

Adaptive Management Work Group Meeting  
October 25-26, 2004

Updates on Ongoing Humpback Chub Projects in HBC Plan

**Project 01: Assess genetics of humpback chub being held at Willow Beach National Fish Hatchery for their potential as brood stock. Not Funded by GCDAMP, Funded by USFWS, Region 2; Reporting: USFWS Region 2.**

Glen Knowles reported that the actual number of fish at Willow Beach is 84 on station. He said that Connie Keilier Foster, a geneticist with the Dexter National Fish Hatchery, started work to look at the fish and develop the primers. She has since moved on to Region 4 and the hatchery has run out of money to continue that work. Glen said he spoke with Manual Uilbari, the manager at the hatchery, and the work will continue but it isn't a high priority for them because it's not an actively funded project. They are looking at another \$8K to complete that project and aren't sure they'll be able to do through AMP funds for FY05.

**Project 02: Remove humpback chub from mainstem Colorado River at 30-Mile to maintain genetic stock in refugia. Funded: FY 2004 as Genetic Refugium, Replaced by Hualapai Fish Facility Evaluation FY 2005; Reporting: GCMRC.**

There was a lengthy discussion on Project 2. It was originally set up to remove HBC from the mainstem LCR at 30-mile to maintain genetics stock and refugia. In FY04 it was funded as genetic refugium but in March 2004, it was replaced to do an evaluation of the Hualapai Fish Facility. Bruce Taubert said that AGFD came up with enough funds to cover that work and therefore, \$40K is left in the budget. He would like to move \$8,000 from that fund to the FWS so they could complete the genetics work at the Dexter National Fish Hatchery. The following motion was considered:

**MOTION:** To use up to \$40,000 now dedicated for evaluation of the Hualapai Fish Facility and other fish facilities (Project 2) to repay Arizona Game and Fish Department for their expenses for evaluating the Hualapai Fish Facility. Motion seconded.

Voting Results:            Yes = 7            No = 8            Abstaining = 4  
15 voting, 2/3 vote = 10  
Motion failed.

After further discussion, Bruce withdrew his request and said he would work with Denny Fenn to secure funding to finish the genetics work.

**Project 03: Genetic relationships within and among populations of the endangered *Gila cypha* (humpback chub) in the Colorado River ecosystem. Funded: 2001; Reporting: GCMRC.**

Ted Melis reported that Mike and Marlis Douglas have been doing this work. They are scheduled to make a presentation at the Desert Fishes Council Meeting this winter and GCMRC is expecting to have the final report by the new year. The initial results will be presented at a professional meeting at the next TWG meeting.

**Project 04: Feasibility of Developing a Program to Augment the Population of Humpback Chub (*Gila cypha*) in Grand Canyon. Funded: FY 2003; Completed FY 2004 by USFWS, Region 2.**

This project was completed in July 2004.

**Project 05: Translocation of native fishes to tributaries of the Colorado River, Grand Canyon National Park and tribal lands. Funded: FY 2004, FY 2005; Reporting: USFWS, Region 2.**

Glen Knowles gave a PowerPoint presentation, "Translocation of HBC Above Chute Falls, Little Colorado River" (see Attachment 7a)

**Project 06: Complete feasibility study of selective withdrawal on Glen Canyon Dam and, if feasible, finish compliance, construct, and test the device. Funded: FY 2004; Reporting: Ongoing by Reclamation as TCD Updates.**

Dennis Kubly reported that regular updates have been provided. Another update will be given at the next AMWG meeting.

**Project 07: Use Dam Operations to Benefit Humpback Chub. Funded: FY 2004, FY 2005; Reporting: GCMRC.**

Ted Melis reported that GCMR used part of those funds for planning activities related to experimental flows including the multi-attribute tradeoff analysis workshop in December 2003. He thinks they only used about half of the available funds for that and so they are looking for additional direction from the TWG on what other facets might be appropriate to cover from that fund. He said the experimental planning process has morphed or evolved into a more formal ad hoc process now and the so-called MATA process could be continued as part of that or not depending on what the TWG indicates. There is approximately \$33,000 left on the contract.

Dennis said the LTEP AHG is going to propose doing a workshop to be held this spring and it has no funding. This would be an opportunity to use the funds.

**Project 08: Consider sediment augmentation to benefit native fish (e.g. sediment pipeline from San Juan River), both long-term feasibility and short term experiment. Funded: FY 2004, FY 2005; Reporting: GCMRC.**

Ted Melis reported that this project had been initiated through an interagency agreement between the USGS and the USBR. It's scheduled to be on the order of 18 months long and has two phases. The first phase which is supported in the 04 budget component is specific to the idea of turbidity management options and is currently being conducted in cooperation with the USBR Denver Technical Center. Tim Randle is the lead working with Joe Lyons. Their proposal is to have a report in about a year and a half on both Phase 1 and Phase 2. Phase 2 being the more physical habitat related sand augmentation component of it but the first and more important part is work that will be done jointly with GCMRC fishery scientists to try and define for the engineers first and foremost what level of turbidity and during what periods and how long and where turbidity management might be undertaken below the dam is part of this feasibility. In FY05 with that component that was approved they will carry it forward into options for combining that turbidity management feasibility or options with actual sand augmentation for physical habitat related to things like backwater channels, nursery habitats So the project is underway. It's very early on in the process. The folks in Denver are planning on meeting with us in Arizona during the week of Dec. 2 and also they have participation from Norm Henderson as a NPS representative on the project. A preliminary report will be presented sometime during the spring.

**Project 09: Understand the effect and identify the threats of scientific work and recreational activities on humpback chub populations in the Grand Canyon area (review Upper Basin Recovery Program, etc.). Funded FY 2004 (scientific work portion), FY 2005: Reporting: GCMRC.**

Lew Coggins reported that the work done has been a collaborative effort with FWS, past post doc, Craig Paukert at GCMRC, and AGFD, Dave Ward with some help from the Forest Service as well. Ponds at NAU that John Ritting has. Essentially what they did was simulate the monitoring that is done within the Little Colorado River with hoopnets over the course of essentially spring effort and fall effort. I recently received a draft report from those folks regarding that effort. The big findings that they found were there was little to no mortality associated with the hoopnetting that was done and the marking and handling. Some of these fish were captured. This is a small pond where they're setting a whole bunch of hoopnets. Some of these fish were captured over this time period up to 7 times and there was an indication of decreased growth in terms of both length and in weight associated with those activities that seemed to increase the numbers of times that a particular fish was handled. Their intention is to submit the report as a journal article. He received a draft of the report and only briefly read it but said there was some fairly interesting stuff contained in it. The punch line is there does seem to be an effect in particularly the growth and weight of these fish that could perhaps be biologically significant. They basically don't say in their conclusions whether or not they think it's something that is based on the results of this study something that is a big concern. It's hard to say whether or not when you capture a fish seven times and see that it gains 20% less weight than its fellow fish in the same pond that were not captured at all is something that is significant relative to the population dynamics of the fish. So their conclusions relative to overall biological effects are not very strong. They simply conclude that they saw this effect relative to growth that they did not see in effect relative to survival.

**Project 10: Evaluate the use of a temporary weir in Bright Angel Creek to remove nonnative salmonids from the Colorado River Ecosystem during 2002 and 2003. Not Funded by GCDAMP, Funded by NPS; Reporting: Grand Canyon National Park.**

**Project 11: Removal/suppression of Nonnative Fish in tributaries of the Colorado River in Grand Canyon National Park and tribal lands. Not Funded by GCDAMP, Funded by NPS; Reporting: Grand Canyon National Park.**

Update on Projects 10 & 11. Dennis reported these projects were funded externally by the Park Service. Jeff Cross said that the first project was on Bright Angel Creek Weir where they tested a weir in the fall and winter of 2002 and in 2003 they evaluated under a research Categorical Exclusion by a contractor. There was a report by the contractor to the TWG during that period. The NPS then decided to move on to scoping on the management action. The contractor began preparing an EA in the fall of 2003. They went out to public scoping in Dec 2003 and Jan 2004, got comments from the public, and the contractor prepared a draft of the EA. At that time they ran into some problems. The contractor was given a stop work order and cannot resume the work until the contract issues are resolved. They have a draft EA and have made comments on it but need to get the contract issues resolved and then get that information back to the contractor in order to complete the EA. That document will then be put out for public comment and the Superintendent will make a decision on whether or not it's going to be implemented as a management action.

**Project 12: Mechanical removal of non-native fishes from the Colorado River near the confluence with the Little Colorado River. Funded in FY 2004, FY 2005; Ongoing Reporting by GCMRC.**

Ted said as part of the plan for year three and to simplify it, they won't be doing the diet analysis portion. They are not approved for funding at the same level so will focus on the removal and then finish processing the stomachs. He hopes to have the work completed in 2005 but they don't have the staff to do a lot of field work due to attrition.

**Project 13: Develop a monitoring program for the Colorado River downstream of Diamond Creek to detect changes in habitat and fish communities resulting from operation of Glen Canyon Dam and Lake Mead. Funded in FY 2004, FY 2005; Reporting: GCMRC.**

Ted Melis said the initial trip occurred in early October. The number of fish that were captured during the sampling was 220 and overall cost for the effort was around \$60,000. One observation that Barbara Ralston made about the use of the gear types relative to the shoreline habitat availability down there is obviously a lot of failing sandy banks with very vertical steep walls. Kerry Christensen commented that it was mentioned to him that it was the most turbid water than they ever tried to sample fish in so it might be an unfair characterization to portray that they didn't catch very many fish. Jeff said that in talking with Barbara they didn't get any striped bass but get a fairly large number of small channel catfish. A more complete update will be provided at a future meeting.

**Project 14: Develop an invasive species management plan for the Colorado River Ecosystem (CRE). Not Funded.**

**Project 15: Monitoring fish parasites and diseases, Colorado River Ecosystem. Funded FY 2004, FY 2005. Reporting: GCMRC.**

Lew Coggins said that AGFD (Bill Persons) and the Madison Fish Wildlife Health Center have sent a proposal to GCMRC for consideration so there has been some movement there as far as development of a program.

**Project 16: Reclamation will lead a review of Little Colorado River (LCR) watershed management plan. Funded FY 2005. Reporting: Reclamation.**

Dennis reported that Reclamation will need to review a Little Colorado River Watershed Management Plan, which will be done in conjunction with FWS as part of the Biological Opinion. Reclamation agreed to help in the development of that plan and there is funding allocated for that. Reclamation also agreed to work with the LCR Multi-Objective Management Group. Pam Sponholtz (FWS) just went to a meeting before she went to work on Fossil Creek meeting with that group. Internally Reclamation has taken a GIS library that was put together actually with much help and assistance from Dave Garrett a few years ago. It's a very valuable product and Amy Cutler is working to develop that GIS information into a library that would be used by this project. Reclamation is going to meet with GCMRC during the week of December (second week) to discuss tactically how they're going to move forward on this project.

**Project 17: Conduct concurrent estimates of HBC in LCR and mainstem to develop/confirm population estimates. Evaluate the age group survivability for all age classes, including recruitment. Funded FY 2004, 2005 (includes simulation modeling); Reporting: GCMRC.**

GCMRC will provide an update at tomorrow's meeting.

**Project 18: Development of an Adaptive Management Work Group Outreach Program. Not Funded in HBC Plan, Transferred to Public Outreach.**

This project has been transferred to the Public Outreach Ad Hoc Group. A report will be given at tomorrow's AMWG meeting.

**Project 19: Develop and Implement a Genetics Management Plan for Humpback Chub in Grand Canyon. Not Funded by GCDAMP: Reporting: WAPA, USFWS Region 6.**

Gary Burton said that in talking with Bob Muth and Tom Czapla, they're targeting to have a draft by the end of the calendar year. Dennis said that AGFD tried to give them a little incentive to complete the report but wasn't sure if anyone saw the letter AGFD sent to FWS. Bruce Taubert suggested that other AMP stakeholders should write letters to the FWS or they may just end up sitting on the report. The AGFD's director is going to be calling Ralph Morgenweck to see what can be done about getting the report completed. Dennis said they intend to put that on the agenda for the next AMWG meeting and would like to have Tom Czapla attend and give an update.

**Project 20: Development of Emergency Response/Contingency Plan for Protection of Downstream Species from Spills into the Little Colorado River at Cameron or other Potential Sites. Not Funded.**

**Project 21: Develop pollution control plan for Little Colorado River watershed that includes capability. Not Funded.**