**2016 SOUTHERN PAIUTE CONSORTIUM**

Colorado River Corridor Resource Evaluation Program

Annual Report of Activities

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Introduction

The traditional lands of the Southern Paiute people are bounded by more than 600 miles of the Colorado River from the Kaiparowits Plateau in the north to Blythe, California in the south. According to Southern Paiute traditional knowledge, Southern Paiutes were the first inhabitants of this region and are responsible for protecting and managing this land along with the water and all that is upon and within it.

Today, the Colorado River flows through Grand Canyon National Park and Glen Canyon National Recreation Area, as well as the Navajo and Hualapai reservations. The Bureau of Reclamation (BOR) completed the construction Glen Canyon Dam on the Colorado River in 1963 and became responsible for management of the Dam. U.S. federal law requires that Glen Canyon Dam be operated with minimal impact to the natural, recreational, and cultural resources of the *Colorado River Corridor,* the region of the Colorado River between Glen Canyon Dam and Lake Mead that is potentially impacted by flows from the Dam. The National Historic Preservation Act mandates that the impacts of any federal undertaking that will negatively affect historic and traditional cultural properties be evaluated, and the Southern Paiute monitoring program is designed to address this mandate. The Grand Canyon Protection Act and the Environmental Impact Statement for the Operation of the Glen Canyon Dam (GCDEIS) established a program of long-term research and monitoring of the effects of the Dam on these resources.

In 1991, three Southern Paiute tribes – the Kaibab Band of Paiute Indians, the Paiute Indian Tribe of Utah (representing the Shivwits Band of Paiute Indians), and the San Juan Southern Paiute Tribe – agreed to participate in studies to identify cultural resources impacted by Glen Canyon Dam and to recommend strategies for their protection. In 1993, the Kaibab Band of Paiute Indians and the Paiute Indian Tribe of Utah created the Southern Paiute Consortium (SPC) to ensure more effective government-to-government interactions between the tribes and the BOR. The SPC took over the cultural resource studies being conducted under the GCDEIS.

The BOR and National Park Service (NPS) developed a Programmatic Agreement (PA) on Cultural Resources for Glen Canyon Dam Operations. On February 9, 1994, the PA was signed by the Advisory Council on Historic Preservation, the Arizona State Historic Preservation Office, the BOR, the NPS, the Hopi Tribe, the Hualapai Tribe, the Navajo Nation, the Paiute Indian Tribe of Utah, the Kaibab Band of Paiute Indians, the San Juan Southern Paiute Tribe, and Zuni Pueblo. The PA laid out a plan for agency compliance with Section 106 of the National Historic Preservation Act through the development of monitoring and management protocols for cultural resources in the *Colorado River Corridor*. It directed the BOR and NPS to develop and implement a plan for monitoring the remedial actions and to develop a Historic Preservation Plan (HPP) for long-term monitoring and management.

In 1995, the GCDEIS was completed and transition to the Adaptive Management Program called for in the Grand Canyon Protection Act was begun. At that time, the SPC expanded the research activities it began under the GCDEIS to include assessing potential environmental impacts, developing monitoring procedures, and interacting with the BOR and other PA signatories. It established the Colorado River Monitoring and Environmental Education program. The basis for the program and the results of its initial development and implementation are fully discussed in the report*, Itus, Auv, Te’ek (Past, Present, Future): Managing Southern Paiute Resources in the Colorado River Corridor (*Stoffle, Austin, Fulfrost, Phillips, and Drye 1995). The results of each succeeding year’s activities are reported in annual reports to the BOR.

The Bureau of Reclamation (BOR) and the National Park Service (NPS) worked to prepare the Long Term Experimental and Management Plan Environmental Impact Statement (LTEMP EIS), from an initial public scoping period in 2011-2012 to the final Record of Decision published in December 2016 (completed after the term addressed in this annual report). The goal of the LTEMP EIS was to evaluate dam operations and identify management actions and experimental options that will provide a framework for the operation of the Glen Canyon Dam over the next 20 years, replacing the above-mentioned GCDEIS. The LTEMP will implement regular high flow experiments (HFEs) as an integral part of the management plan. HFEs release large volumes of water from the dam in an effort to increase the size and number of sandbars in the canyon. An important driver of the LTEMP EIS was the incorporation of scientific information gathered since the previous EIS as well as an updated assessment of how to minimize impacts on resources within the area impacted by dam operations. The Kaibab Band of Paiute Indians and the SPC director actively participated in the LTEMP process, providing feedback on several draft versions of the document. The tribe and the SPC director continue to participate in the ongoing development of the LTEMP Programmatic Agreement. The important change signaled by this new LTEMP and the longevity of the Consortium’s program prompted the SPC to focus its activities this year on assessing its monitoring program, evaluating in particular how the program might be adjusted to best address the effects of the changing operation of Glen Canyon Dam on places and resources of special concern to Southern Paiutes.

The 2016 initially program had four goals: (1) implementation of the SPC’s monitoring program; (2) training and education of Southern Paiute monitors; (3) education of Southern Paiute tribal members and the general public; and (4) discussion and evaluation of traditional cultural properties protection and management. As discussed below, these goals shifted during 2016. The first goal was modified to include an assessment of the SPC’s monitoring program. The revised goals were accomplished during 2016. This report summarizes the activities of the SPC undertaken as part of its responsibilities to protect and manage the land, water, and resources within Southern Paiute traditional territory and as a PA signatory.

**River Trip: Cultural Resource Evaluation and Educational Program**

The SPC cultural resource monitoring program was developed to evaluate the effects of the operation of Glen Canyon Dam on cultural resources that have been identified by Southern Paiute consultants within the Colorado River Corridor. The FY2016 Southern Paiute Consortium (SPC) Colorado River Corridor cultural resource monitoring program operated between September 2015 and September 2016 and marks the program’s twentieth year. Given the program’s longevity, significant changes in the availability of consultants (particularly a botanist knowledgeable about the flora and environmental history of the Colorado River Corridor, experienced in monitoring, and knowledgeable about Southern Paiute history and culture), and anticipated changes to the programmatic agreement, the SPC focused its 2016 activities on (1) assessing the monitoring program; (2) holding conversations about updating and adjusting the monitoring program to address current tribal needs and interests, resource availability, and changing adaptive management and program priorities; and (3) establishing the basis for revising the program in FY2017. Because the LTEMP process was still ongoing at the time of the 2016 river trip, trip leaders and participants included discussions about the current progress of the EIS as well as the status of revisions to the programmatic agreement. Tribal members were informed about the impacts of Glen Canyon Dam that had been noted in prior years and the role of the SPC in the Glen Canyon Dam Adaptive Management Program.

Run concurrently with the monitoring program, the 2016 SPC Colorado River Corridor Education and Training Program was specifically designed to provide opportunities for Southern Paiutes to learn directly from elders and cultural resource specialists as well as from scientists and others participating in the Glen Canyon Dam Adaptive Management Program. The program includes activities that take place along the Colorado River and elsewhere. This aspect of the overall SPC program is necessary to inform and educate future tribal leaders and train tribal monitors (see Austin, Fulfrost, Osife, Drye, and Rogers 1996). Additionally, a second purpose of the program is to provide education and outreach to non-tribal members about Southern Paiutes, their history in and perspectives of the Colorado River Corridor, and the importance of the broader cultural landscape stretching from rim to rim. This is achieved through outreach programs to the Colorado River Guides, schools, and civic organizations, as well as through interactions with other canyon visitors during the annual river trip.

The education component of the trip included (1) specialized training in monitoring skills and techniques; (2) direct information about Paiute culture provided by the Southern Paiute elders and cultural resource specialists; (3) learning through participation in Southern Paiute traditional practices and in monitoring activities; (4) information about policy and management related to Glen Canyon Dam, especially the new LTEMP; (5) education about how cultural resources along the Colorado River are being protected, and what policies exist and requirements are needed for receiving protective designation of cultural resources; and (6) expert consultation about relevant political and scientific issues in the Grand Canyon. As in past years, tribal educators were an integral component of the education program, sharing information about past as well as present connections between Southern Paiutes and the Colorado River Corridor. The sharing of ethnobotanical knowledge, including information about traditional plant uses, was an important component of the 2016 river trip.

This year’s program included one river trip between Lees Ferry and Diamond Creek (June 8th – June 17th), incorporating both an assessment of tribal monitoring as well as environmental education. Trip participants included the SPC Director; two tribal elders; two SPC monitors; one Southern Paiute cultural consultant; one monitor-in-training; four participants from the Paiute Indian Tribe of Utah; four participants from the Kaibab Band of Paiute Indians; one participant from Moapa Band of Paiute Indians; two educational and research specialists from the University of Arizona; and one botanist.

Table 1.1. Downriver Trip Schedule and Activities, 2016

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| --- | --- | --- | --- |
| **Site #** | **Site name** | **Date monitored** | **Activities Completed** |
| - | Lees Ferry | June 7, 2016 | * River safety orientation and monitor training
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| 5 | South Canyon | June 8, 2016 | * Southern Paiute interpretation and cultural activities
* Monitoring of archaeology, rock writing, and the beach, and assessment of monitoring program
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| 6 | Nankoweap | June 9, 2016 | * Southern Paiute interpretation and cultural activities
* Monitoring of archaeology and and assessment of monitoring program
 |
| 7 | Lava Chuar | June 11, 2016 | * Cultural hike and ethnobotany discussion
* Monitoring of archaeological site and assessment of monitoring program
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| 8 | Salt Mines | June 10, 2016 | * Southern Paiute interpretation and cultural activities
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|  | Blacktail Canyon | June 12, 2016 | * Discussion of LTEMP, AMWG participation, and gathering of information to inform potential changes in SPC monitoring program
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| 10 | Deer Creek | June 13, 2016 | * Southern Paiute interpretation and cultural activities
* Monitoring of plants, archaeology, and visitors, and assessment of monitoring program
* Cultural hike featuring ethnobotany and history
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| 12 | Vulcan’s Anvil | June 14, 2016 | * Southern Paiute interpretation and cultural activities
* Assessment of monitoring program
 |
| 13 | Whitmore | June 15, 2016 | * Southern Paiute interpretation and cultural transmission
* Monitoring of rock writing and assessment of monitoring program
 |
| 15 | Ompi Cave | June 15, 2016 | * Southern Paiute cultural activities
 |
| 18 | Pumpkin Spring | June 16, 2016 | * Southern Paiute interpretation and cultural transmission
* Monitoring of spring and beach, and assessment of monitoring program
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# **Lees Ferry**

A pre-river orientation and training of participants took place at Lees Ferry the day prior to the start of the downriver trip (June 7, 2016). Technical training was conducted during the orientation day at Lees Ferry. Participants were taught skills including: photo matching, compass reading, and laying transect lines. Other topics covered included the history and development of the Southern Paiute Consortium and the monitoring program, as well as the goals, importance, and cultural significance of the river trips. River safety training was also conducted pre-departure.

# **South Canyon – Site # 5**

South Canyon was the first site visited by the 2016 trip participants. At South Canyon, the elders and cultural consultant shared their knowledge about how to respectfully move through the canyon. Elders, the cultural consultant, and monitors also discussed with trip participants the significance of the site and the rock writing. The SPC director and botanist spoke with participants about the tamarisk trees in the area, the effects of the tamarisk beetle, and the impacts of HFEs on the beach at South Canyon. No significant change in the beach or archaeology/rock writing was observed since the last monitoring.

# **Nankoweap – Site # 6**

At Nankoweap, participants engaged in several cultural and educational activities. Tribal elders and the cultural consultant shared their knowledge of the bench and granary sites, including the importance of the living area at the confluence of Nankoweap Creek and the Colorado River and the impact of the loss of sediments and continued widening of the Creek channel at this site due to the operations of Glen Canyon Dam. Monitors demonstrated the photo monitoring process for trip participants, and incorporated interested participants into the process. No significant changes were noted. The botanist, with input from tribal elders, spoke with participants about the plants located at the site, their importance and ethnobotanical use. The botanist, SPC director, monitors, and research specialists assessed the established plant monitoring program, discussing potential modifications.

**Lava Chuar – Site # 7**

 The archaeological site Lava Chuar was visited in 2016. Trip participants were informed about the monitoring program at this site and were encouraged to practice their technical skills of transect laying and photo matching. The SPC director, monitors, and research specialists noted no significant increase in erosion from the side canyon channel or impacts to the site and also assessed the monitoring at the site. Additionally, an elder and the cultural consultant led participants on a hike and shared their extensive knowledge of the observed plants. At Lava Chuar, as well as at other key sites, trip participants learned about Southern Paiute uses of plants found in the Colorado River Corridor, where the plants grow, and methods of gathering and processing plant materials. The participating elders shared plant names (in Paiute and English), uses, and history of different plants. Specific discussions covered yucca, dogbane, mesquite bean, water sage, tobacco, and agave. At camp after visiting Lava Chuar, the elders demonstrated how to make string out of dogbane, and participants were encouraged to participate in making string.

**Deer Creek – Site # 10**

The visit to Deer Creek included several cultural and spiritual activities as well as monitoring the rock writing panels and agave and a discussion of the SPC monitoring program. The cultural consultant and tribal elders helped prepare trip participants for their visit, imparting important cultural knowledge linked to the site. SPC monitors, the director, cultural consultant, and tribal elders led trip participants in the monitoring. There were no significant changes observed in the rock writing panels.

The botanist and a research specialist visited the agave plants (*Agave phillipsiana*) at Deer Creek. The botanist offered feedback and recommendations for potential adjustments to the monitoring program at the agave plot. The botanist and the research specialist also shared with trip participants and canyon visitors the history of the agave and how they were used by Southern Paiutes.

Southern Paiute monitors, elders, and trip leaders continue to express concern about the impacts of visitors coming from the river on both the rock writing panels and the agave. Participants were also led on a cultural hike by the cultural consultant and one SPC monitor. Participants and trip leaders were particularly concerned about the low level of water coming out of the source.

#### **Vulcan’s Anvil – Site #12**

At this site, trip participants engaged in several activities. Firstly, Vulcan’s Anvil was visited for spiritual and ceremonial reasons. Participants visually inspected the Anvil and removed twenty objects and coins from the Anvil—an increase from the previous two years. Southern Paiute leaders and participants continue to express concern about this use of the Anvil.

The SPC director, tribal monitors, research specialists, and botanist examined the site where plant monitoring occurs at Vulcan’s Anvil (on the northern bank of the river), and discussed potential changes to the monitoring program at the site.

Also at this site, a tribal elder, the SPC director, SPC monitors, and a research specialist facilitated a discussion among trip participants about tribal participation in resource management efforts in the Colorado River Corridor and more broadly in the region.

#### **Whitmore Wash - Site #13**

In 2016, trip participants visited the Whitmore Wash site, holding discussions about its cultural significance. Tribal elders and the Southern Paiute cultural consultant spoke about the significance and interpretations of the rock writing panels. Participants were able to ask questions, engage in discussion with tribal experts, and inspect the rock writing panels. Trip participants also worked with SPC monitors to conduct the monitoring at the site and appraise the monitoring process there. No significant changes were observed at the rock writing panels or on the beach.

**Ompi Cave – Site #15**

This site was visited for spiritual and ceremonial reasons. As part of the Grand Canyon tribal work group, the SPC has noted that greater awareness of the sanctity of this site appears to have spread.

# **Pumpkin Spring – Site #18**

Pumpkin Spring was visited and monitored in 2016. The SPC monitors and director explained the site’s monitoring program to trip participants and a discussion was held about future monitoring at the site. No significant changes were observed at the site but the increased beach erosion noted in 2015 appears to have continued.

**Other Activities during the River Trip**

Throughout the trip, participants gathered every other evening in a circle to share thoughts and feelings about the day’s experiences and prepare for the following day’s activities. Information shared during these group meetings included stories about the places and the culturally appropriate behaviors expected there. All participants discussed what they knew about the places and shared their feelings about visiting them, often in relation to their past experiences and contemporary lives “up on top,” outside the river corridor. The participants also provided additional information about other groups and historical/political events related to places that were visited. The evenings ended with time for prayer and reflection after everyone had a chance to be heard, and to speak as much as they liked regarding the issues that affected them.

**Initial Assessment and Suggestions**

Throughout the 2016 river trip and in ongoing discussions, the SPC has engaged in an assessment of the monitoring program. This year’s initial assessment identified three main challenges. These include: the availability of a botanist knowledgeable about the flora and environmental history of the Colorado River Corridor, experienced in monitoring, and knowledgeable about Southern Paiute history and culture; the need to strengthen communication between the SPC and tribal councils, consultants, and tribal members; and the lack of easy access to the information collected under the monitoring program. These initial assessments will be addressed in a program redesign which will be completed in FY2017.

**Meetings, Conferences, and Other Activities**

Many of the activities conducted under the PA during FY2016 consisted of committee participation and meeting attendance. The Southern Paiute Consortium was represented at meetings of the Adaptive Management Work Group (AMWG), the Technical Work Group (TWG), the Long Term Experimental and Management Plan (LTEMP), and meetings with the tribal liaison of the Adaptive Management Program. The SPC and its member tribes, the Kaibab Band of Paiute Indians and the Paiute Indian Tribe of Utah, participated in consultation with federal agencies that are PA Signatories. All of these activities are informed by the data and information that the SPC gathers during its annual Colorado River trips. The SPC Director is responsible for ensuring that the information is passed between the Southern Paiutes and the federal managers responsible for operations of Glen Canyon Dam and the resources within the Colorado River Corridor.

The SPC Director met with representatives of the LTEMP and participated in conference calls related to the LTEMP EIS. The Kaibab Band of Paiute Indians is a signatory for the LTEMP, and the SPC Director attended meetings in February, August, and October and participated in regular conference calls. The SPC Director also met with tribal leaders aand representatives to discuss the LTEMP process, presenting reports on the LTEMP and its progress. For the ongoing process involving the Programmatic Agreement, the SPC Director met with and discussed the PA with tribal leaders and technical consultants at the University of Arizona. The SPC Director submitted comments on the draft version of the PA, and the Kaibab Band of Paiute Indians and the SPC will continue to participate in the ongoing process of developing a final programmatic agreement.

The SPC Director participated in two AMWG meetings (February and August), four AMWG conference calls and webinars, four TWG meetings, and six TWG conference calls and webinars on behalf of the SPC. The SPC maintains its position that the Colorado River Corridor is a significant cultural landscape and is vital to the physical and spiritual well-being of Southern Paiute people (see Stoffle, Halmo, and Austin 1997). Finally, the SPC Director met with representatives from GCMRC and National Park Service to discuss projects and activities that could potentially impact the Colorado River Corridor.

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