

# Grand Canyon Adaptive Management Program Humpback Chub Comprehensive Plan



Glen Knowles  
TWG Meeting, Phoenix, Arizona  
September 24, 2004

“Honest disagreement is often a good sign of progress.” -Mahatma Ghandi

“If you don't know where you have been, you cannot know where you are. If you don't know where you are, then you cannot know where you're going. If you don't know where you're going, your probably not going to get there.”

-Unknown

# History of the HBC Plan

- January 29, 2003 AMWG meeting – AMWG forms Humpback Chub Ad Hoc Group to “consider action to implement a comprehensive research and management program for the HBC (and make) a recommendation to the AMWG.”
- August 13, 2003 AMWG meeting – The “Status and Management Strategy for Humpback Chub in Grand Canyon” delivered at AMWG meeting. AMWG uses plan in August meeting in developing FY 2004 budget, but does not make any formal acceptance of the plan.

# History cont.

- October 1, 2003 TWG meeting – Knowles provides update, suggests TWG create ad hoc to work on the plan. TWG decides to have the existing (AMWG) HBC AHG work on completing the report and present it to AMWG in January with the intent of having AMWG forward it to the FWS.
- February 3, 2004 TWG meeting – Kubly provides update that work continues on the plan and the intent now is to forward it on to the Secretary for incorporation into a recovery program with a cover letter explaining that not all projects are within the authority of the AMP but that the AMWG can make in/out decisions in its budget process.

# History cont.

- March 3, 2004 AMWG Meeting – Spiller says if AMWG thinks plan should be sent to Secretary with a recommendation to present the plan to RD of Reg 2 than that is appropriate.
- June 9, 2004 – Kubly delivers revised plan to HBC AHG.
  - ◆ Similar format and content
  - ◆ Names of potential contract recipients eliminated
  - ◆ Cost estimates removed
  - ◆ Project summaries shortened
  - ◆ Some projects combined
  - ◆ Two new projects added: Non-native stocking procedures and improve rearing habitats

# HBC Plan Projects v 2.0

## **Genetic Considerations**

1. HBC Genetic study
2. Willow Beach genetics
3. Genetics management plan
4. Refugium and captive breeding plan
5. Translocation plan
6. Feasibility assessment of augmentation

## **Glen Canyon Dam Operations**

7. Use/mitigate Dam ops to benefit HBC
8. TCD
9. Sediment augmentation
10. Improve rearing habitats
11. Tributary nonnative removal
12. Mainstem nonnative removal
13. Diseases and parasites

# HBC Plan Projects v 2.0

## **Understanding HBC Population Dynamics and Distribution**

- 14. Diamond down fish monitoring
- 15. Concurrent estimates

## **Evaluation and Protection from External Threats**

- 16. Watershed management plan
- 17. LCR emergency response plan
- 18. LCR Pollution control plan
- 19. Invasive species management plan
- 20. Nonnative stocking procedures
- 21. Effects of science and recreation
- 22. AMP Outreach

# History cont.

- August 3, 2004 – Conference call, edits are made to first 4 sections; Kubly, Knowles, Stevens tasked with revision of section 5 (project implementation/science basis).
- August 17, 2004 - Second version distributed with August 3 edits.
- September 10, 2004 – Conference call identifies that too many conflicts exist to complete the plan in time for the October AMWG meeting. Decided that a powerpoint presentation would be given to the AMP on the unresolved issues to seek guidance on how best to proceed.

# History cont.

- September 13, 2004 – New section 5 distributed.
- September 20, 2004 – Conference call to identify issues of contention, results in a discussion of options AMWG might consider to complete the plan.

# What's next?

- Sam Spiller will present the issues that have stalled completion of the plan to the AMWG at the October 25-26 2004 meeting and ask for their guidance in completing the plan.

# HBC PLAN ISSUES

- Removal of HBC from Grand Canyon (refugia/grow out/propagation)
- Translocation of HBC in Grand Canyon
- Integration of plans (Core, LTEP, HBC)
- LCR Mgmt Plan responsibility
- Peer-review of the HBC Plan
- Prioritization of projects
- Round out, support, move goals section
- Clarify and support status section w/citations

# HBC PLAN ISSUES, cont.

- Scientific basis for threats section
- Describe priorities, linkages, sequence of strategy
- Risk analysis of each action
- Review by GCMRC and science advisors
- Complete Genetics Management Plan
- Include Lower Paria River in management actions
- Include actions for creation of Lower LCR and mainstem rearing habitat

# HBC PLAN ISSUES, cont.

- Function of the Plan too complex, should it be just a list of projects?
- Concurrent Population Estimates included?
- In and Out determination necessary, or part of budget process?
- Move HBC Plan to SOI for Recovery Program
- Project 04 misinterpreted (refugium plan)?
- Clarification of Reasons For Revision of HBC Plan