

## **ADM 12.A4.11-12 (B)—Coordination and Review of Services Provided by Science Advisors**

### **Start Date**

FY2009

### **End Date**

Ongoing

### **Principal Investigator**

Lawrence D. Garrett, Principal M3 Research and Executive Coordinator of the Science Advisors

### **Project Overview**

The Science Advisors (SAs) provide two types of science support: (1) review of scientific and planning documents and (2) advise on a range of scientific issues and questions related to the Glen Canyon Dam Adaptive Management Program (GCDAMP). The SAs review a wide range of scientific research and planning documents, including multiyear and annual strategic and operational plans, budgets, and special project science plans for activities such as the 2008 high-flow experiment (HFE). The SAs also provide advisory services to the Grand Canyon Monitoring and Research Center (GCMRC), Adaptive Management Work Group (AMWG), and Technical Work Group (TWG) on topics ranging from adaptive management and long-term experimental approaches to the development of new ecosystem science approaches and technical projects such as a temperature control device (TCD).

In FY2011-12, the SAs will include 4-6 interdisciplinary senior scientists, primarily from universities supporting natural resource research programs.

### **Need for Project**

The SAs contribute to the overall science support needs of the GCDAMP as one of the Independent Review Panels (IRPs), serving special functions not provided by other IRPs. SAs service is enlisted to increase the efficiency and quality of the science being developed by the GCMRC and used by the AMWG and the Secretary of the Interior. SAs provide independent scientific oversight and technical advice to ensure that the GCMRC science programs are efficient, unbiased, objective, and scientifically sound.

The SAs are expected upon request to review and comment on the following:

- Results of ongoing and completed monitoring and research program activities, as well as any synthesis and assessment activities initiated by the GCMRC
- The appropriateness of the GCMRC's Requests for Proposals (RFPs), especially their responsiveness to management objectives
- Protocols used in the GCMRC-sponsored scientific activities, including a 5-year review of GCMRC monitoring and research protocols
- The GCMRC's long-term monitoring plan
- The GCMRC's biennial monitoring and research plans

- The GCMRC’s biennial budget proposals, to ensure that the science program is efficiently and effectively responding to AMWG goals (that is, management objectives)

The SAs and Executive Director also provide other program-specific scientific and technical advice when asked by the AMWG, the GCMRC, or the Secretary of the Interior.

## **General Methods/Tasks**

### **Administrative Services**

In FY2009, the GCMRC and GCDAMP requested a significant revision of the composition of the SAs, which resulted in the replacement of all but three disciplines and recruiting three to five new SA members in full- or part-time positions. Several administrative activities to support new positions occurred in 2010. The SA Executive Coordinator worked with GCMRC staff to screen specialists to fill three to five SA positions, award positions, develop briefing materials, issue contracts, revise procedures, and other activities, as needed. The new SAs will also be provided an orientation and opportunity to meet the GCMRC staff and stakeholders.

### **Independent Reviews**

Based on activities presented in this work plan, it is anticipated that the SAs will review the following planning and science documents and activities in FY2011-12:

- Proposed 2011–12 science program and related activities, including the integration of these activities into the existing Strategic Science Plan and Monitoring and Research Plan
- Proposed 2011 science program budget
- 2000 low summer steady flows synthesis report
- Core-monitoring plans for (1) Aquatic Food Base/Lake Powell and Downstream Water-quality Monitoring, (2) Native and Nonnative Fish Monitoring, (3) Vegetation Monitoring; and (4) Camping Beaches Monitoring
- Overall fisheries science and modeling direction
- Overall sediment science and modeling direction
- Proposed socioeconomic science request for proposals and science plan
- Humpback chub translocation and trout abatement science plan
- Review of HFE synthesis report

### **Advisory Services**

The SAs provide reviews and advisory service to the GCMRC, the TWG, the AMWG, and the Secretary’s Designee. SAs communicate in a variety of ways (emails, phone conversations, reports, and workshops) with the GCMRC and the GCDAMP members, facilitators, outside scientists and managers to clarify review positions, provide information, develop prospectus for collaborative efforts, and assist with the evaluation and development of program direction. The scope of the advisory services will be scaled back due to funding constraints.

FY2011-12, the SAs anticipate providing the following advisory services:

- Participate in GCMRC science workshop on aquatics/fisheries ecosystem modeling led by Senior Ecologist

- Work with GCMRC Chief, leadership team, and Senior Ecologist to assess opportunities for greater integration and improved overall system assessments of biology programs
- Participate in January 2011 and 2012 annual reporting workshop/TWG meeting on HFE Synthesis
- Participate in combined final quality-of-water (including Lake Powell) and aquatics protocol evaluation panel in FY2011
- Participate in final recreational protocol evaluation panel in FY2012
- Assist GCMRC in development of advanced knowledge assessment procedures to support workshop(s) and participation in the workshop(s) in FY2011
- Participate in development of *State of the Colorado River Ecosystem in Grand Canyon II* report as outcome of knowledge assessment in FY2011

## **Budget**

The M3 Research 5-year award included a base year and 4 option years for reviews and services. Due to budget constraints, the GCMRC will significantly reduce the scope of services for FY11-12.

FY2011        \$173,850

FY2012        \$179,900