

HBC comprehensive strategy mtg
Phoenix, March 12, 2003

Development of additional population models for HBC

Steve Gloss

Steve distributed copies of “An Overview of Status and Trend Information for the Grand Canyon Population of the Humpback Chub” and primarily discussed the Figures 1 – 5 in the report. Carl Walters and Lew Coggins were the primary authors of the report, and believe that the monthly ASMR model produces more realistic mortality rates and therefore is likely the better estimator of population size. While there remain significant questions about the adult HBC population estimate, all methods point to a decline over the course of the last decade.

Status of FWS Proposal to Evaluate Feasibility of Augmenting HBC Population

Pam Sponholtz

Will have report on requirements of maintaining HBC in a hatchery situation. Will also include a genetics evaluation (as far as possible) in the report. Shinamu and Havasu Creeks were identified as potential sites for second population (aggregation?) sites. Question about the amount of available habitat required for a separate population. Focusing on the establishment of a refugia rather than a second population. Valdez discounted the potential of Bright Angel Creek due to the non-native predator load, but this should be revisited with the implementation of the Bright Angel Creek weir and removal of non-native fish.

Discussion about the starting point for FWS recovery goal determination. Offsite population could provide potential for insurance against extirpation, but could dilute the energy to preserving the existing population in the Grand Canyon. Refugia could provide short-term holding site against catastrophic event or risks associated with actions intended to benefit the HBC. Need to address uniqueness of separate aggregations (genetics). Need to make sure we address the protocols required for creation of an off-site refugia. Discussion about the tradeoffs between removing a certain amount of adult HBC now vs. the future when the population could be smaller. Some indication that the impact on genetics would be minimal either way, but deserves more work.

Discussion about the importance of completing the genetics work by Marsh and Douglas, particularly to help address any potential uniqueness of the 30-mile and LCR populations and whether the Willow Beach fish are genetically representative of these other populations. Concern about what will be done with the fish taken → FWS feasibility study will address potential options (grow out, refugia, stocking) and provide evaluation of risks and benefits. Some protection against risks associated with other future actions designed to benefit the HBC could be provided by refugia. Issue of infestation by Asian tapeworm should be included in FWS feasibility study.

Tom Czaplá indicated he thought that Upper Basin populations are relatively stable and that the decrease in last year's estimates were the result of catch efficiency changes associated with low streamflows.

Discussion of Individual Proposed Actions

Need was identified for an integrated comprehensive strategy, not just a list of 23 action items.

Project 15 – Emphasis on need for consistency of our measurement protocols with FWS recovery goal techniques. Suggestion of using Willow Beach HBC as an experiment in using sonic tags. Most important question now is percent of population that is going up the LCR to spawn; some question about whether sonic tags will produce statistically significant results using 50 – 100 HBC. **Tom Czaplá, Bill Persons, Rob Simmonds, Rich Valdez and Steve Gloss will review/revise proposal based on this discussion.** Need for consideration of handling mortality, including FWS permitting of actions involving handling of HBC.

Project 8 – This project is a prerequisite to projects 7, 9, and 11; a draft report is due to GCMRC by June 2003.

Project 11 – Ongoing effort – some question about what happens after completion of the 2004 test. Need for evaluation of results of the experimental effort.

Project 7 – Bulk of the project cost is in the preparation of the broodstock management plan. Need to continue to press for results of genetic work by Douglas, perhaps with need to expand genetics question basinwide. Rob will add subproject duration and cost breakdowns for each part of the project, and check with Douglas regarding genetics project timeframes, scope and intermediate results.

Project 9 – Valdez emphasized extremism of Warm Springs individuals. Question about which has greater value - taking fish to refugia or leaving them in the wild. What would be the final use for those fish? Importance of Project 8 as a prerequisite action reiterated.

Project 1 – Question about removing fish carcasses and consultation with tribes. Goal is to take all non-native fish (including trout). Need coordination with UCRIP efforts. Project should be better defined with respect to feasibility study vs. annual effort. Measure of success might be (1) are removal efforts depleting non-native population and (2) is the project having a positive effect on HBC recruitment? Suggestion to move items 4 and 5 to Project 22. Non-native control timeframe might be late fall. Suggestion to develop procedures to minimize escapement of non-native fish upstream in LCR watershed.

Project 2 – Differs from Project 3, which is something of a non-emergency plan. Project 2 is narrowly scoped as a Cameron bridge spill contingency plan. In recovery goals, state emergency response plans are investigated first, and if they are not adequate, expand

development of plan. Potential drying of Blue Springs should be addressed in Project 22. Pat Port led effort about 12 years in development of plan – **Amy will check on availability**. Should add provision to Project to address prevention measures instead of just containment. Consider combining Projects 2, 3, and/or 22. Provide provision for salvaging of native fish.

Project 3 – Prioritize actions based on likelihood of occurrence. Should also consider leaching from tailings piles. Include tribes in water quality standards. Should “identify and review potential threats.”

Project 4 – addressed under Project 8

Project 5 – Need to review threats and actions to counter threats. Alternate proposal is that threats have already been identified -> what is needed is crosswalk to Recovery Goal threats. Need to identify author and recovery goal criteria.

Project 10 – Concern over special trip to collect parasite data -> effort will piggyback on existing trips. Efforts should be focused on prevention / remediation efforts to minimize impact of Asian tapeworm. Need mortality rates for HBC handling.

Project 12 – Needs to be tied to Project 14. Question about Project extending beyond 2004 (experiment now in progress).

Project 14 – Needs to include discussion about handling the fish. Comment on importance of this work, since all other projects will likely increase the amount of fish handling. Question about how to accomplish.

Suggestion to add Problem Statement and Recovery Goal action number to each Project. Tom will send UCRIP format as an example of their project proposal. **Need to include subproject breakdown for duration (months) and costs to each project description. Please identify any prerequisites or dependencies between projects – this will help in integration and sequencing of projects.**

Next mtg in Phoenix for ad hoc group is April 1 if AMWG trip is cancelled, April 18 if trip is not cancelled. **Comments to authors due March 21, deadline for submitting revised project writeups is March 27.**