

**Glen Canyon Dam Adaptive Management Work Group**  
**Agenda Item Information**  
**December 5-6, 2006**

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Agenda Item

Science Planning Group Accomplishments Report

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Action Requested

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

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Presenters

Dave Garrett, Executive Director, Science Advisors

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Previous Action Taken

√ Other:

In 2005, the then-Secretary's Designee, Michael Gabaldón, approved a prospectus that asked Dave Garrett to assist the TWG and GCMRC in their science planning process, and established a committee for Dave to work with called the Science Planning Group. The prospectus, entitled "A Prospectus from Glen Canyon Dam Adaptive Management Program (GCDAMP) Science Advisor Program to the Grand Canyon Monitoring and Research Center and GCDAMP for Completion of Science and Development Plan for Fiscal Years 2005-2007," was sent to AMWG members on July 11, 2005, and the Secretary's Designee's decision was announced at the August 2005 AMWG meeting.

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Relevant Science

√ N/A

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Background Information

Dave Garrett will report on the accomplishments of the Science Planning Group. Please see the attached executive summary of the Accomplishments Report. The full report can be found at [http://www.usbr.gov/uc/rm/amp/twg/mtgs/06nov08/Attach\\_15.pdf](http://www.usbr.gov/uc/rm/amp/twg/mtgs/06nov08/Attach_15.pdf).

Also, please see attached Dave's PowerPoint presentation on this subject.

## EXECUTIVE SUMMARY

### THE GCD AMP SCIENCE PLANNING GROUP (SPG): EVALUATION OF EFFECTIVENESS AND RECOMMENDATIONS

**Responding to an AMP Need:** The Science Planning Group (SPG) was authorized by the AMP Secretary's Designee and AMWG in 2005 at the request of GCMRC and TWG. A 12 month focused effort of AMP managers and scientists was approved to develop the AMP five year experimental plans and associated science programs plans. The Science Advisors group was appointed to direct and facilitate the process. The SPG, led by GCMRC and TWG members, was an experimental adaptive management task group developed specifically to assure involvement of all AMP programs and groups in the planning process.

**Evaluation of Effectiveness:** Although effectiveness evaluations of the SPG as a AMP task group will come from other parties, the SPG has documented their process and performance in "A Report on Activities and Accomplishments of the GCD AMP Science Planning Group: 2005-2006". In brief, the SPG:

- Developed and followed a twelve month plan of specific objectives, and proposed schedules, costs and outcomes.
- Utilized an open process of all AMP parties' involvement in multiple workshop meetings to develop all plans.
- Produced and evaluated in twelve months and within budget;
  - Three five year experimental plan alternatives
  - A five year Strategic Science Plan (SSP)
  - A five year Monitoring and Research Plan (MRP)
  - A 2007 Annual Work Plan and Budget (AWP)

In conducting its activities, the SPG found the lack of full development in several aspects of the GCD AMP structure and processes, that created weaknesses in the science planning process, and will likely effect other future management and science activities in a similar nature. These findings prompted a set of recommendations from the SPG.

**Recommendations of the SPG:** The SPG felt its size, composition and task orientation contributed strongly to its performance. However, it also determined that its performance and the performance of future task groups could be greatly improved if resolve could be gained in several critical aspects of the structure and processes of the AMP. The SPG identified 10 issues for continued effort in FY 2007 and 2008. To this end the SPG recommends that the SPG be followed in 2007 by another similar task group that is charged in the twelve month period to provide resolve to one or more of five critical issues.

- Develop improved methods and/or procedures for managers to establish and articulate priorities for specific 3-5 year time intervals.
- Develop improved methods for managers and scientists that permit more effective tradeoff assessments.
- Develop more effective scientist/managers collaborative working procedures.
- Implement methods to monitor and improve the adaptive management process.
- Implement methods to define future conditions (dfcs) for the Colorado River Ecosystem resources of concern.

# SAs INPUT ON SPG PROCESS AND AMP SCIENCE PLANS

- PLANNING PROCESS
- SCIENCE PLANS
- SCIENCE INDEPENDENCE

BY  
L. D. GARRETT,  
EXECUTIVE SECRETARY SAs



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# SPG PLANNING PROCESS

- ❑ IMPROVEMENT OVER INDEPENDENT HAND-OFF ASSESSMENTS OF SCIENTISTS/MANAGERS
- ❑ REQUIRES TECHNICAL EXPERTISE WITH TECHNICAL KNOWLEDGE OF PROGRAM
- ❑ NEEDS SCIENTIST/MANAGER COLLABORATION AND ACCOUNTABILITY AS JOINT PRODUCT
- ❑ SHOULD RESTRUCTURE SPG TO MAKE MORE EFFICIENT

# STRATEGIC SCIENCE PLAN

- STRATEGIC OPERATIONS PLAN (1<sup>ST</sup> DRAFT) NOT SUFFICIENT BUT COULD BE SUPPORT DOCUMENT
- FINAL STRATEGIC SCIENCE PLAN ACCEPTABLE
- IMPROVEMENTS CLARIFY GENERAL STRATEGIES AND OUTCOMES; NEEDED CONTINUED PLANNING
- DEVELOP FOCUSED SCIENCE QUESTIONS AROUND MANAGERS PRIORITY PROGRAMS

# MONITORING AND RESEARCH PLAN

- GREATER SPECIFICITY OF PROCESS FOR ADDRESSING NEEDED PLAN IMPROVEMENTS
- MORE FOCUSED SCIENCE QUESTIONS DIRECTED TO TIMELY RESEARCH ACCOMPLISHMENT
- IMPROVED PROGRAM INTEGRATION, LINKAGE

# ANNUAL WORK PLAN AND BUDGET

- IMPROVED METHODS FOR LINKAGE AND INTEGRATION OF PROGRAM ELEMENTS
- GUIDANCE ON OUT YEAR EXTENSION OF CURRENT PROGRAMS TO GAIN RESOURCE SOLUTIONS

# EXPERIMENTAL OPTIONS

## HYDROPOWER ECONOMIC IMPACT ASSESSMENTS

- IMPROVED SPECIFICATION OF METHODS
- IMPROVED CLARIFICATION OF HOW  
SELECTED METHODS AFFECT OUTCOMES
- IMPROVED CLARIFICATION OF DIFFERENTIAL  
IMPACTS OF OPTIONS



# EXPERIMENTAL OPTIONS BIOPHYSICAL/SOCIO-CULTURAL IMPACT ASSESSMENTS

- IMPROVED SPECIFICATION OF METHODS
- CONSISTENCY OF STATEMENTS RELATED TO DIFFERING RESOURCE IMPACTS
- POTENTIAL INTEGRATED IMPACTS OF FLOW AND NON-FLOW ACTIONS

# SCIENCE INDEPENDANCE

- SAs AND EXECUTIVE SECRETARY SHOULD CONSTANTLY EVALUATE THEIR INDEPENDANCE IN REVIEW AND ADVISORY SERVICE
- CHANGING SAs ON 3 TO 5 YEAR SCHEDULES ASSISTS IN INDEPENDENT THOUGHT AND NEW PERSPECTIVES
- ABILITY FOR ACCESS TO OTHER SPECIALISTS IS IMPORTANT (ECONOMICS)