

**Glen Canyon Dam Adaptive Management Work Group**  
**Agenda Item Information**  
**May 18, 2011**

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Agenda Item

Technical Work Group Chair Report

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Action Requested

This is an information item.

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Presenter

Shane Capron, Technical Work Group Chair, Western Area Power Administration  
Helen Fairley, Cultural Program Chief, Grand Canyon Monitoring and Research Center

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Previous Action Taken

N/A

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Relevant Science

N/A

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Background Information

**Socioeconomics Ad Hoc Group (Helen Fairley)**

During the fall and winter of 2010, the TWG Socioeconomic Ad Hoc Group (SEAHG) developed a five-year socioeconomic “implementation plan” based on recommendations resulting from the December 2009 socioeconomics workshop and additional input from TWG members. Since then, the National Park Service (NPS) has come forward with the outline of a multi-year socioeconomic study plan they are proposing to initiate this year. The NPS study will conduct a comprehensive evaluation of the economic costs and benefits of visitation in the Colorado River system national parks, including Glen Canyon NRA, Lake Mead NRA, and Grand Canyon National Park. This study will also estimate the passive use values held by the American public for these resources.

Elements of the NPS plan overlap with, and to some degree, duplicate some of the studies identified in the SEAHG’s 5-year implementation plan. The NPS has indicated a willingness to collaborate with the GCDAMP to avoid duplicative efforts and is willing to collect data in a manner that will be useful to the GCDAMP, while also meeting NPS’ specific socioeconomic information needs and interests. The NPS is also willing to work with the GCDAMP to collect data specifically relevant to AMP interests (e.g., economic expenditure and benefit data from angler use in the Lees Ferry to Badger Creek reach) in exchange for the AMP providing data that will be useful to the NPS studies (e.g., hydropower cost/benefit analyses). In light of these recent developments, and to avoid duplication of effort, reduce program costs, and ensure maximum benefit to all parties, the SEAHG five-year implementation plan is being re-scoped by GCMRC.

This five-minute presentation will update AMWG on progress made to date towards revising the five-year plan and developing specific work plans for FY2011 and 2012 to meet previously defined

objectives. **GCMRC is seeking AMWG confirmation that the new collaborative approach is supported by the AMWG.** GCMRC is also requesting that AMWG **direct their TWG members to provide feedback to GCMRC** about these various economic study plans (specifically, the GCDAMP five-year plan and the NPS non-use value study) by the next TWG meeting, or sooner if possible.

### **Core Monitoring Plan (Shane Capron)**

On December 1, 2009, GCMRC and TWG co-hosted a workshop on the development of a general Core Monitoring Plan (GCMP) for the GCDAMP. The purpose of the meeting was to:

- Achieve understanding of the GCMRC proposed general strategy for long-term core monitoring (measuring trends in “signals” for resources of critical interest to GCDAMP).
- Enhance support for the general Core Monitoring Plan (including timelines, budget, and staffing requirements) and completion of remaining steps for all resource areas.
- Reach a tentative agreement on timeframe and steps for TWG to develop a recommendation to AMWG.

This agenda item is a report to AMWG on the work that has been done to implement the results of that workshop. The workshop report was provided to AMWG in February 2010; please see that Agenda Item Form ([http://www.usbr.gov/uc/rm/amp/amwg/mtgs/10feb03/Attach\\_15a.pdf](http://www.usbr.gov/uc/rm/amp/amwg/mtgs/10feb03/Attach_15a.pdf)) for background information and history on the CMP development process.

An ad hoc group of the TWG led by the TWG Chair was formed to work with GCMRC to revise the GCMP and help integrate the TWG concerns. The primary goals were to help revise Section 2 of the document, which describes the process of developing the individual core monitoring plans by AMP goal. A number of revisions to the main portion of the document have been completed. The primary change that has been made to the document is the addition of an appendix written by TWG that describes the TWG role in the development of the individual core monitoring plans (by AMP Goal). The appendix describes the management portion of the project, decision-making, and expectations from the TWG for what will be in each individual plan. The Appendix calls for each individual plan to include a trade-off analysis or risk assessment that will include a high, medium, and low funding scenario and describe the trade-offs between each of these. This will allow TWG to consider different levels of implementation. The decision-making will incorporate a Structured Decision-Making (SDM) process to develop a series of criteria for TWG to use when making decisions about the level of implementation for each program. The TWG Chair requested and received an initial review on the appendix by the Science Advisors (November 5, 2010).

At the TWG meeting in March, the TWG Chair and facilitator Mary Orton designed and managed a one-day Consensus Building Workshop. That workshop used an SDM approach to help TWG develop its evaluation criteria it will use when considering individual core monitoring plans. The TWG ad hoc group will incorporate the results of this workshop into a revision of Appendix B for the General Core Monitoring Plan and the full TWG will consider these changes at its June meeting.

At the AMWG meeting, the TWG Chair will update the AMWG on the results of the March workshop, describe the process used to achieve those results, and outline next steps. The results of the workshop were nine evaluation criteria (see below) with a series of specific issues to be considered for each criterion. As described, the next step is for the ad hoc group to consider these results, integrate them into Appendix B, and seek approval by the TWG in June.

### **COMPLIANCE WITH LAW AND POLICY**

Compliance (Fed/state/tribal)  
Compliance – ESA, NHPA, Law of River, EO13007  
Consistency with park values and no impairment  
Degree of linkage to dam operations  
Related to GC Dam Operations  
Meets mandates of GCPA  
Comply with laws and regulations  
Meets compliance needs (LOR, NEPA, etc.)  
Meets legal goals/objectives  
Related to “dam operations and other actions” (GCPA)

### **DATA QUALITY**

Geospatially and temporarily related datasets  
Objectivity and replication of methods, measurements, and assessment  
Appropriate scientific methods (controls, sample, study design)  
Use of best science/technology/TEK  
Data provide a measure of confidence/reliability  
Result in measurable outcomes  
Adequacy of existing knowledge  
Robust metric for determining effects

### **UTILITY OF DATA**

Data are useful and timely  
Timeliness of information  
Risk analysis ... does it contribute?  
Ability to detect threats (contingency/risk assessment)  
Flexibility in periodicity of monitoring  
Relevance of measured indicators to dam operations  
Dual role of data and use in model generation  
Relevance to rigorous, defensible predictive model  
Adaptable/flexibility of timing and frequency  
Continuation of Legacy Data sets  
Ability to detect trends  
Continues long-term dataset  
Metrics and indicators appropriate to CMINs

### **MINIMIZE ADVERSE IMPACTS**

Impact to visitor experience  
Geographic and demographic extent of effects  
Potential impact on resource being monitored  
Minimal impacts to CRE  
Impacts to Tribal Trust resources  
Considers negative impacts on other resources

### **INTEGRATION OF CULTURAL AND SOCIAL VALUES**

Considers environmental and cultural values  
Zuni is happy

Considers economic values  
Sensitive to tribal concerns?  
Stakeholder interest (i.e., AMG, TWG, public)  
Satisfies tribal and public trust responsibilities  
Considers social values  
Tribal monitoring results can be meaningfully integrated  
Culturally relevant and sensitive to cultural concerns

### **ADDRESSES GOALS AND PRIORITIES**

Meets hierarchy of priorities  
Does it relate to AMP goal?  
AMP strategic plan  
Meets program priorities  
AMWG /Secretary of the Interior priorities  
Does it lead to DFC?  
Addresses AMP goals 1-12  
Contribute to management actions/decisions  
Is there a defined goal?  
Meets SOTI goals  
Appropriate to resource goals and CMINs  
Are data linked to ends/objectives?  
DOI priorities vs. AMWG priorities

### **INFORMATION MANAGEMENT**

Adequacy of information management

### **ECOSYSTEM APPROACH**

Is it directed to keystone resources?  
Prioritized by trophic structure  
Tie-in to ecosystem model  
Integration into big picture  
Provides for multiple needs

### **COST EFFECTIVENESS AND AFFORDABILITY**

Good benefit/cost  
Cost can be accommodated by program  
Affordability and budget implications (cost)  
Integration with other monitoring programs  
No duplication of effort  
Cost/Benefit  
Collaborative funding sources