

Glen Canyon Dam Adaptive Management Work Group
Agenda Item Information
August 12-13, 2009

Agenda Item

Funding for Nonnative Fish Control and Other Future Funding Challenges

Action Requested

✓ Feedback requested from AMWG members.

Presenters

Mike Senn, Assistant Director of Wildlife Management, Arizona Game and Fish Department
Sam Spiller, Lower Colorado River Coordinator, U.S. Fish and Wildlife Service
John Hamill, Chief, Grand Canyon Monitoring and Research Center

Previous Action Taken

✓ N/A

Relevant Science

✓ N/A

Background Information

Control of nonnative fishes is recognized as one important element in restoration of the native aquatic ecology of the Colorado River ecosystem in Grand Canyon. It is included as a conservation measure of the most recent Glen Canyon Dam Operations Biological Opinion (BO, February 27, 2008, page 54):

“*Nonnative Fish Control* – As first presented in the biological opinion on the Shortage Guidelines, Reclamation will, in coordination with other DOI AMP participants and **through the AMP**, continue efforts to assist NPS and the AMP in control of both cold- and warm-water nonnative fish species in both the mainstem of Marble and Grand canyons and in their tributaries, **including determining and implementing levels of nonnative fish control as necessary**. Because Reclamation predicts that dam releases will be cool to cold during the period of the proposed action, control of nonnative trout may be particularly important. Control of these species will utilize mechanical removal, similar to recent efforts by the AMP, and may utilize other methods, to help to reduce this threat. **GCMRC is preparing a nonnative fish control plan through the AMP process** that addresses both cold and warm-water species that will further guide implementation of this conservation measure.” *(emphasis added)*

The Arizona Game and Fish Department (AZGFD) has helped organize two meetings since the last AMWG meeting for the purpose of identifying potential funding sources for these actions, as well as to help define future study objectives for nonnative fish control. The first meeting was held May 19, 2009, and included representatives from the AZGFD, the Fish and Wildlife Service (FWS) and Bureau of Reclamation (Reclamation) by telephone. On June 9, 2009, those representatives were

joined by representatives from Grand Canyon Monitoring and Research Center (GCMRC) and National Park Service (NPS).¹

At these meetings, it was identified that funds will be needed to support the following actions:

1. Periodic monitoring consistent with the Nonnative Fish Control Plan (NFCP, in development) to determine if triggers have been met that warrant actions to remove cold or warm water fish. Yet to be identified triggers could include factors such as the biological status of the humpback chub, relative abundance and distribution of nonnative fish species, presence of new nonnative species, or other factors that the Glen Canyon Dam Adaptive Management Program [AMP] determines to be appropriate. Targeted nonnative fish are those that prey upon humpback chub and other native fish, including cold water species (i.e., trout) and warm water species (i.e., smallmouth bass, catfish, bullheads, green sunfish, or other species).
2. Continued periodic removal of nonnative fish if triggers are met.
3. Associated research needs in support of completion of the warm water management portion of the NFCP, or for specific aspects of future cold water management.

On June 9, the group agreed to:

- Create a document that shows funding that could be available for the period of the current experiment, 2008-12.
- Identify potential funding sources for nonnative fish removal for years beyond the completion of the current experiment.
- Work together to determine future research objectives to help further refine triggers for both warm and cold water nonnative fish removal.

Funding availability for the current experiment, 2008-12. The group understands and appreciates that there is disagreement about whether nonnative fish control in the Colorado River and its tributaries below Glen Canyon Dam is the responsibility of the AMP. The group discussed the need for some type of “banking” arrangement that provides the ability for the AMP program to implement, partially implement, or defer fish control efforts each year based on a trigger that is to be determined. This arrangement would also provide the flexibility to carry over unused funds to the following year. This would maximize the efficient use of funds and better ensure an adequate level of funds when needed. The group discussed a goal of ensuring that adequate funding is always available to accomplish at least two nonnative fish control trips, which, for coldwater species, would cost approximately \$300,000 in 2009 dollars.

Funding proposed by GCMRC and TWG for FY2010-11. On June 23, 2009, the TWG voted to recommend to AMWG that funds for nonnative fish control for FY10 be obtained from the Experimental Flow Fund and Nonnative Fish Contingency Fund such that the total FY10 funding would be \$315,308:

- \$68,842 from power revenues,
- \$150,000 from the Experimental Fund, and
- \$96,466 from Nonnative Contingency Fund.

Funds requested for FY11 includes \$309,251 from the experimental flow fund.

¹ AZGFD, FWS, Reclamation, GCMRC, and NPS are aware that concerns have been expressed by tribal and recreational fishing entities about the killing of fish for the purposes of nonnative fish control and conservation of humpback chub, as well as the recommendations for consultation with the Tribes.

Potential funding sources beyond FY2012. It is likely that nonnative fish removal efforts also will be needed after the current experimental period that ends with FY2012, if the triggers described above are reached. Some potential fund sources for nonnative fish work (including research, monitoring, and removal) after FY2012 are described below.

- Power revenues (used for past and present removal work).
- Funding sources that are or have been used for the Upper Colorado River and other similar programs (like the LCRMSCP), include power revenues (Reclamation), federal agency appropriations (Reclamation, NPS, FWS), funds from states, and water user contributions.
- Congressional appropriations to Reclamation.
- Congressional appropriations to FWS, NPS, and/or GCMRC.
- Use of funds through the Fish and Wildlife Coordination Act (FWCA).²
- Federal funding sources such as Endangered Species Act (Sec. 6) and Sport Fish Restoration Program.

If it recognizes the need for nonnative fish removal post-FY2012, AMWG may want to consider making a recommendation to the Secretary on preferred funding mechanisms. The AMWG has agreed upon a three-year funding process in its budget process to seek Federal appropriations. This part of the budget process has not yet been utilized, but could be for this purpose.

Securing Funding for Priority Actions Needed for the Glen Canyon Dam Adaptive Management Program (GCDAMP). While the AMP has not yet defined management actions, the Department of the Interior agencies are working collaboratively to identify ways to fund priority actions in a manner that does not compromise the current AMP monitoring and research program or management needs. This work addresses actions related to the GCPA mandate to operate Glen Canyon Dam in a manner as to protect, mitigate adverse impacts to, and improve the values for which Grand Canyon National Park and Glen Canyon National Recreation Area were established, including natural and cultural resources and visitor use. We plan to advise our respective Regional Directors of the anticipated funding needs and on possible funding sources and strategies, and we will be seeking the advice of the AMWG stakeholders as well.

² FWCA transfer funds can be transferred from Reclamation to FWS or AGFD under the FWCA, which authorizes the Secretary of the Interior “(1) to provide assistance to, and cooperate with, Federal, State, and public or private agencies and organizations in the **development, protection, rearing, and stocking of all species of wildlife, resources thereof, and their habitat, in controlling losses of the same from disease or other causes, in minimizing damages from overabundant species,** in providing public shooting and fishing areas, including easements across public lands for access thereto, and in carrying out other measures necessary to effectuate the purposes of said sections; (2) **to make surveys and investigations of the wildlife of the public domain,** including lands and waters or interests therein acquired or controlled by any agency of the United States; and (3) to accept donations of land and contributions of funds in furtherance of the purposes of said sections.” *(emphasis added)*

While there is not agreement on the question of whether the FWCA mandates such a transfer with a change in flows from the dam (such as the current HFE), such funds could be used for activities such as maintenance of the recreational trout fishery at Lees Ferry, native fish populations, and other riverine and riparian ecosystem resources downriver. Specifically, these funds could pay for planning, research, and removal activities.

POTENTIAL FUNDING SOURCES BEYOND 2012

Purpose: Update Glen Canyon
Adaptive Management Work Group

POTENTIAL SOURCES

- Upper Colorado River Recovery Program and other similar programs (Lower Colorado River Multi-Species Conservation Program use):
 - Power revenues
 - Federal agency appropriated funds
 - Funds from States
 - Water user contributions.

POTENTIAL SOURCES (CONT.)

- Power revenues (have been used for past activities, including 2009 removal)
- Congressional Appropriations (Reclamation, NPS, FWS, and/or USGS)
- Funds from Fish and Wildlife Coordination Act
- Other Federal: Endangered Species Act (Sec. 6) and Sport Fish Restoration Program

DISCUSSION

- Funding non-native removal is expected to be a continuing need
- AMWG has agreed to a 3-year budget process funding cycle to seek Federal appropriations
- AMWG may want to consider a recommendation to seek appropriations
- Thoughts/Questions?