

American Water Resources Association
2009 SUMMER SPECIALTY CONFERENCE
Adaptive Management of Water Resources II
June 29 – July 1, 2009
Snowbird, UT

Tuesday, June 30

1:30 PM – 3:00 PM

Session 21: Panel – Glen Canyon Dam Adaptive Management Lessons Learned

Panel Participants:

Moderator – Dennis Kubly, Bureau of Reclamation, Salt Lake City, UT
John Hamill, U.S. Geological Survey, Flagstaff, AZ

Recent Progress and Hurdles for the Glen Canyon Dam Adaptive Management Program (GCDAMP) - Dennis Kubly, Bureau of Reclamation, Salt Lake City, UT

The GCDAMP entered a new phase of experimentation in 2008 with the production of National Environmental Policy Act and Endangered Species Act compliance documents for the period 2008-2012. An environmental assessment was conducted on a proposed action for a high flow experiment in March and steady flows during September and October. This was the third high flow experiment conducted by the GCDAMP, and it was triggered by very large sediment inputs received from tributary streams to the Colorado River in Grand Canyon. The steady flow experiment will continue for these same months through 2012. The nonjeopardy biological opinion on the proposed action received from the Fish and Wildlife Service contained conservation measures directed at translocation of endangered humpback chub fish, non-native fish control, habitat protection for the endangered Kanab ambersnail, monitoring of endangered southwestern willow flycatcher, and habitat assessment for potential augmentation of the endangered razorback sucker. The population of endangered humpback chub has continued to increase in 2008, improving the prospect that actions taken by the GCDAMP are having desired effects in balancing resource protection with the delivery of water and hydroelectric production as required by the 1992 Grand Canyon Protection Act. Not all agreed with this progress, however, as the U.S. defended the actions of the Bureau of Reclamation and Fish and Wildlife Service against a lawsuit instituted by a stakeholder group in the GCDAMP.

The Glen Canyon Dam Adaptive Management Program: recent progress, immediate challenges - John Hamill, U.S. Geological Survey, Flagstaff, AZ

The Glen Canyon Dam Adaptive Management Program: recent progress, immediate challenges John Hamill, Chief, Grand Canyon Monitoring and Research Center, U.S. Geological Survey The Glen Canyon Dam Adaptive Management Program (GCDAMP) was established in 1996 to provide a mechanism to integrate science and multiple stakeholder perspectives into the decision making process related to the operation of Glen Canyon Dam (GCD) and protection of resources pursuant to the Grand Canyon Protection Act of 1992 (GCPA). This presentation examines recent improvements in several key resources and progress related to several large scale experiments, including: □ An estimated 25% increase in the adult population of the endangered humpback chub (*Gila cypha*) since 2000 following continuous declines at least from 1989 to 1999; □ Reductions in the distribution and abundance of nonnative fishes that are known to compete with native fishes; □ Implementation of the third high flow experiment in March 2008 aimed at conserving sediment, restoring sandbars, and improving habitat condition for native fishes; □ Implementation of a 10-year program to treat 54 archaeological sites in the Colorado River corridor in the Grand Canyon. The most immediate challenges facing the program include: □ Define measurable resource objectives and desired future conditions to guide science and management activities; □ Evaluate the GCDAMP structure, mission, and processes, and make appropriate adjustments to improve the functionality of the program; □ Clarification of roles and responsibilities various GCDAMP components; □ Develop and implement a long term plan for future high flow experimentation based on the results and conclusions of the three previous experiments; □ Develop contingency plans for addressing the potential expansion of warm water nonnatives fishes that may result from warm water releases from the GCD associated with long term drought and/or climate change. Strong and consistent leadership from Department of the Interior will be needed to effectively address these challenges and build on current successes.