# On a Scale of 1–10, Exactly How Sacred is It? Evaluating Tools for Integrating Tribal Resources in the Planning Process

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Developing evaluative tools in a National Environmental Policy Act (NEPA) process is often seen as a standard process, yet the resource challenge can be immense. Evaluating affects upon cultural resources, especially those whose significance lie in their cultural values, is especially difficult in situations where tribal uses still exist. This paper will focus on examples from Grand Canyon National Park (GCNP) where tribal values, and the need to evaluate traditional cultural properties, has led to interesting applications of standard analysis tools so that tribal values are better integrated into the decision making process. Recognizing and protecting these resources, including ethnographic landscapes and soundscapes, are central to the integration of tribal concerns, providing a way for park managers to get beyond consultation.

Over the past 15 years, NPS resource managers at GCNP have been engaged in a multitude of consultations regarding projects and programs that have the potential to affect resources of concern to the affiliated Indian tribes of the area. In this discussion, I will focus on two specific projects, the revision of the park's Colorado River Management Plan (CRMP) and the Aircraft Overflights Plan, both of which evaluate affects upon resources from vastly differing points of view. In the CRMP, we addressed tribal perspectives from the tribal origin, or emergence place, of many of the tribes themselves, the Colorado River, deep within the Grand Canyon. In the overflights plan, we are viewing the very same origins of the Grand Canyon from thousands of feet above the ground surface.

The Colorado River in the Grand Canyon has considerable significance for many of the indigenous peoples of the region. For the Hopi people, the river and canyon are referred to as the "Salt Canyon," *O'ongtupka*, representing the place of emergence of their people into the fourth world. The people originated from the *Sipapuni*, deep within the canyon, and upon death, the spirit returns to the canyon. For the Navajo people, the river is the river of never-ending life, *Bits'iis Nineezi*, a sacred being in and of itself. The confluence of the Colorado and Little Colorado rivers represents the sacred male and female beings (Figure 1). The rivers also represent cultural boundaries. For the Zuni people, the rivers represent the umbilical cord that connects them to their place of origin deep within the canyon. For the Pai people, the canyon and the river are "*hakatai'a*," the backbone. The Southern Paiute people have identified a place deep within the canyon is a difficult task and we, as NPS managers, are often placed in the position of trying to compartmentalize a sacred landscape in order to meet the legal requirements of NEPA or the National Historic Preservation Act (NHPA).

#### **Colorado River Management Plan**

In 2006, the park completed a revision of the Colorado River Management Plan (NPS 2005). This is primarily a visitor use management plan that specifies actions to conserve park



Figure 1. View of the confluence of the Little Colorado and Colorado rivers within the Grand Canyon.

resources and the visitor experience while enhancing recreational opportunities on the Colorado River through GCNP. Many of our affiliated tribes participated in the development of the plan, with the Hualapai Tribe acting as a cooperator in the development of the plan.

Park staff routinely host tribal consultation river trips where tribal members can interact with park staff and the resources of the canyon. These trips provide opportunities for tribal representatives to provide feedback to park resource managers about the condition of resources, impacts they are observing and recommendations for park management actions. As we interacted with tribal representatives concerning the status of resources along the Colorado River, many expressed concern with the number of visitors in the canyon, physical impacts to archaeological sites, and the appropriateness of certain activities conducted by recreational users of the river. Evaluating physical effects to historic properties is relatively simple; evaluating the effects of numbers of visitors and their behaviors proved to be more complicated.

When we developed strategies for the evaluation of physical impacts to archaeological sites, campsites, trails, etc., we employed standard evaluative techniques based upon the concept of "limits of acceptable change." We established baseline resource conditions and evaluated the alternatives based upon likely changes to those conditions. Evaluating the potential impacts to traditional cultural places (those that may or may not meet National Register criteria) proved to be more challenging, requiring additional tools to insure we were accurately portraying effects that may be experienced by traditional practitioners.

After discussing with tribal representatives the resources that may be affected by visitation, we identified a number of locations known to have traditional associations and used

#### **Engaging with Native Communities**

them as characteristic of traditional cultural places throughout the river corridor. Since the location and nature of many of the sacred places are known only to the traditional leaders of the various tribes, we used well known sacred locations, such as the confluence of the Colorado and Little Colorado rivers, Vasey's Paradise, Deer Creek narrows, and Havasu Canyon (Figure 2). GCNP, through partner universities, developed a computer simulation model of river trips, allowing resource managers to manipulate launch patterns and types of trips in order to predict downstream congestion and crowding. Our goal was to use the river trip simulation model to estimate the number of people at one time and within any given day visiting these locations. With that information, we were able to evaluate potential effects to traditionally important locations within the Colorado River corridor. That information aided park managers in choosing the preferred alternative that provided for no more than 100 people at a time at any of the significant locations identified as culturally sensitive. Now that the plan has been implemented, we will be monitoring visitation at these special locations in the hope that our modified launch pattern resulted in the hypothesized reductions of people at one time. These results will provide necessary information for modifications in the visitation pattern if the number of people at one time is exceeded.

## Aircraft Overflights Plan

In 1996, the park began working with the Federal Aviation Administration (FAA) on special flight rules within GCNP. This work resulted in an environmental assessment and rule in 2000 that identified specific flight routes and elevations within the special flight rules area. GCNP and the FAA initiated a new environmental review in 2006. This new effort is intended to assist the park in the "substantial restoration of natural quiet" to the park as mandated by the 1987 Overflights Act. Over 90,000 aircraft overflights occur annually over GCNP, and hundreds of flights a day transit over the park on their way east-west and north-south. Restoring the natural soundscape of the canyon has, and continues to be, a challenge (Figure 3).

Over the past thirteen years, we have been working with the affiliated tribes and the FAA on identifying traditionally associated resources and ways to mitigate impacts to them from the sounds created by aircraft overflights. The FAA is not as familiar as the NPS with incorporating tribal values into their planning process and early on staff from the FAA asserted to the Havasupai and Hualapai tribes during a consultation meeting that the FAA "owned" the air. The reaction from the tribal officials present at the meeting was one of amazement, immediately resulting in the Havasupai chairman reading the tribal constitution to the FAA officials. This experience led to the NPS becoming more directly involved in identifying culturally sensitive resources and working with tribal representatives on ways to evaluate impacts to traditional users.

Although unfamiliar with assessing impacts to traditional resources, the FAA briefly assigned a cultural resource specialist to the 1996–2000 effort. While attempting to define a flight corridor that avoided locations identified by tribal practitioners, FAA officials asked tribal representatives to rank the significance of their sacred places, i.e., on a scale of 1 to 10, how sacred is ...? That question clearly illustrated the FAA's lack of understanding of tra-



Figure 2. Vasey's Paradise, a spring important to native people, deep within the Grand Canyon.

ditionally valued places, and the need for the NPS to become more directly involved in assessing affects on tribally identified resources.

In the current effort, the NPS has asserted its role in identifying and evaluating impacts to resources on the ground, and within NPS jurisdiction. In order to do that, we have employed a number of evaluative tools that incorporate perspectives gained through tribal consultation with acoustic measurements such as "speech interruption," "noise free intervals," and simple acoustic decibel measurements. We chose representative cultural locations within the park for modeling purposes, and are currently in the process of analyzing the effects, and determining if these metrics represent a true evaluation of effects on cultural properties.

The padding of feet in the pueblo, the song of the canyon wren welcoming the morning, prayers offered in the kivas—these are all sounds that exist today in the canyon, which can connect people to sacred places. All of these images represent important sights and sounds (the ethnographic landscape) that deserve protection from both the visual and audible intrusion of the sights and sounds associated with aircraft overflights over the landscape. Finding ways to identify the resources of concern and appropriately characterize them, without compromising tribal values, is our challenge and we hope to continue working with our affiliated tribes toward that end.



Figure 3. Aircraft flight corridors and zones within Grand Canyon National Park.

## Conclusion

In the examples described above, I have attempted to illustrate the challenges we face in trying to characterize traditionally valued resources while accurately representing the impacts these resources may receive from agency actions. Recognizing the sensitive nature of the resources, the sensitive nature of the information, and the needs of both the agencies and affected tribes to make progress in understanding how actions can affect traditional resources has allowed us to propose ways in which traditionally valued resources can be evaluated in a NEPA process. Although the process can be seen as the antithesis of how tribal people view resources of concern, the approaches we have suggested provide ways to quantify the unquantifiable and recognize the effects of our actions on these significant resources. The approaches may not be perfect, but they are a tool to insure that tribal perspectives can be integrated into agency actions, rather than being ignored for lack of a creative way to include them.

## Reference

NPS [National Park Service]. 2005. *Final Environmental Impact Statement: Colorado River Management Plan.* November. Grand Canyon National Park, Ariz.: US Department of the Interior.