

Glen Canyon Dam Adaptive Management Work Group
Agenda Item Information
August 29-30, 2012

Agenda Item

Technical Work Group Chair Report

Action Requested

- ✓ Action Item: The following motion is recommended by TWG. However, no motion is officially made unless and until an AMWG member makes the motion in accordance with the AMWG Operating Procedures.

AMWG recommends that the Secretary of the Interior accept the Administrative History Prospectus dated August 2011.

- ✓ Feedback is requested from AMWG members on the report from the Cultural Resources Ad Hoc Group report.
 - ✓ These are information items.
 - Kanab Ambersnail taxonomy report
 - TWG Chair election update
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Presenters

Shane Capron, Chair, Technical Work Group (Western Area Power Administration)
Glen Knowles, Chief, Adaptive Management Group, Bureau of Reclamation

Previous Action Taken

Administrative History

- ✓ AMWG passed the following motion at its August 2010 meeting:
AMWG requests that POAHG, working with Reclamation, GCMRC, and other appropriate parties, develop and forward to TWG a recommendation with regard to a prospectus that identifies goals and objectives, scope, lead agency, cost, and funding source(s) for an RFP for an annotated administrative history of the AMP to document the history of events, people, sites, issues, and documents that have contributed to adaptive ecosystem management of the Colorado River ecosystem in relation to Glen Canyon Dam. AMWG further requests that TWG make a recommendation on the subject to AMWG by the summer 2011 AMWG meeting.
- ✓ TWG passed the following motion at its October 2011 meeting:
TWG recommends that AMWG recommend to the Secretary to accept the Administrative History Prospectus dated August 2011.

Cultural Resources Ad Hoc Group

✓ AMWG passed the following motion by consensus at its August 2011 meeting:

[unrelated text deleted]

To address cultural resources issue #3, below, AMWG directs the TWG to reconstitute the Cultural Resources Ad Hoc Group and make a recommendation to the AMWG on the issue at its February 2012 meeting.

[unrelated text deleted]

3. AMWG indicates its intention to make a recommendation to the Secretary on the following questions: How should the program fairly treat conflicts of cultural values, specifically those involving Native American perspectives? How will tribal values be monitored and tracked in this program?

Relevant Science

N/A

Background Information

Administrative History

In August 2010, AMWG directed the Public Outreach Ad Hoc Group (POAHG) to develop a prospectus for the development of an annotated administrative history “to document the history of events, people, sites, issues, and documents that have contributed to adaptive ecosystem management of the Colorado River ecosystem in relation to Glen Canyon Dam.” In October 2011, TWG recommended that AMWG forward the prospectus to the Secretary of the Interior and recommend his acceptance of the prospectus. That prospectus is attached to this AIF as Attachment 1.

AMWG will be asked to forward the prospectus to the Secretary and recommend that he accept it.

Cultural Resources Ad Hoc Group

In August 2011, AMWG directed the Cultural Resources Ad Hoc Group (CRAHG) to make a recommendation to TWG, and TWG to make a recommendation to AMWG, with regard to the following two questions:

- How should the program fairly treat conflicts of cultural values, specifically those involving Native American perspectives?
- How will tribal values be monitored and tracked in this program?

In June 2012, the CRAHG presented its report to the TWG. That report is attached to this AIF as Attachment 2. The TWG agreed that the recommendations in that report should be adopted, and formed an Operating Procedures Ad Hoc Group, chaired by Chris Harris, to develop a recommendation to the TWG for revisions to the TWG operating procedures to implement appropriate portions of the CRAHG report. Some of the recommendations contained within the CRAHG report may need further consideration at levels higher than TWG, and the Operating Procedures Ad Hoc Group (OPAHG) will provide that direction to the TWG in consultation with the CRAHG.

AMWG will have an opportunity to comment on the report, consider the proposed TWG approach to implementing the recommendations (OPAHG), and consider adopting the CRAHG recommendations for AMWG or whether further action is required.

Kanab Ambersnail Taxonomy Report

The TWG heard a project update from Dr. Melanie Culver (University of Arizona) on the Kanab ambersnail (*Oxyloma*) genetics research to determine taxonomy. Dr. Culver and others are preparing a final report that indicates that the Kanab ambersnail is not a distinct species and that there appears to be extensive gene flow throughout the *Oxyloma* populations. Their research has found that only one taxonomic group (species-level) is indicated. There is also evidence of both short- and long-distance dispersal. They expect to complete a manuscript for publication soon. The Fish and Wildlife Service will consider whether a change in listing status under the ESA is appropriate.

Regardless of these efforts and the listing status, Dr. Culver stressed that this may be an important population and should continue to be monitored for stability and a decline in numbers. She also emphasized that it is important to protect habitat and to allow a dynamic process of colonization to continue with other populations. Dr. Culver's PowerPoint presentation is available at http://www.usbr.gov/uc/rm/amp/twg/mtgs/12jun20/Attach_05.pdf.

TWG Chair Election Update (Glen Knowles)

Shane Capron's term as TWG chair ends in October. However, the search for a new TWG Chair has not been successful to date. Mr. Capron has agreed to continue as chair through the October 2012 TWG meeting in the hopes that a new Chair will be found and elected. Mr. Capron has been nominated and approved as Western's official TWG member and will be moving to that side of the table once his duties as TWG Chair are completed.

GLEN CANYON DAM ADAPTIVE MANAGEMENT PROGRAM
ADMINISTRATIVE HISTORY PROSPECTUS
L.E. Stevens (GCWC) and Michael Yeatts (Hopi Tribe)

AMWG Motion: (Proposed by Larry Stevens, seconded by Sam Jansen): AMWG requests that POAHG, working with Reclamation, GCMRC, and other appropriate parties, develop and forward to TWG a recommendation with regard to a prospectus that identifies goals and objectives, scope, lead agency, cost, and funding source(s) for an RFP for an annotated administrative history of the AMP to document the history of events, people, sites, issues, and documents that have contributed to adaptive ecosystem management of the Colorado River ecosystem in relation to Glen Canyon Dam. AMWG further requests that TWG make a recommendation on the subject to AMWG at the summer 2011 AMWG meeting.

INTRODUCTION

The Glen Canyon Dam Adaptive Management Program (AMP) is one of the most important tests of implementing a multi-stakeholder adaptive management program. Beginning in the decade prior to dam construction, management planning and research began, focused on areas both above and below the dam site. Topics were related to construction and operation of the dam and to the environment that would be affected by its installation. In 1982, awareness of the possible affects that dam operations were having on the downstream environment, even far from the dam itself, initiated Phase I of the Glen Canyon Environmental Studies (GCES). The findings of Phase I indicated that impacts were occurring downstream in Glen and Grand Canyon National Parks. Phase II of the GCES and a NEPA process were then initiated to better understand the affects and to develop an operational scenario that minimized the affects of the dam while still maintaining compliance with the multitude of legal and operational constraints on the system. The result of these studies and the outcome of the NEPA process was a change to the operations of Glen Canyon Dam and the formal initiation of the AMP.

The process of getting to and implementing the current AMP is the result of vast numbers of individual choices made by hundreds of administrators, politicians, tribal and non-governmental organizations, judges and solicitors, and researchers. Decisions are made drawing on knowledge of the past actions as well as new information. Many issues and topics have been addressed by the program, sometimes at great length and involving considerable expense. Not surprising given the duration that the program has been in existence and the average tenure of individual participants, topics tend to cycle through time with issues sometimes being partially resolved, reported upon, forgotten, then reintroduced a decade or two later as new issues. This occurs both in the management realm and, to a lesser extent, within the research realm. Some examples of this within the AMP in recent decades include:

1. Definition of “Desired Future Conditions”;
2. The environmental benefits of steady vs. fluctuating flows;
3. The role of high flows in sustaining upper riparian zone vegetation;

4. The need to adopt an ecosystem approach to achieve integrated adaptive management; the role of Native American Tribes and traditional knowledge in adaptive management;
5. And many other topics.

Unfortunately, no mechanism currently exists in the AMP to adequately track of its own history. As time passes, personnel come and go from the program. As they leave, they take a bit of the collective knowledge that informs on the relationships among management and research topics, the history and chronology of participants, issues and concepts that have shaped the program. Since the program lacks a collective historical perspective and no briefing document exists to allow new members to readily learn about the AMP's history, we seem destined to repeat that history in a cyclic pattern.

Here we present draft concepts, justification, and a process through which to develop a comprehensive, integrated administrative history of the AMP, a process that will summarize past efforts and serve as an archive and learning tool for the future. We recognize that many elements of this project will require further discussion and refinement to maximize its usefulness to the AMP, and we hope this document stimulates productive discussion on the importance of this topic to the AMP.

JUSTIFICATION

Undertaking a comprehensive administrative history of the AMP will provide numerous potential benefits, including the following:

1. Improving understanding of inter-relationships among AMP issues and concepts;
2. Determining which CRE management questions have been resolved, why other questions remain unanswered, and the state of knowledge about resolved and unresolved questions;
3. Providing new and current members of the AMP with background information to help them become more quickly engaged and effective in discussions and decision-making;
4. Improving understanding of relationships between funding expended and management of the CRE as a human-dominated ecosystem;
5. Reducing redundancy in research and monitoring efforts among the several agencies and entities with parallel programs and related questions;
6. Create a focal point to access information about the AMP program, both administrative and scientific;
7. Begin documenting one of the founding adaptive management efforts while many of the original participants are still around.

DESIGN

The administrative history of the AMP should be developed as an unbiased, integrated, well-annotated historical program with the following features (not an exhaustive list):

1. It is a robust chronology of persons, concepts, decisions, actions, events, and reviews, likely from the early 1970's to the present, to address the questions of who the participants have been, their affiliations and perspectives, and the legislation and policies behind their participation;

2. It contains a robust, relational bibliography of agency and published documents, with strong linkage to agency and peer-review published scientific literature;
3. It can easily be expanded and added to over time;
4. It is very user friendly, versatile, relational, and readily capable of presenting synopses of the literature or concepts, as well as graphical displays of appropriate information;
5. It is designed to help AMP members quickly come up to speed on the background behind issues under discussion;
6. It provides new AMP participants with structured learning to help them become more effective advisors to the Secretary;
7. It provides relational linkage to understand how funding and projects relate to program goals, objectives, and information needs.
8. It relates projects by Reclamation to those of other agencies / entities conducting related research and monitoring.
9. It has a strong geographical framework relating projects and history to specific locations and reaches of the CRE. The advantages of this approach are that administrators and researchers can be quickly brought up to speed on the historical information available at study sites, reducing redundancy and quickly illuminating complicating issues, such as compliance;
10. It readily links to, is interactive with, but does not reinvent, elements of administrative history already constructed by Reclamation and GCMRC;
11. It is accessible to outside researchers, educators, and the general public.

Thus, the AMP administrative history would provide: 1) an unbiased archive of past program participants, concepts, actions, and achievements; 2) a relational educational resource to improve the efficiency of AMP discussions; 3) a learning kit for new-comers to the AMP; and 4) a strategic planning tool to help guide research and management projects.

COMPONENTS

Development of the AMP administrative history will involve the following elements, and other elements may arise during the formative stages of the project:

1. Design of an appropriate relational, user-friendly framework for locating and accessing archival information, including the AMP bibliography, briefs on the history of key topics, and chronological trees of participants and concepts. In concept, it could be something like a “Wikipedia of the AMP”. This database should include capacity to store text, images, videography, GIS data, and other data gathered by the team, and should be sufficiently flexible to be improved and updated in the future. It will not be a replacement data archive for the existing AMP and agency data management systems;
2. Compilation of existing literature, including linkage where possible;
3. Carefully crafted and executed interviews, including in-depth interviews of 25-50 living historical figures who have been responsible for the development of the AMP (e.g., Bruce Babbitt, Cliff Barrett, Steven Carothers, David Garrett, Rick Gold, Duncan Patten, David Wegner, and several past GRCA superintendents), as well as shorter interviews with past and present TWG and AMWG members and individuals in other agencies who are knowledgeable about CRE management issues.
4. Developing biographical sketches of individuals no longer living;

5. Development of the GIS-AMP project geographical linkage, likely with GCMRC and Reclamation involvement.

It should be reiterated that the intent is not for the system to become a primary data storage entity for the AMP. Instead, it should serve more as a “search engine” that points to where data resides (whether electronic or otherwise). Only in the case of new administrative history data will the system serve as the primary repository.

TIME FRAME AND BUDGET

The time frame of this project is moderately urgent, as many historical figures are nearing the ends of their careers. Therefore, this administrative history should be undertaken with Phase 1 starting in FY 2012 and completed in FY 2013, Phase 2 starting in 2013 and being completed in 2015, and Phase 3 starting in 2015 and being completed in FY 2016.

PHASE 1: \$100,000

An overarching strategic plan will be produced detailing the steps to be taken in developing the Administrative History. It will include technical, logistical, and funding aspects of the project. A pilot implementation of the strategic plan will follow and is envisioned to include:

1. Develop a provisional database approach for information archival and retrieval;
2. Conduct 5 in-depth and 10 brief interviews with AMP historical figures;
3. Integrate literature;
4. Develop a chronological overview of participants and concept;
5. Develop the new-participants handbook to the history of the AMP;
6. Assess utility of the project to the AMP.
7. Develop a funding strategy for future Phases

This pilot phase will allow better definition of the project, allow refinement to the strategic plan and will enable future tasks to be prioritized in a more realistic manner.

PHASE 2: \$250,000

If pilot Phase 1 is deemed useful to the AMP, Phase 2 would involve an effort to:

1. Refine the database structure;
2. Expand the number of interviews conducted; Integrate the interview data with the chronology;
3. Develop the geodatabase; Improve the new-participants handbook;
4. Develop the pilot relational analysis of AMP goals, objectives, funding to the CRE ecosystem structure;
5. Assess utility of the project to the AMP.

PHASE 3: \$100,000

If the second phase is successful, Phase 3 would involve:

1. Refine the final database structure;

2. Complete historical interviews;
3. Complete the analytical process relating program actions to ecosystem management;
4. Conduct information addition studies for contribution of future information;
5. Assess utility of the project to the AMP.

Thus, the overall administrative history project may require \$450,000 to complete, but each phase would depend on successful completion of the previous phase, and would guarantee the utility of the deliverables to the AMP.

FUNDING SOURCES

It is likely that funding will need to be sought through AMP, appropriated agency, and outside (grant) funding sources. It may be possible to greatly leverage limited internal funding through cooperation with academic institutions. This type of project provides a unique opportunity for educators, researchers, and their students to work on real-world topics.

At a minimum, the strategic plan guiding the development of the program needs to occur in the near future. With an appropriately worded RFP, much of this plan could be obtained as the winning proposal. Development of the nascent database structure and interviews with critical players in the development of the AMP should also be of high priority.

MEMORANDUM

To: Technical Work Group members
Glen Canyon Dam Adaptive Management Program

From: Kurt Dongoske, Chair, Cultural Resources Ad Hoc Group

Date: 04 June 2012

Re: Report and Recommendations from the Cultural Resources Ad Hoc Group

In an AMWG motion passed at the 24-25 August 2011 meeting, the AMWG directed the TWG to reconstitute the Cultural Resources Ad Hoc Group (CRAHG) and make recommendations to the AMWG on the following at its February 2012 meeting: [AMWG indicates its intention to make a recommendation to the Secretary on the following questions: How should the program fairly treat conflicts of cultural values, specifically those involving Native American perspectives? How will tribal values be monitored and tracked in this program?](#)

The CRAHG presented a progress report to the Technical Work Group at their February 2012 meeting. The progress report is attached as appendix A. This final report of the CRAHG expands on the previous progress report and offers options for consideration and subsequent implementation.

The purpose of these recommendations is to address conflicts of cultural values within the Glen Canyon Dam Adaptive Management Program. The CRAHG believes that implementation of these recommendations will allow every stakeholder participating in the AMWG and TWG to fully participate in the process, believe that they have been heard and understood by the other stakeholders, and are satisfied that their points of view are fully considered within the program. The CRAHG believes that implementing these recommendations will result in the generation of improved and constructive recommendations to the Secretary of the Interior. The CRAHG also believes that these recommendations have the distinct potential to produce a more robust involvement and a greater sense of enfranchisement on the part of all stakeholders, as well as lessening the perceived need for litigation or seeking other avenues outside the program to obtain what stakeholders believe they need to be taken seriously.

The CRAHG strongly encourages the AMWG and TWG to engage in a dialogue about these recommendations and come to agreement on how to proceed. With the assistance of Mary Orton, the CRAHG has drawn from the *Core Values of Public Participation* developed and published by the International Association of Public Participation (<http://www.iap2.org/displaycommon.cfm?an=4>) to constructively contribute to this report. The fifth core value states: “Public participation seeks input from participants in designing how they participate” (Please see Appendix 2 for the full set of core values from IAP2.).

Consensus Building and Collaboration

The CRAHG recommends that the AMWG and TWG commit to building consensus on the difficult issues we confront. This approach necessitates changes in how each of these two groups operate. Some of these changes are described below.

1. In order to build consensus, it is imperative to understand the others' points of view and find ways to address everyone's interests. This involves deeply listening to each other during meetings, and the willingness to commit the time to explore avenues to satisfy all the interests at the table. While more time to explore differences may be uncomfortable for some stakeholders, it is crucial for others.
 - a. This may involve changes to the operating procedures to emphasize consensus.
 - b. In order to allow the time needed, agendas may need to be shorter or meetings may need to be longer and/or more frequent.
2. A commitment to consensus changes the dynamics of a group. **Instead of determining what proposal will achieve the number of votes required, every point of view is considered and the focus is on how everyone's interests can be addressed in the proposal.** While many stakeholders in the AMP understand this process, the group as a whole does not have these skills. Therefore, committing to working together to build the skills and protocols will allow all parties to demonstrate respect for all points of view and resolve differences as a group.
 - a. One aspect of cultural differences concerns the confrontational approach used by some individuals during meetings. While some people are very comfortable with this approach, others (including many tribal members) are not. For some, cultural norms would prohibit participation in a confrontational conversation. It is recommended that AMWG and TWG develop norms that ensure that everyone at the table is comfortable taking part in the discussions.
3. Develop ways to increase opportunities for dialogue among stakeholders in situations where important issues are not at stake. AMWG meetings are one important venue for stakeholders to offer their perspectives and initiating this dialogue. This helps all parties understand each other's values and worldviews in advance of addressing a difficult issue. Perhaps creating more opportunities for social interaction among stakeholders at the AMWG and TWG meetings would provide opportunities to understanding each other's perspectives and values.
 - a. Educating each other about different perspectives is crucial. The purpose of the AMP is to bring together disparate points of view; that is to say that we need to understand each other in order to take full advantage of these differences.
 - b. Tribal values and worldviews are often significantly different from those of the other stakeholders around the table. Often, non-tribal stakeholders do not fully understand the unique relationship between tribes and the federal government. Additional educational efforts are necessary to clarify this relationship and achieve mutual understanding.
 - c. Retreats held every year or every two years offer an ideal venue for the purpose of assessing and improving collaborative processes. Retreats provide opportunities for

stakeholders to explore their various cultural perspectives about the Grand Canyon and the Colorado River ecosystem.

- d. Day trips or AMWG and TWG meetings on reservations, at the park, and on the river would provide other venues that could enhance mutual understanding of tribal cultures and other stakeholders.

Openness and Transparency

4. When AMWG and TWG, or subsets of these groups, make recommendations regarding a topic, and the federal agencies make final decisions about that topic, the agencies should explain their decisions to the stakeholders, as appropriate; particularly when the recommendations were not accepted. This is consistent with the seventh point of the Core Values of Public Participation of IAP2: “Public participation communicates to participants how their input affected the decision.”
5. If a federal agency is undertaking an initiative that stakeholders are interested in or concerned about, they should begin a dialogue with those stakeholders early in their decision-making process and not wait for an AMWG or TWG meeting, though these meetings can be used for this purpose.

Dispute Resolution

6. In a collaborative process, it is inevitable that some issues will never be resolved through the normal discussion and deliberation processes, even if we use best practices of collaborative groups. To handle such cases, it is recommended that the AMP adopt a dispute resolution process that stakeholders may invoke if they feel their views are not represented in the proposal being considered. Presented below are some ideas for a dispute resolution process.
 - a. If there are disagreements at a AMWG or TWG meeting, and there is no additional time for discussion, a stakeholder may request a caucus with the Chair to explore options. The Chair may request that a small group of stakeholders, representing all points of view, work on the issue and bring a recommendation to the full group.
 - b. When consensus is not reached, AMWG forwards in writing the different perspectives to the Secretary to consider before making a decision.

Monitoring and Tracking Tribal Values

In order to monitor and track how tribal values are integrated in the AMP, the CRAHG offers the following ideas for consideration and implementation.

7. Include the traditional ecological knowledge (TEK) integration process into the Grand Canyon Monitoring and Research Center’s science program as a pilot TEK project collaboratively developed with one or more of the participating Tribes for implementation in FY 2013 or 2014.
8. It is recommended that the program track, in an annual report, the number of times consensus is reached or not reached, how often the dispute resolution process was invoked, and the outcomes of the dispute resolution process. During the suggested retreats, AMWG and TWG could discuss how to improve the operation of these processes, with attention paid to how

many times one of the participating Tribes invokes the dispute resolution process and an analysis of those conditions performed.

Appendix 1: February 2012 Progress Report of the Cultural Resources Ad Hoc Group (CRAHG)

Motion: In an AMWG motion passed at the 24-25 August 2011 meeting, the AMWG directed the TWG to reconstitute the Cultural Resources Ad Hoc Group and make recommendations to the AMWG on Issue #3 at its February 2012 meeting. Issue #3: [AMWG indicates its intention to make a recommendation to the Secretary on the following questions: How should the program fairly treat conflicts of cultural values, specifically those involving Native American perspectives? How will tribal values be monitored and tracked in this program?](#)

The CRAHG met on 23 January 2012 to discuss these two questions and how to respond to the Technical Work Group. The CRAHG recognized that whatever recommendations the ad hoc group generates and brings back to the TWG and is ultimately reviewed and acted on by the AMWG could and probably will be significantly affected by the new Department of the Interior's Policy on Consultation with Indian Tribes issued in December of 2011 and the subsequent Secretarial Order 3317 issued on December 01, 2011. The following represents a progress report to the Technical Work Group concerning the outcome of the CRAHG meeting.

Recommendations:

[How should the program fairly treat conflicts of cultural values, specifically those involving Native American perspectives?](#)

1. AMWG/TWG should spend more time and effort at trying to achieve understanding and consensus among the stakeholders regarding issues where conflicts of cultural values are apparent.
 - Agreement by AMWG to work harder (i.e., good faith effort) to achieve consensus
 - Federal agencies (e.g., BOR) should be transparent about why they are making certain decisions and provide this rationale back to the tribes when the tribal perspectives are not honored.
 - Federal agencies should take the initiative to begin a dialogue regarding emerging issues to reflect their sincerity in working collaboratively where conflicts of cultural values are relevant.
2. Respect each stakeholder's perspective and position
 - Acknowledge and foster increased respect among stakeholders (at all levels)

- Acknowledge and accept that some stakeholders may have values and perspectives that are at odds with non-western views; respect these perspectives and be willing to objectively listen.
3. Listen – actually “hear” and understand what is being said (effective communication)
 - Continue talking, talking, talking: It makes a huge difference in understanding and through effective communication new options can emerge.
 - Dialogue among and between stakeholders is critical to successful communication. Discussions among stakeholders do not always need to be issue oriented. Non-tribal stakeholders appear to not understand various expressed tribal values regarding the Grand Canyon and the Colorado River ecosystem.
 4. Acknowledge, accept, and respect philosophical differences regarding the ecosystem that are represented by the various stakeholders.
 - Presentations by individual stakeholder groups are very productive. Stakeholder presentations should be recorded for use as educational tools for new stakeholder representatives to the AMWG/TWG and new scientists employed by GCMRC.
 - Educate about the values beyond those from a western scientific perspective
 - Educate about tribal issues and concerns.
 - Educate AMWG/TWG stakeholders about “tribal values,” what these values mean, and that a monetary value or quantitative value cannot be placed on these values.
 5. Work to rebuild a constructive dialogue and trust around the AMWG/TWG tables. There appears to be plenty of mistrust among and between stakeholders in this program.
 - DOI needs to work at rebuilding trust among the stakeholders.
 6. Develop a dispute resolution process for use in AMWG/TWG venues. This process should seek as its goal to achieve consensus. It should focus on educating and understanding each others’ values and perspectives. The dispute resolution process should be utilized before going to a vote on any motion. It also needs to address situations where the conflict of cultural values involves a stakeholder group and the decision-maker (Secretary of the Interior).
 - Acknowledge and educate about the nature of the Federal government’s relationship with American Indian Tribes. This should be a shared responsibility between agencies and tribes.
 - Acknowledge that Federal & State agency constraints exist that may conflict with tribal perspectives and values, and that it may not be possible to achieve what is being requested. In such cases, we should ask whether other recourses exist.
 - Articulate the philosophical underpinnings for tribal consultation; the rationale.
 - Institutionalize a dispute resolution process for the AMP that can be used as a last resort prior to litigation or taking concerns to Secretary’s Office.

7. Devote one full day where AMWG stakeholders share their various cultural perspectives about the Grand Canyon and the Colorado River ecosystem.
 - Spend time with Native American stakeholders on their reservations to experience and begin to understand individual tribal cultures. These could be done as day trips designed to foster education, understanding, and appreciation.
 - Conduct day trips on the river (maybe in conjunction with TWG/AMWG meeting at the dam).
 - Create more meaningful opportunities for interaction beyond the “official” AMWG/TWG meetings and their respective agendas. A TWG/AMWG river trip may be appropriate, but tribes should take a principal role in developing the agenda so that it is not just a litany of science projects (see also below).
 - Utilize retreats as a method for resolving conflicts of value
 - Have each stakeholder Tribe host a retreat to discuss their assets

How will tribal values be monitored and tracked in this program?

1. A traditional ecological knowledge (TEK) integration process has been initiated and should be integrated into the Grand Canyon Monitoring and Research Center’s science program.
2. Cultural sensitivity workshops and/or training sessions would be opportunities to promote knowledge about different perspectives and mutual understanding.
 - Two prong approach – joint TWG/AMWG river trip with Tribes setting the agenda and AMWG/TWG meetings at Tribal homelands.
3. Define basis (metrics) for determining success. This needs to be more than just counting the number of consultation meetings; it needs to evaluate successful resolution of conflict issues.
4. Stakeholder meetings in Page, AZ with a visit to the Glen Canyon Dam and a one day river trip to the Glen Canyon reach and the Dam.
5. Stakeholder meetings at Grand Canyon National Park
6. River trips with Tribal representatives very important coupled with stakeholder participation in tribal sensitivity workshops held in the respective tribal community. Feedback evaluations by stakeholders who participate in tribal sensitivity workshops. Sensitivity training for GCMRC employees and contract scientists equally important.
7. Incorporate reflexivity into GCMRC’s science program
8. Annual report that tracks efforts at sensitivity sharing of cultural values among stakeholders, tracks conflicts of cultural values that emerge within the program, and efforts at tribal consultation to resolve conflicts.

**Appendix 2: Core Values for the Practice of Public Participation
from the International Association for Public Participation**

1. Public participation is based on the belief that those who are affected by a decision have a right to be involved in the decision-making process.
2. Public participation includes the promise that the public's contribution will influence the decision.
3. Public participation promotes sustainable decisions by recognizing and communicating the needs and interests of all participants, including decision makers.
4. Public participation seeks out and facilitates the involvement of those potentially affected by or interested in a decision.
5. Public participation seeks input from participants in designing how they participate.
6. Public participation provides participants with the information they need to participate in a meaningful way.
7. Public participation communicates to participants how their input affected the decision.

TWG CHAIR REPORT

Chairperson: Shane Capron

Agenda Item: TWG Chair Report

- 1. Aug. 15 letter: SEAHG Report, SAs*
- 2. Administrative History Project*
- 3. CRAHG Report*
- 4. POAHG Report (not TWG report)*

Reclamation/NPS Aug. 15 Letter

- Response from DOI on two issues (LTEMP AIF): (a) SEAHG/AMWG economics recommendation (2012), and (b) role of the Science Advisors in the LTEMP.
- AMWG passed the following motion on February 23, 2012:

Motion: “The AMWG requests the Secretary’s Designee to transmit the revised SEAHG report to the Secretary and advise him that the AMWG supports implementation of socioeconomic impact assessment studies to further our understanding of adaptive management decisions within the GCDAMP. The AMWG requests that the Secretary advise the AMWG regarding those elements of the proposed socioeconomic implementation plan that will be developed within the LTEMP development process.

Reclamation/NPS Aug. 15 Letter

The Secretary responded to the AMWG motion on April 30, 2012; described the process that DOI would take in responding to the SEAHG report/AMWG motion, and potential next steps for the AMWG/TWG.

DOI response raises two issues for the TWG and AMWG to consider:

1. Would AMWG like the SEAHG (TWG ad hoc group) to review this response, and consider potential recommendations on economics work to be completed by the AMP? This step is described in the Secretary's letter on April 30, 2012.

February AMWG Motion : “The AMWG directs the Technical Work Group to identify information needs and research priorities not addressed through the LTEMP process so that GCMRC can refine and develop a work plan.”

Reclamation/NPS Aug. 15 Letter

DOI response raises two issues for the TWG and AMWG to consider (cont'd):

2. The TWG considered a role for the Science Advisors in the LTEMP, but was asked to refrain from a motion until after hearing from DOI. That response is now in hand, AMWG may wish to consider changes to the TWG recommended budget and workplan for 2013-14 based on the response. No TWG recommendation was made.

Administrative History Prospectus

- AMWG motion requesting the prospectus Aug. 2010
- Prospectus attached to your AIF
- Initial draft provided to AMWG Aug. 2011 during POAHG report (took me a while to find it)
- TWG passed the following motion October 2011:
 - TWG recommends that AMWG recommend to the Secretary to accept the Administrative History Prospectus dated August 2011.

Administrative History Prospectus

The AMP administrative history would provide:

1. An unbiased archive of past program participants, concepts, actions, and achievements;
2. A relational educational resource to improve the efficiency of AMP discussions;
3. A learning kit for new-comers to the AMP; and
4. A strategic planning tool to help guide research and management projects.

Administrative History Prospectus

Phase 1: (\$100k) pilot phase. An overarching strategic plan will be produced detailing the steps to be taken in developing the Administrative History. It will include technical, logistical, and funding aspects of the project. A pilot implementation of the strategic plan will follow and is envisioned to include:

1. Develop a provisional database approach for information archival and retrieval;
2. Conduct 5 in-depth and 10 brief interviews with AMP historical figures;
3. Integrate literature;
4. Develop a chronological overview of participants and concept;
5. Develop the new-participants handbook to the history of the AMP;
6. Assess utility of the project to the AMP.
7. Develop a funding strategy for future Phases

Phase 2: (\$250k) refinement of above, move beyond pilot

Phase 3: (\$100k) refine, complete interviews

Funding source: undetermined

CRAHG Report, pt 1.

- TWG received final report June 2012
- TWG has been working on the recommendations for some time
- Operating Procedures Ad Hoc Group (OPAHG) formed, first met Aug. 14, include CRAHG members
- Revised Purpose for the OPAHG:
 - To make a recommendation to the TWG by the winter meeting 2013 on a revised TWG Operating Procedures document to include consideration of the CRAHG Report (dated June 4, 2012) and any other information deemed appropriate when considering the revision.
- Small sub-group of OPAHG completed initial draft
- Consensus, change the environment