

USGS/GCMRC Biology Program Updates
TWG meeting 29 June 2010

Fish PEP Implementation

GCMRC conducted a Protocol Evaluation Panel for Fish Monitoring in May 2009. The PEP chair, Mike Bradford, presented the PEP findings to the TWG in September 2009. The PEP recommended that GCMRC consider shifting some fish monitoring efforts, subject to analysis of existing data. GCMRC has been working with cooperators to evaluate existing data according to PEP recommendations.

The PEP was impressed with the robust monitoring program for humpback chub in the Little Colorado River, but felt that not enough effort was devoted to mainstem native and nonnative fish monitoring. Because of the endangered status of humpback chub, we expect to maintain focus on monitoring in the Little Colorado River. However, it may be possible to reduce some of the LCR monitoring, making resources available for more mainstem work. We plan to do additional mainstem fish monitoring in 2010, '11, and '12.

To evaluate the potential effect of spatial and temporal changes in humpback chub monitoring, GCMRC entered into an agreement with Steve Martell to conduct runs of the Age-Structured Mark-Recapture model using subsets of existing monitoring data. Martell completed this work in June 2010 and has just delivered a draft report to GCMRC for review. Our goals for any proposed changes to fish monitoring will be that they are

- a) consistent with the PEP recommendations;
- b) improve the monitoring program in both the LCR and mainstem;
- c) not dramatically bias or lower precision of ASMR output; and
- d) not result in a net change to the costs of the monitoring program proposed in the draft FY 2011-12 budget

In other words, if monitoring changes are warranted and acceptable, they will likely require similar personnel and logistics costs as to what is currently proposed. We plan to complete analyses by August 2010 and deliver a monitoring report by September 30, summarizing recommended changes to the fish-monitoring program.

Nonnative Fish Technical Document

This document has been reviewed on a number of occasions with the TWG. We understand that some TWG members, especially tribal members, do not wish to have the document published as an Adaptive Management Program document and so GCMRC will not be presenting it to TWG for any additional reviews or recommendations. However, we do believe that the document accurately depicts the current state of knowledge regarding nonnative fish control methods for Grand Canyon. We also recognize that the state of knowledge will change with time; for example, GCMRC is currently pursuing the development of a risk assessment to support management decisions about which nonnative species may pose the greatest risk to native fishes in Grand Canyon. Therefore, we intend to pursue publication

of the nonnative fish technical document in the standard USGS Open-File Report format. The document should be published by 30 September 2010.

Rainbow Trout Abundance in the LCR Reach

GCMRC, primarily through the work of the Arizona Game and Fish Department, has continued to monitor the relative abundance of rainbow trout in the Little Colorado River reach of the mainstem Colorado River. Abundance in 2010 appears to be similar to that observed in 2009 and 2000 (preliminary data subject to review and revision; see figure below).

