Agenda Item
Hopi Tribe’s Monitoring Program

Action Requested
Information item only; we will answer questions but no action is requested.

Presenter
Leigh Kuwanwiswima, Director, Hopi Cultural Preservation Office
Mike Yeatts, Archaeologist, Hopi Cultural Preservation Office

Previous Action Taken
N/A

Relevant Science
N/A

Summary of Presentation and Background Information
The Hopi Tribe has been involved with the Adaptive Management Program since its inception, and prior to that was a cooperating agency on the EIS for the Operation of Glen Canyon Dam. In 2003, the Hopi Tribe began developing a Long-term Monitoring Program to assess the health of culturally important resources along the Colorado River corridor from a traditional Hopi perspective; this program was approved by the AMP in 2007.

Our presentation will look at the cultural philosophy underlying the Hopi Long-term Monitoring Program, the culturally significant resources that are part of the program, and what has been learned to date.
Hopi Long-term Monitoring Program for Öngtupqa
Origin Location and Final Home

In Hopi tradition, the Grand Canyon holds the origin location of people and is the final destination for Hopis in the afterlife.
Ceremony and Tradition

**Wuwutsim**

The initiation ceremony for male Hopis into adulthood. Associated with Salt Pilgrimage.

**Tiyo** - The first person to travel the length of the river. Brought the Snake Ceremony to Hopi.
Migrations

- Currently 34 clans at Hopi

- At least 19 Hopi clans have ties to the Grand Canyon through their migrations

- Archaeological sites, petroglyphs and other remains are viewed as “footprints” left by Hisat’sinom. They are considered to be still occupied.
Hopi Resources

“Cultural” resources---traditional cultural properties (TCPs), archaeological sites, human remains, petroglyphs & pictographs

Biological resources--- plants, birds, mammals, insects, reptiles, fish, springs, side streams

Physical resources---minerals, sand, beaches, water, springs
Monitoring Methodology

• Goal:
  – Integrate traditional Hopi cultural values into a science-based long-term monitoring program

• Challenges:
  – Restrictions on entry into Öngtupqa
  – Sampling issues

• Survey based approach
  – Premise - it is during the Interpretation of data and not necessarily during its collection where cultural values and traditional knowledge are best integrated
  – Developed out of the TEM integration project (2001-2004)
Data Acquisition

• Relies primarily on data collected by other scientists
• Information converted to Standardized Presentations
  – Data needs to be made relevant; convert into familiar terms or concepts
• Independent observation by limited number of Hopis on river trips
  – Repeat visits to specific sites
  – Locations with culturally important resources
  – Repeat photography
  – Voucher specimens
Surveys

- “General” survey (13 questions)
- River Trip participant survey (20 questions)
- River Trip participants address resource health for a wider suite of resources

- Both cover
  - General cultural questions
  - Resource health questions
  - Management questions
Survey Categories

• Cultural
  – Should Hopi be involved in management and monitoring?
  – Is monitoring information important?
  – Relevance of information?

• Resources
  – Marshes  – Birds  – Archaeological Sites
  – Hopi Salt Mine  – Willows  – Animals
  – Native Fish  – Snakes  – Insects
  – Springs and seeps

• Management
  – Is recreation appropriate?
  – Should trout be removed?
  – Do non-native species have a role?
  – Treatment of Archaeological Sites?

➢ Yes/No and Narrative response options
Results To Date

• Monitoring program “officially” began in 2008; Surveys conducted annually since 2003, with those since 2006 used in current analysis
• 262 surveys have been completed by Hopis
  – represents 148 individual Hopis
• Over all surveys and across all resource categories, 68% of the responses indicate a positive assessment of resource health
• 94% of Hopi respondents feel that Hopi should be involved in the management of the Grand Canyon
• 97% of Hopi respondents feel that the information being collected in the AMP is culturally important.
Are Archaeological Sites Healthy
Are Native Fish Healthy

- Yes
- No
- Other

Normalized Response

Year

Is Removing Trout to Hopefully Help Native Fish Right or Wrong

- **Right**
- **Wrong**
- **Other**

Normalized Response vs. Year

Is the Öönga Healthy

- Yes
- No
- Other
Conclusions and Recommendations

- There is a strong desire by the Hopi Tribe to remain involved in the management of the Grand Canyon.
- Process can be as important as the outcome with regard to desired resource conditions.

- Development of Education resource handbook for use at Hopi

- Need additional input on terrestrial resources:
  - AMP has not consistently collected information on the status of a number of resource categories that are culturally important to the Hopi Tribe. This includes archaeological sites, vegetation, avifauna, reptiles, insects, and mammals.