player supernatural being, was identified on the basis of how he is represented graphically at the Pueblo of Zuni. At Zuni *Paiyatamu* is associated with the Galaxy (*Ne'we:kwe*) clowns.

¹ Mr. Cachini is referring to a painting he did of the A:Shiwi dividing for the A:Shiwi A:wan Museum's Map Art Project. In this painting, Mr. Cachini depicts three groups of people separating and leaving an area that is represented by a mesa covered with pine trees. Previous to the field trip, Mr. Cachini had never seen or visited the area of Chavez Pass. Both Mr. Cachini and the other Zuni field research team members were impressed by the resemblance of that landscape depicted in Mr. Cachini's painting to the Chavez Pass area. Mr. Cachini interpreted this remarkable resemblance as the result of the A:Shiwi ancestral spirits communicating and directing Mr. Cachini's brush strokes during the creation of his painting.

The line in front of the figure is said to be the migration route. The ZCRAT have indicated that if you follow the direction of the line in front of this figure, it points to a place on the rim of the canyon where a similar petroglyph is located and marks the direction to the Pueblo of Zuni. They infer that Zuni ancestors deliberately marked a connection between the Grand Canyon and the final destination of the migrations: Zuni Pueblo (Dongoske and Hays-Gilpin n.d.). This site is very important to the Zuni people and their way of life because it is an affirmation of the Zuni origin account, the subsequent migrations, and the arrival at the predestined home for the Zuni.

Zuni 2016 River Trip Observations: The Zuni river trip participants noted that there was a similar image identified during the recent visit to Hardscrabble Wash. Mr. Cornell Tsalate stated that there are two supernatural beings depicted here, one is clear with the other one difficult to see. He interpreted these as two brothers who led the Zuni out from the fourth underworld. Eventually, these two brothers turned into the morning and evening stars. They changed the Zuni people into human figures by cutting their webbed hands and feet and cutting off their tails with a lightning bolt. The river trip participants also expressed continued concern about the erosion that is occurring to the petroglyph image and associated pecked line because the sandstone appears to be exfoliating as a result of side canyon runoff. Specifically, Mr. Eldred Quam stated “we don’t want this petroglyph to fade away because it is there for our history of where our ancestors came from.”



Figure 6. Supai Man petroglyph. Photograph by D. Byers.

Zuni Recommendation: The Zuni river trip participants reiterated their desire to have the National Park Service develop the most appropriate method, in consultation with Zuni, of diverting the side canyon runoff to alleviate or stop the erosion occurring at this site. A previous method recommended by a Zuni cultural advisor was to employ a type of sealant to spread over the rock protecting the images from further erosion. In addition, the Zuni cultural advisors would like the National Park Service to conduct more documentation of this petroglyph panel in the form of photographs.

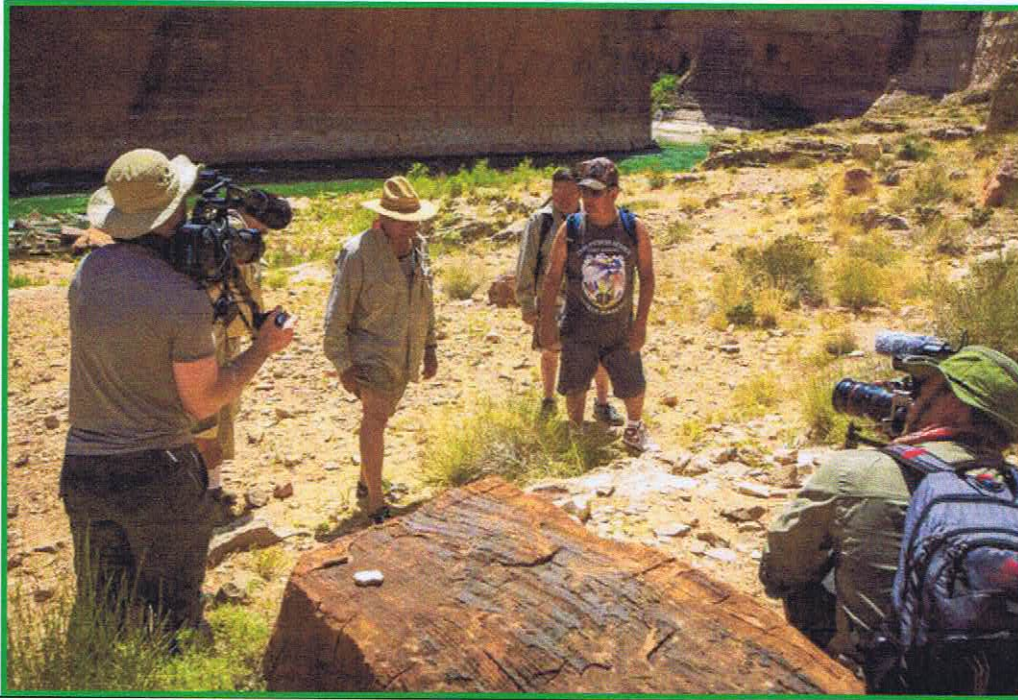


Figure 7. Filming at South Canyon. Photo by Daniel Byers.

South Canyon (AZ:C:5:1)

Site description: The site consists of a masonry habitation complex with 12 defined structures situated mostly along an open area on a bench within the Redwall limestone formation, with two contiguous structures located at the mouth of a small solution cave approximately 25-30 m above. On the lower terrace structures are more or less grouped into three areas. On the downstream end are two structures (F1 and 12) with plaza like walls on either end (F9 and 11). The middle section includes a large masonry structure (F3) associated with a petroglyph boulder. The upstream section consists of habitation rooms and a possible storage room (F4, 5, and 10). Overall, ceramic type diversity makes the site difficult to place culturally, although Kayenta Anasazi ceramics tend to dominate the assemblage, suggesting a PII affiliation. Two roasting features, one below Feature 11 and one below Feature 7, may be the result of re-use of the site by Paiutes. The massive size of some of the structures and quantity of trash indicate substantial occupation; the south room complex may be a kiva or a plaza (Fairley and others 1994:216-17).

Zuni 2016 River Trip Observations: South Canyon is a place where the Zuni river trip participants collected minerals (gypsum) for use in their religious ceremonies and made offerings to a shrine located here. South Canyon is considered a very important place to the Zuni. The site no longer contains surface artifacts, the Zunis believe this is the result of visitors collecting artifacts because on previous trips before 2000 the Zunis observed artifacts at this site. The Zuni river trip participants continue to be concerned about a trail that leads visitors directly to this site and the high visitor presence which continues to threaten the existence of this site.

Zuni Recommendations: The Zunis want the National Park Service to stress visitor education regarding the appropriate behavior when visiting archaeological sites and to discourage artifact collecting and the creation of new trails.

Vaseys Paradise

Site Description: Vasey's Paradise is an oasis 1.5 miles below Mile 30 Sand Bar on the Colorado River in Grand Canyon. In a semi desert environment it supports dense vegetation watered by a waterfall emanating from groundwater emerging from the upper cliff faces. John Wesley Powell characterized Vasey's Paradise in writing ". . .fountains bursting from the rock high overhead, and the spray in the sunshine forms the gems which bedeck the wall. The rocks are covered with mosses and ferns and many beautiful flowering plants" (Belknap and Evans 2011:37). Powell named Vasey's Paradise after botanist G.W. Vasey (Stevens 2013).

Zuni 2016 River Trip Observations: For the Zuni people water is life. As such, all springs and sources of water are sacred to the Zuni because they provide the life-giving substance, water that is necessary to maintain life within the Southwest's harsh environment. All water is deemed sacred to the Zuni, with springs "considered to be the most precious things on Earth" (Hart 1980: Vol. 1, 4). Springs within the Zuni territory are utilized among all religious groups for traditional and religious practices. Springs and seeps are also considered sacred to the Zuni. At Vasey's Paradise the Zuni river trip participants collect the spring water for use in religious ceremonies. The Zuni river trip participants noted that the water emanating from Vasey's Paradise was a stronger flow than it was last year when it was just a trickle. During the journey from Vasey's Paradise to Nankoweap the Zuni party experienced a group of young male Anglo adults exposing themselves to the Zuni which offended the river trip participants who considered this type of behavior unacceptable.

Zuni Recommendation: The Zuni recommend that the National Park Service continue to monitor the water flow from Vasey's Paradise. Additionally, the Zuni are still interested in the results of the National Park Service's current research on springs in and around the Grand Canyon National Park.

Nankoweap (greater area, shrine and granaries; AZ:C:9:1)

Site description: AZ:C:9:1 consists of several loci of rock alignments, artifacts, and other features that were originally recorded by R. Euler and re-recorded by Grand Canyon River Corridor crews in the early 1990s. Loci A-C, however, were not re-recorded by the Grand Canyon River Corridor archaeological survey. According to Fairley and others (1994:219) locus G was re-recorded as sites AZ:C:9:51 and :52, locus H was re-recorded as site AZ:C:9:53, and locus D was re-recorded as site AZ:C:9:80. Loci E, F, I, and J were re-recorded using their original designations. Locus E consists of a sparse artifact scatter, primarily lithics with a few Paiute sherds, associated with an ephemeral charcoal-stained lens.

Locus F consists of two granaries in a Muav cliff face. Locus I consists of a ridge slope with numerous rock alignments oriented perpendicular to the slope and a few PII Anasazi sherds. Locus J consists of several rock alignments that form terrace-like areas. The site is considered multi-component because locus E was interpreted and recorded as a Paiute use area, locus F attributed to PI-III Anasazi; and loci I and J are deemed mid-late PII Anasazi occupations (Fairley and others 1994:219).

Zuni 2016 River Trip Observations: The Zuni river trip participants interpret AZ:C:9:52 as a Zuni ancestral site utilized by Zuni ancestors during migrations within the Grand Canyon. The Zuni river trip participants made offerings at a Zuni shrine located here. They noted that no changes have occurred to the shrine and the restriction of non-Zuni tourists from this place has positively resulted in no identified impacts. Skyship Films documented interviews of the Zuni river trip participants when they were on the ledges at the granaries.

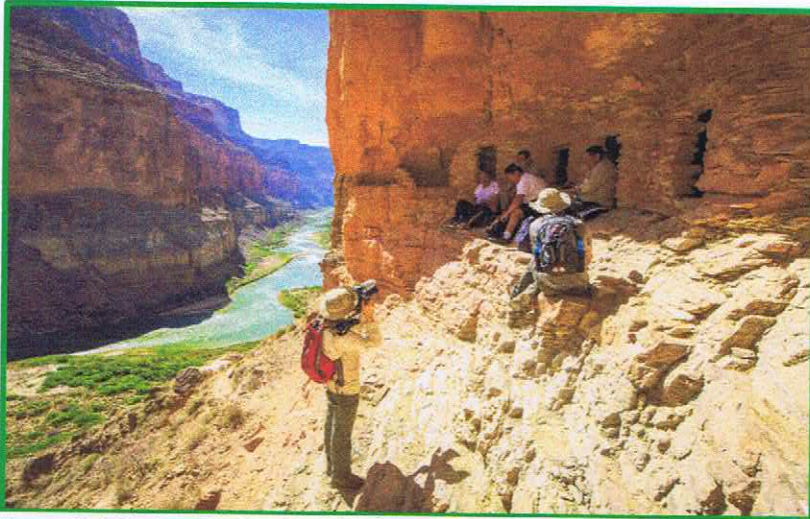


Figure 8. Filming Zuni cultural advisors at Nankoweap Granaries. Photo D. Byers.

Zuni Recommendations: Zuni recommends that the National Park Service protect the granaries to keep them from being inadvertently damaged by tourism.

Kwagunt Site [shrine; AZ:C:9:28 (L-N)]

Site Description: This site is fairly new to the Zuni cultural advisors and the monitoring program. The site was first visited in 2001 when it was pointed out to the Zuni monitoring team by a river boatman. The site consists of over 10 rooms and associated features along with several shrines, terraced gardens, and storage bins. The site is located at the base of the first terrace from the river and may have been previously excavated.

Zuni 2016 River Trip Observations: The Zuni river trip participants noted that this site has been closed to tourists by the National Park Service and that this is considered the reason there are still some large ceramic artifacts still visible on the site's surface. The site was considered to be in good shape by the Zuni river trip participants. There is a Zuni shrine located here and the Zuni cultural advisors made offerings to that shrine.

Zuni Recommendations: Zuni encourages the National Park Service to continue managing this site in the current fashion because it appears to be very effective.

Malgosa Canyon (shrine; AZ:C:13:365)

Site description: This is a small limited activity area of unknown cultural affiliation that consists of a semi-rectangular rock alignment (F1), a sparse artifact scatter, and two FCR concentrations (F2 and F3), which are eroding from a dune bank. According to Fairley and others (1994:235), Feature 1 is at the north end of the site and measures 2.7 x 3 m and is a single course rock alignment with elements of unshaped limestone and sandstone cobble boulders of unknown function. Recorded artifacts at the site include tertiary flakes and a metate and mano fragment. The FCR concentrations each have 10-15 burned stone fragments, but no discernible charcoal staining (Fairley and others 1994:235).

Zuni 2016 River Trip Observations: There is an active Zuni shrine located here, considered the largest Zuni shrine in the Grand Canyon, and it is semi-circular in shape with an opening to the northeast. The Zuni river trip participants stop here to honor the shrine and make offerings. Although the archaeological site is located approximately 200 meters west of the shrine, the shrine is still considered by the Zuni to be associated with this site. This location is also important for the Zuni as a hackberry (*łala:du*) collection area because hackberry is important to Zuni religious societies. Years ago, the Zunis made an offering to a lone hackberry tree located here. Now, there are five hackberry trees growing at this location and the Zuni river trip participants believe that the Zuni prayers have directly helped the lone tree to live and prosper. This particular hackberry tree is specifically mentioned in Zuni prayer. The shrine and site are recommended for monitoring on an annual basis.

Little Colorado River Confluence (61.7 mile)

Site Description: Here, at river mile 61.7, the Little Colorado River confluence with the Colorado River marks the terminus of Marble Canyon and the beginning of the central Grand Canyon. When the Little Colorado River (LCR) is not in flood stage, this milky blue stream contrasts dramatically with the green-brown waters of the larger Colorado River. The confluence is more than just water moving downhill. It represents a crossroads of nature, history, and culture. The confluence of the Little Colorado and the Colorado rivers is also a critical habitat for endangered fish species, primarily the humpback chub.

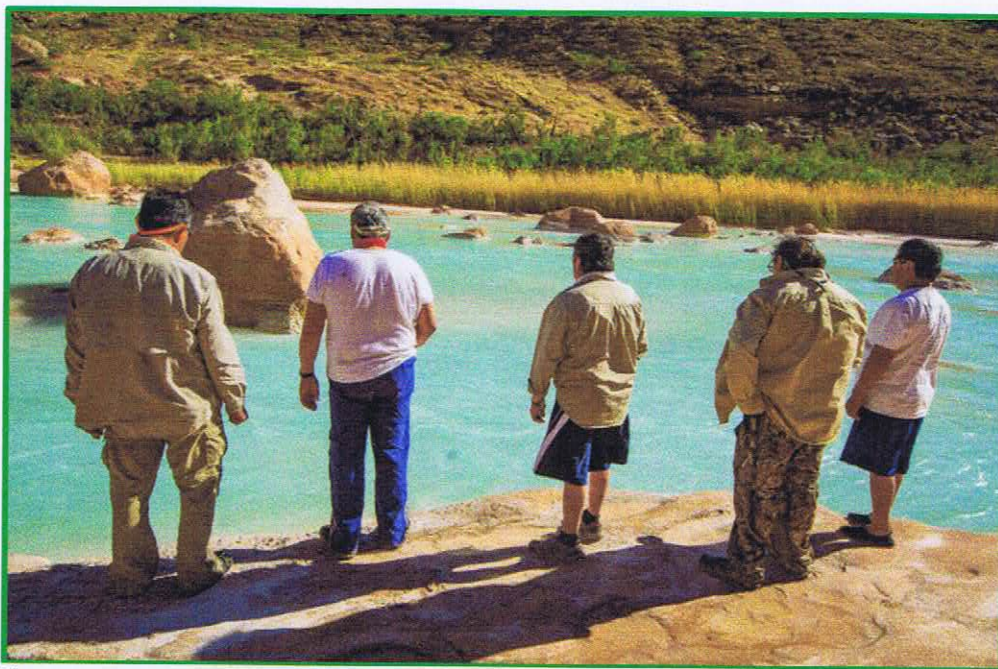


Figure 9. Zuni cultural advisors at the Little Colorado River near the confluence. Photo D. Byers.

Zuni 2016 River Trip Observations: The Little Colorado River is the umbilical cord that connects Zuni to their place of origin and emergence within the Grand Canyon. Additionally, the Little Colorado River provides a spiritual umbilical connection between Zuni and Zuni Heaven. The Zuni river trip participants noted that the Little Colorado River (LCR) was exceptionally clear and blue in color and was flowing at a high level. This is a good sign. During the visitation to the confluence the Zuni river trip participants deposited an offering. The Zuni river trip participants were also filmed and interviewed by Skyship Films during which they talked about the Zuni connection to the Zuni River, the Little Colorado River and the

Colorado River and expressed their serious concern over the Navajo Nation's proposed Escalade Project and the construction of a tramway to take people from the rim to the bottom of the Little Colorado River Gorge near the confluence. They believe that the construction of this project will directly threaten the spiritual link between the Pueblo of Zuni and their aboriginal home lands. More specifically, the Zuni river trip participants believe that the increase of tourists and businesses that will result from this project will sever the Zuni connection to the place of Zuni emergence. The Zuni river trip participants do not want to lose their spiritual and physical connection to the place of Emergence which will be the result if the Escalade project is constructed.

Tanner (camp area north of Tanner trail) – left shrine and Tanner Right rock art boulders



Figure 10. Newspaper Boulder at Tanner. Photo D. Byers

Zuni 2016 River Trip Observations: At this location the Zuni river trip participants deposited an offering and examined a petroglyph panel (labeled "Newspaper Boulder") that contained a lot of information for the Zuni to interpret. This petroglyph panel exhibited pecked depictions of trails, sun, moon, star, anthropomorphic figures, two anthropomorphic figures tied with tails, and mountains. The two figures tied with tails, according to Mr. Cornell Tsalate and Mr. Titus Ukestine, are referenced in Zuni prayers and represent Zuni ancestors helping each other through strength as one in leaving the womb. The Zuni river trip participants want the Colorado River boatmen who take visitors to this site to tell the visitors not to touch the rock art symbols located here. According to Mr. Octavius Seowtewa, the petroglyphs, taken in totality, may represent a trail map of the Colorado River. The site appeared to be in good condition.

Zuni Recommendations: Zuni recommends that the National Park Service consider implementing methods to protect the "Newspaper Boulder" because it is directly tied to Zuni prayers. Additionally, Zuni recommends that the National Park Service consider eliminating the obvious trails that lead to this site. Zuni reiterated the previous recommendation that the National Park Service and/or the Bureau of Reclamation consider funding a joint research project between the Zuni Cultural Resource Enterprise and the Zuni Cultural Resource Advisory Team to research and interpret the trail network throughout the Grand Canyon that is depicted on the Newspaper Boulder.

Cardenas: Lookout Site (Hilltop Ruin)

Site Description: This site is situated on a hill top overlooking the Colorado River and is across the river from Furnace Flats (AZ:C:13:10). The site consists of a single stone room oriented in a north-south direction that measures 10 x 5 meters. A thermal feature (hearth) is located in the center of the room. There are two Zuni shrines located here; one on the way up to the hilltop structure and another shrine on top of the ridge.



Figure 11. Zuni cultural advisors at the Hilltop site. Photo D. Byers.

Zuni 2016 River Trip Observations: The Zuni river trip participants determined that this site was in fairly good condition. The Zuni river trip participants made offerings at both shrines located here. Octavius Seowtewa was film interviewed at this site during which explained that the one big main building with little windows set in the walls had a specific purpose. Zuni has the same type of little windows which are used during the winter solstice by the *Baw dewa* on the last night of the Zuni solstice fasting. Mr. Seowtewa further explained that he thought the previous occupants of Lava Chuar, Palasides, Comanche Creek, North Tanner, Basalt Creek, Cardenas, Furnace Flats, and Unkar Delta used this site and the North Tanner site during the winter solstice fasting.

Zuni Recommendations: Zuni recommends that the National Park Service consider redirecting the trails away from this site to continue to keep tourists from piling rocks on this structure. Additionally, Zuni recommends that the National Park Service consider studying old photographs of the hilltop site's structure and based on those photographic depictions return the structure to its historical appearance. Finally, the Zuni river trip participants believe that the structures, located at both the Lookout and Tanner sites, are associated with winter and summer solstice observations and that the National Park Service and/or the Bureau of Reclamation should consider funding an ethnographic and archaeological research effort by the Zuni Cultural Resource Enterprise in cooperation with the Zuni Cultural Resource Advisory Team to scientifically document the Zuni functional interpretation.

Ribbon Falls

Site description: Located on the north side of the Colorado River, approximately 6 miles (9.6 kilometers) up Bright Angel Creek and tucked away in a side canyon, is Ribbon Falls. Ribbon Falls is a 100 feet high water fall with mineral rich water that has created a giant travertine spire below the falls. At the bottom

of the falls is a vibrant green moss base, the result of the mineral deposits from the water. Initially, the falls were referred to as the Altar Falls, but, over time, due to the ribbon-like appearance of the water cascading down the rocks, the name Ribbon Falls was adopted and became the main name of the falls.



Figure 12. Ribbon Falls. Photo by D. Byers.

To the Zuni, Ribbons Falls is called *Chimik'yana'kya dey'a* or the "place of emergence." Expert Zuni testimony submitted during the Zuni I land claims case (Docket 161-79L, United States Court of Claims) identified the place of emergence as being located at Ribbon Falls in Grand Canyon. Mr. Oscar Nastacio, religious leader for the Newekwe Society, had identified Ribbon Falls as being the location of *Chimik'yana'kya dey'a* during depositions and meetings that occurred in 1980 and 1981, prior to the court hearing. In addition, Fred Eggan, a renowned anthropologist, also documented Ribbon Falls as the place of emergence. Chester Mahooty also gave a deposition to the court identifying Ribbon Falls as the site of *Chimik'yana'kya dey'a*, and Lyman Taylor, an expert in the field of history located *Chimik'yana'kya dey'a* at Ribbon Falls. As a result of the Zuni statements and the expert testimony that was submitted by the Pueblo of Zuni, the United States Court of Claims identified Ribbon Falls as the site of emergence in the Findings of Fact in Docket 161-79L (Hart 1995:13).

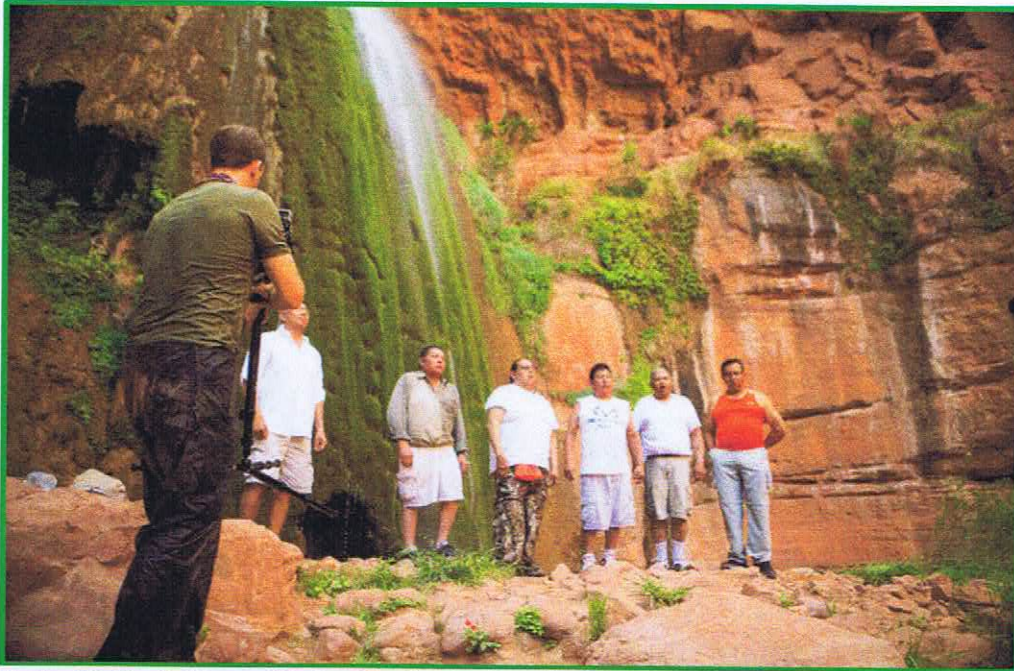


Photo 13. Daniel Byers filming the Zuni cultural advisors performing a rain prayer.

Zuni 2016 river trip observations: The Zuni river trip participants made ceremonial offerings upon reaching Ribbon Falls. At Ribbon Falls, the Zuni river trip participants collected water and then sang their ceremonial song. During the singing of their ceremonial song, the wind shifted causing water from the falls to be sprayed onto the Zunis, who took this as a welcoming sign from their ancestors. The Zuni river trip participants also recounted the story of the emergence and how Father Sun sent his two warrior sons to lead the A:shiwi out of the fourth world into this world through Ribbon Falls. The Zuni left feeling that Ribbon Falls was in good health.

Zuni Salt Deposit below Elves (River Mile 117.6; N4007296, E368978)

Site Description: This area is a newly identified site by the Zuni for acquiring salt from the Grand Canyon located north of Elves Chasm. Salt forms and is exposed within the crevices of the western wall of the Canyon.

Zuni 2016 River Trip Observation: The Zuni river trip participants stopped here, made an offering, and collected salt. The Zuni's believe the salt deposits here produce a better salt than that found at the Hopi Salt Mines. The Zuni river trip participants allowed the film crew to film their approach and return from the salt deposit, but not the salt collection.

Zuni Recommendations: The Zuni continue to recommend that the National Park Service monitor this site as a means of protecting it from future disturbance.

Deer Creek (AZ:B:10:01) and Deer Creek Falls

Site Description: According to Fairley and others (1994:194), AZ:B:10:01 is a PI to early PII Formative storage area consisting of seven granaries, a few sherds, and pieces of twine/cordage (found in Structure 1). The site is in a shallow overhang but visible from the river. The granaries vary in size,

construction, and integrity, and are generally built of wet-laid and dry-laid Tapeats sandstone slabs, with walls often 4-5 or 6-7 courses high. In some instances, it appears that recreational river runners and/or visitors have re-laid or newly laid additional stone elements as topmost courses.

Deer Creek Falls is a 100-foot-high waterfall that cascades out of a sinuous Tapeats sandstone tributary, creating an oasis on the lower Colorado River at mile 136.75. Recreational river runners often stop here to hike around the falls to Deer Creek Narrows, along a trail barely wider than a footstep, suspended high above the rushing creek waters. This area is known by the Zuni for the collection of willow, yucca, tobacco, water, datura, phragmites and pigments.

Zuni 2016 River Trip Observations: The Zuni river trip participants hiked from the Colorado River up to Deer Creek Falls made an offering and collected willow, phragmites, and water. Octavius Seowtewa was filmed and interviewed by Skyship Films about the importance of the Zuni Salt Deposit and Deer Creek.

Whitmore Wash (AZ:A:16:01)

Site Description: According to Fairley and others (1994:187), the site consists of two extremely shallow rockshelters at the base of a Tapeats sandstone cliff with associated perishable artifacts and nearby pictographs located approximately 30 m from the Colorado River. This is a multi-component site with evidence of late Archaic-Basketmaker II, PI-III Virgin Anasazi, and late prehistoric-protohistoric Paiute occupations, and remnants of a historic visitation in the late 1950s. The pictographs are located southwest of the shelters along the cliff face. There is one main group of hematite pictographs, and several smaller ones that are partially obliterated, but painted in white. The main shelter area consists of a deeply stratified midden exposed by a small gully about 1 m deep. Considerable amounts of charcoal, animal bone, cordage, corn cobs, and matting are visible; some vandalism (i.e., pothunting) has impacted the site. The site was recorded and recommended for excavation by R. Euler in 1960. The midden (locus A) was partially excavated in May and June of 1984, and a rock retaining wall was built as a management action to retard erosion. A prominent historic addition to the site were the words "Wilson Austin – Surveyors, Casa Grande, Ariz.," which were painted in white on the cliff face on the downstream side of the site (Fairley and others 1994:187).



Figure 14. Pictographs at Whitmore Wash. Photo by D. Byers.

Zuni 2016 River Trip Observations: This site is important to the Zuni because it depicts the Zuni history of emergence, evolution of the Zuni form through previous worlds, and the final emergence into this world of light from the Fourth Underworld at Ribbon Falls. The petroglyphs also show how the emerging Zuni were greeted by Father Sun and Mother Moon to this world of light. Also depicted are Father Sun's two Warrior sons who led the *A:Shiwi* out of the Canyon toward the Middle Place. The Zuni river trip participants believe it is very important to protect this site and keep wind/water erosion to a minimum and they recommend restricting public access to this area.



Figure 15. End of monitoring trip group photo. From L to R are Cornell Tsalate, D. Byers, unknown, Sam Eilertsen, unknown, Jan Balsom, Jim Enote, Titus Ukestine, unknown, Octavius Seowtewa, Eldred Quam, Zachary Ludeschar, and Ronnie Cachini.

Summary of 2016 Zuni River Trip Monitoring

As stated above the general purpose of these river trips are to monitor Zuni ancestral sites (i.e., archaeological sites) and other traditional cultural properties within the Grand Canyon that may be affected by erosion (both natural and human induced), and to identify, if possible, direct impacts related to the operations of Glen Canyon Dam. During the 2016 Colorado River monitoring trip, Zuni river trip participants stopped at 14 places of traditional cultural importance for the primary purpose of film documenting the importance of these places as part of the Zuni associative values project. This report briefly describes the filming of the Zuni cultural advisors at important places on the Zuni cultural landscape between the Pueblo of Zuni and the Grand Canyon. The report also describes the Zuni filming activities during their 2016 river trip and the 14 locations within the Grand Canyon at which filming occurred for the Zuni associative values project.

Presence in the Canyon

For the Zuni, their connection to this cultural landscape is what differentiates them from other tribal peoples, and what differentiates them from the dominant colonialist society. The Grand Canyon is a

significant place that contributes to the Zuni collective and individual identities. Experiencing the Grand Canyon through these monitoring trips allows Zuni individuals to transcend time, provides them an immediate connection to Zuni ancestors, and reinforces and reaffirms their connection to the emergence event, the migrations of the A:shiwi ancestors, and the creation of sacred bundles.

Experiencing the Grand Canyon links the present with the past and the Zuni cultural advisors' individual identities with their respective medicine societies, kiva groups, and kin groups. What the Zunis know about the Grand Canyon flows through them from the 'echo of generations,' and their knowledge cannot be universalized, that is, placed in quantitative terms that can be understood through a scientific paradigm, because they arise from the Zuni epistemological experience of this sacred place (see Kovach 2009:61). For the Zuni, experiencing the Grand Canyon and the validation of their associated historical traditions provides comfort and grounding and offers the warmth of reinforcing the strong spiritual umbilical connection between the Grand Canyon and the Pueblo of Zuni (*Id'iwan*).

Being in the Grand Canyon reaffirms the Zuni interconnection with their cultural landscape and how that forms Zuni epistemology. That is, the Zuni epistemological interrelationship between the Grand Canyon and Colorado River, the Zuni language, the rocks, plants, and animals, and the Zuni knowledge of the ecosystem. The key to Zuni knowledge of maintaining harmony with the universe is, in part, based on insuring this relational balance with the ecosystem. The Zuni cultural advisors also felt that it is important to have all Zuni religious leaders experience a river trip through Grand Canyon because this location is where it all began and it should be seen and experienced by the Zuni religious hierarchy.

Springs and Animals

During the river trip, the Zuni river trip participants encountered 12 Desert Bighorn Sheep (*Ovis Canadensis nelsoni*), 6 Mule deer (*Odocoileus hemionus*), squirrels (*Sciuridae*), 14 Mallard Ducks (*Anas platyrhynchos*), 3 Cranes (*Gruidae* sp.), 3 Ravens (*Corvus corax*), 2 Osprey (*Pandion haliaetus*), 4 Condors (*Cathartidae*), 6 Turkey Vultures (*Cathartes aura*), 100+ swallows (*Hirundinidae*), and 6 Magansers (*Mergus merganser*) in the Grand Canyon. The Zuni river trip participants when they see these animals believe that they are a blessing for them, because they were in the Zuni ancestors' homeland and that they must acknowledge these animals so they can spiritually keep with them even when they return back to the Pueblo of Zuni. In addition, seeing many forms of wildlife during the river trip was a good sign, it meant that they were being watched by Zuni ancestors and that the Zuni ancestors were glad they were here, in Grand Canyon.

Moreover, from the Zuni perspective, Zuni ancestors understand that the Zuni river trip participants were here on a pilgrimage and this is why they were blessed with the plants that they collected and how easy it was to find these things. The animals the Zuni river trip participants observed will also bless their use of the materials collected. For example, water collected from the spring at Vasey's Paradise will be used for the cleansing ceremony, but not all of it because some would be saved for the medicine bowl.

Conclusion and Management Recommendations

Between 20 and 29 April 2016, the Zuni Cultural Resource Enterprise, on behalf of the Pueblo of Zuni, conducted a monitoring river trip on the Colorado River through Grand Canyon from Lees Ferry to Diamond Creek. The purpose of this river trip was to document through filming the Zuni deep time and continuing cultural connection to the Grand Canyon and to provide the Zuni cultural advisors an opportunity to inspect the health of the Colorado River ecosystem through Grand Canyon as part of the

long-term monitoring program that is associated with the Glen Canyon Dam Adaptive Management Program (GCDAMP). Six (6) Zuni representatives participated in the 2016 Zuni filming and monitoring river trip. As a result of the Zuni monitoring trip the following management recommendations are provided to the Bureau of Reclamation and Grand Canyon National Park.

Recommendations to the Bureau of Reclamation

Zuni reiterates the previous recommendation that the Bureau of Reclamation consider funding a joint ethnographic and archaeological research effort between Zuni Cultural Resource Enterprise and the Zuni Cultural Resource Advisory Team to document and interpret the architecture at the Lookout and Tanner sites as winter and summer solstice observatories.

Zuni also recommends that the Bureau of Reclamation consider funding a joint ethnographic and archaeological research effort between Zuni Cultural Resource Enterprise and the Zuni Cultural Resource Advisory Team to research and interpret the ancient trail network depicted on Newspaper Boulder.

Recommendations to the Grand Canyon National Park Service

The Zuni reiterates a previous recommendation that the Grand Canyon National Park Service develop the most appropriate method, in consultation with Zuni, to divert the side canyon runoff to alleviate or stop the erosion that is occurring at the Supai Man petroglyph. Additionally, Zuni requests that the Grand Canyon National Park Service initiate more formal documentation of the petroglyph panel before they disappear or are irreparably damaged.

Zuni reiterates a continuing recommendation that the Grand Canyon National Park Service stress visitor education regarding the appropriate behavior when visiting archaeological sites, including discouraging artifact collecting, artifact piling, and the creation of new trails.

Zuni restates a recommendation that the Grand Canyon National Park Service monitor the water flow emanating from Vasey's Paradise. Zuni is concerned about the health of the springs in and around Grand Canyon.

Zuni restates a previous recommendation that the Grand Canyon National Park Service redirect visitor trails away from the masonry structure at the Lookout site.

Zuni reiterates a former recommendation that the Grand Canyon National Park Service monitor the Zuni Salt Deposit below Elves Chasm for any type of disturbance.

Zuni maintains a previous recommendation that the Grand Canyon National Park Service consider closing Ribbon Falls to visitation because of its highly cultural and religious sensitivity to the Zuni people.

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APPENDIX A

ZUNI GLOSSARY FOR THE GLEN CANYON DAM ADAPTIVE MANAGEMENT PROGRAM

ZUNI GLOSSARY

(Adopted from the work of E. Richard Hart)

Apithla:shiwanni. Bow Priests.

A:shiwanni. Rain Priests.

A:Shiwi. The Zuni's name for themselves in the Zuni language.

A'witentehula. The Fourth Womb or level of the Zuni underworld.

Akwathle. Azurite.

Chimik'yana'kya day'a. Located on the Colorado River, in the Grand Canyon, willows, herbs, sands, clay and water are collected here. This is the original point of origin in the Zuni origin and migration narrations. It is visited by the Galaxy Fraternity.

Da:biliyanku. Located east of Denatsali Im'a, this is a site near the Little Colorado River mentioned in the migration narratives.

Da:kwe. Mountain Mahogany.

Denatsali Im'a. Woodruff Butte, located near the Little Colorado River; this is a very sacred place mentioned in migration narration. It is also a place in the Kyaklo prayer.

Hanathlipinkya. Place on the migration route, southwest of Witch Wells.

Hatin K/ya:kwe. "Listening Spring" or "Whispering Spring" is found near the base of Korkokhi Mountain, near the confluence of the Little Colorado and Zuni Rivers.

Hetsupapa. Iron pyrite.

Ibina. Salt bush.

Itiwa Kyana. A sacred spring along the Zuni River on the trail to Kolhu/wala:wa.

K/ya:kwe. "Water Place" in the Zuni language.

Kiatuthlanna. North of St. Johns, stopping place on migration route.

Kokko. The supernatural beings who inhabit Kolhu/wala:wa and are responsible for the well being of those living in this world.

Kolhu/wala:wa. A location near the confluence of the Zuni and Little Colorado Rivers. The home of the supernatural Kokko, and the place where all Zuni's go after death.

Kolowisi Kyakwe. Sacred spring and shrine mentioned in migration narratives, on Zuni River.

<i>Kuhnis.</i>	Havasupais.
<i>Kumanche an A'lakwin.</i>	Canyon Diablo ("Commanche Rock Drawer"), near Two Guns, Arizona.
<i>Kyana Bathlta.</i>	A sacred spring along the trail to Kolhu/wala:wa and near the Zuni River.
<i>Kyana Itiwana.</i>	A sacred spring near the Zuni River along the trail to Kolhu/wala:wa.
<i>Ma/ettude.</i> Canyon.	A place along the trail to Hopi, located on the Puerco River at Manuelito Canyon.
<i>Mahko Se'naye.</i> Canyon.	Salt Seeps at Navajo Springs, on the trail from Zuni to Hopi and the Grand Canyon.
<i>Mathlaluco.</i>	Malachite.
<i>Nawisho An Kyana.</i>	A spring of the Kokko called Nawisho is found near Kolhu/wala:wa.
<i>/Oh/emm/a.</i>	A location north of the Puerco River along the trail to Hopi that was a campsite.
<i>Onnane.</i>	"Road" or "Trail" in the Zuni language.
<i>Prayermeal.</i>	Offerings made for the Kokko and Zuni ancestors, consisting of cornmeal, ground shell and turquoise.
<i>Prayerstick.</i>	Prayersticks are constructed as offerings. Their length is usually the distance from the tip of the middle finger to a spot on the wrist of the person making the prayer and prayerstick. Feathers and sometimes corral or turquoise beads are tied to the stick, which is offered in prayer to the sun, moon, ancestors, and Koko, depending on how it is constructed.
<i>Sipocho.</i>	Mormon Tea.
<i>Sunha: Ky'yaba:chu Yalanne.</i>	San Francisco Peaks.
<i>Tsitowe.</i>	Generic term for evergreens.
<i>Tsuhapa.</i>	Specular hematite used as a pigment.
<i>Uwannami.</i>	The Zunis' ancestors when they are above the clouds acting as beings to bring rain to Zuni and the earth, in response to prayers that are made by Zunis to the Kokko and the ancestors.
<i>Wanuadina.</i>	Jacob's Well

Note on Orthograph: :=elongated vowel

' or// = glottal stop
t̥ or hl=thl