

Biology Committee Meeting
September 29-30, 2003
Denver, Colorado

Biology Committee: Frank Pfeifer, Tom Nesler, Tom Pitts, John Hawkins, Melissa Trammell, Tom Chart, Gary Burton, Kevin Christopherson, Kevin Gelwicks, and Bill Davis.

Other participants: John Wullschleger, Pat Nelson, Gerry Roehm, Chuck McAda, John Reber, Kirk LaGory (via phone), Dave Speas, Bob Muth, Matt Andersen, Rich Valdez, Tim Modde (via phone), Tom Czapla and Angela Kantola.

Assignments are indicated by “>” and at the end of the document.

Monday, September 29

1. Review agenda and assign a timekeeper; review previous meeting summaries/action items (July 14-15); schedule next meeting - The agenda was revised as it appears below. The meeting summary was approved as written. The Committee reviewed action items from the July 14-15 meeting. >Tom Czapla will send out a reminder to PI's to get their data to Chuck McAda as soon as possible (data are needed so that Chuck can compile for evaluation of stocking success).
2. Reports list - The Committee reviewed the reports due list.
3. Nonnative Fish
 - a. Update on project leaders' meeting - The Nonnative Fish Workshop took place on September 10-11. The main agenda item was to prepare for the Nonnative Fish Workshop later this year, and to discuss nonnative fish management issues. >Pat Nelson will send out a summary of the meeting. The project leaders agreed that targets will need to be established for various rivers for nonnative fish, including parameters such as number per mile (e.g., adult northern pike = 0, 3, 4, or 5 per mile). For the Green River, the northern pike target will be zero. It was decided to continue with the approved scope of work. The smallmouth bass target is zero. Smallmouth bass appear to be expanding from the Duchesne to the Green. Need to discuss channel catfish in the Green River. The target on the Duchesne for northern pike and catfish is zero. For the White River, the smallmouth bass target is zero. On the Colorado, we will continue catfish removal and also remove smallmouth bass. For the Gunnison, the target for smallmouth bass and northern pike is zero. The Program has no good handle on how to reduce catfish to an acceptable level. >Kevin Christopherson will review the catfish levels on the Green River. >Chuck McAda will review the data for the Colorado River. One solution may be to identify spawning areas and congregation areas and target those areas for removal. Frank Pfeifer said that targets were up for discussion, and an agenda needs to be fleshed out for the workshop.

- b. Draft nonnative fish policy - The Implementation Committee asked the Management Committee to draft a nonnative fish policy. It was reviewed and discussed at the September 10-11 meeting. The revised policy was sent to the Management Committee, Biology Committee, and I&E Committee. Biology Committee input was requested prior to the Management Committee meeting the following week. The Committee believed the policy should be expanded to other species, not just the three listed. Bill Davis said that one of the delisting factors is a conservation plan that identifies what will occur after the fish are delisted. This needs to be added to the policy and addressed in terms of long-term maintenance. Tom Nesler agreed. Committee members strongly recommended that the policy statement be disseminated throughout the agencies. If agency staff is aware of the policy, and it is supported at the Department of Natural Resource level in Colorado and Utah, then it will be supported at all administrative levels by all Program participants. >Bob Muth will do a redline version of the policy statement based on the Biology Committee's recommendations, and submit it to the Management Committee.
- c. Nonnative fish workshop - The workshop's primary purpose is to have brief discussions on what's been done to date, but not dwell on the past. The workshop will focus on the future: defining what needs to be changed and how. Discussion also will focus on how to measure success (e.g., depletion levels, responses of natives and endangered species, and/or target levels of nonnative species). The meeting will be December 3-4 (and possibly the 5th) in Grand Junction at the Adams Mark hotel. Principal investigators will discuss work to date, which will be summarized in the annual reports due November 14. Tom Nesler will moderate the workshop. Kevin Bestgen will provide a report on Yampa native fish response to nonnative fish removal. A similar report will be provided from the Colorado River. For the Yampa, we will look at 20-30 years of data regarding abundance of target species. Bob Muth will provide the data for those species. The Yampa is the best river for detecting and measuring nonnative fish impacts in the Upper Basin because: 1) it has a relatively undisturbed flow regime; 2) there is not much in the way of habitat alteration; and 3) nonnative fish are the main factor impeding recovery. Removal of smallmouth bass, catfish, and northern pike will continue on the Yampa. Nonnative fishes may require management in the Yampa from Steamboat downstream. John Hawkins said we need to talk about long range plans and targets for each basin. Tom Pitts suggested the targets are somewhat similar to the flow recommendations: they need to be developed, then the Program can determine what is realistic, and identify solutions. The Committee discussed the product of the workshop. Tom Nesler said there would be no report, but a rationale should be developed for approval for each basin, including targets. Frank Pfeifer agreed. Targets should be set for each river and then scopes of work need to be revised to meet the targets. Tom Nesler emphasized that we need inform the public in January or February of what nonnative fish removal will occur (not when it's being done in May or June). Basin management plans are needed, and those plans need to be succinct and to the point. The workshop should have an emphasis on results. There should short presentations on existing work of only 10-20 minutes with emphasis on future actions.

3. Population modeling proposal – Dave Speas made a presentation on the application of synthesis models to fishery assessments in the Colorado River Basin. The objectives were to determine if there was a need for a possible workshop for the matter in the fall of 2004, and to assess the interest of the Committee to doing this type of work in the future. After a lengthy discussion of the pros and cons of synthesis models and of a possible workshop, the Committee decided to table the item for the time being (but may re-evaluate the need in the future).
4. Wahweap Hatchery funding request – Via e-mail of September 15, Matt Andersen provided a request for additional funds of \$160,000 from the Recovery Program for additional construction at Wahweap Hatchery. Matt distributed diagrams of the facility, noting that in the late '90s the Program provided funding support for improvements to Well #1 and recommended construction of a hatchery building. However, due to the remote location, the time frame for construction was extended and costs had increased. Well #1 was approved, but the funds were not adequate to construct the building. A total of about \$410,000 in Recovery Program funds is being held by Utah. The Virgin River program is expected to provide about \$90,000, which will make about \$500,000 available. The current estimate for the total of the project is \$775,000, but Utah can reduce that to about \$700,000 by reducing the size of the building. This results in a request for \$160,000 from the Recovery Program (which Matt pointed out is the biggest user of the site). The hatchery would benefit the Recovery Program by providing bonytail from an in-state source (no requirement to stock fish from out of state). Frank Pfeifer noted that the Program previously paid for 12 ponds at Wahweap. The stocking plan says bonytail will be raised at Wahweap for Utah stocking and at Mumma for Colorado stocking. Tom Czaplá said there should be plenty of fish and no need for additional facilities (see February '03 BC minutes), and questioned the need for spending additional funds at Wahweap. Matt pointed out that Well #2 is currently just a well head with no connections. Integrating the second well would increase security at the site. Frank said that if security is the objective, then a range of options should be considered. Bill Davis suggested that the lower basin MSCP is not meeting bonytail stocking needs, and Utah should talk with the MSCP about possible use of the Wahweap facility to help meet those needs. Tom Czaplá said Mumma and Ouray will have some space for bonytail and there does not appear to be a need for expansion of Wahweap. Frank Pfeifer said we are now meeting all production goals, including research needs for the floodplain studies. There is no need to spend further money to meet these needs. Committee members noted that although the Recovery Program originally approved a building at Wahweap, needs have changed. Tom Chart said we were talking about a hatchery at Wahweap when Dexter was not meeting the goals, but those goals are now being met. The Committee recommended spending \$100,000 for connecting Well #2, per the estimate provided in Matt Andersen's September 15 e-mail. Matt said the remaining \$310,000 can be de-obligated and returned to the Bureau of Reclamation.
5. Researchers meeting – Kevin Christopherson reported that the researchers meeting will be held in Salt Lake City on January 13 and 14, 2004. (*Note:* The meeting has since been moved to Moab, Utah, as originally suggested).

6. Utility of peer review for scopes of work – This works when it tracks with work plan development. It only happens on new starts (~ 6/year). If it results in a better product, it should be continued. The recommendation of the Committee was to keep the peer review process for statements of work for one more year and then re-assess, and to diversify the peer reviewers so that the same people are not reviewing the SOWs.
7. Submission of tagging data – Tom Czapla reminded Committee members of the need to submit tagging data ASAP. This information will be critical to the evaluation of stocked fish this winter by the Program Director’s office.
8. Salvage of fish from GVIC canal – Frank noted that this was a carry-over item from the last meeting. The question had to do with 2003 funding and whether or not to salvage fish from GVIC, Tusher, and Government Highline canals. The Service is reviewing language on the Colorado River biological opinion. Salvage is funded for GVIC and Government Highline; however, there is no funding for Tusher Wash or on the Yampa. Work on the Yampa will depend on the results of the programmatic biological opinion to be issued in early FY 04. There will be no fish screen at Tusher or salvage operations likely until FY 05. Last year, about 3,000 native fish were taken out of GVIC on the Colorado, including one stocked razorback sucker. \$10,000 is available this year to do two canals (GVIC and Government Highline). Two to three stocked suckers were found in previous years.
9. Lower Basin update – Tom Czapla reported that the RIPS WG is under review. It has been discussed with Region 2 and Arizona Department of Fish and Game. The Service and Arizona will request a population estimate on the Grand Canyon humpback chub in fall 2004, using 2004 & 2005 dollars. The modeling effort used to estimate population is not providing an adequate estimate. The genetic management plan on the humpback chub will be a USFWS document. It will likely be prepared by the Upper Basin Program Office. The Upper Basin Program has offered comments on various documents from the Lower Basin. The Upper Basin Program received a list of priority needs and has reviewed that list. Eleven of the twelve needs are aligned with management actions in the recovery goals. It was noted that there are institutional limitations regarding an overall program in the lower basin, given different jurisdictions of various Department of the Interior initiatives. The lower basin holds a science symposium every two years. The next symposium is October 28 – 30 in Tucson. Rich Valdez will be attending.

Tuesday, September 30

10. Duchesne Report - Frank Pfeifer distributed revisions to the report (which address Chris Keleher’s comments). Frank suggested that the work group mentioned under “Implementation of flow recommendations” would meet more than once a year; Tim will change this to “meet as needed during the year to discuss and make recommendations for implementation of flow recommendations.” Tom Chart suggested that someone from the Recovery Program staff be part of the work group (an important factor that seems to be missing in some of the similar work groups). >Bob Muth will consider this and report

back to the Committee. On page 18, the new parenthetical belongs with the next sentence. Melissa suggested adding something to the water availability section describing how often water may be available to meet the base flow recommendations. Tim will get that information from Chris and add it in. >Tim will finalize the report and get it printed.

11. Geomorphology report and research needs – Kirk said he made a revision to reflect floodplains as a primary information need. Kirk also reviewed Pucherelli's backwater information and weighted restricted and fixed meanders equally. The Committee accepted the changes and approved the report as final. >Kirk will finalize the report and get it printed. Gerry outlined the recommendations for FY 2004-2005 geomorphology projects. >Chuck McAda will provide a revised scope of work to prepare a final report on project 85c, the depth to embeddedness study (no additional data collection). >George Smith will provide a revised scope of work to do the same for project 85d (George will write the final report). John Wullschleger expressed concern about terminating data collection on Yampa bedload movement. George said the data collected are more of a management tool than something to help make flow recommendations. The Flaming Gorge work group has not made much use of this data in the past. (Tom Chart noted this is why that work group needs to have a Recovery Program representative.) George said the equipment for 85d should be operable for a few more years by changing the batteries and keeping the cell phone service. Tom Nesler suggested the Committee can consider the need to continue data collection begun under 85c & 85d when they review the final reports. The final report for 85d should reflect what's needed to make the data collection reliable and get it used in the decision-making process. The Committee discussed alternatives for new geomorphology work. Floodplain related work has not been included in the alternatives pending completion of the floodplain management plans (however, both draft floodplain management plans do call for geomorphic and hydrological assessment of key floodplain areas to determine entrainment). The Committee discussed the need for data on connected backwaters (alternative A) and suspected spawning bars (alternative B) and agreed that the recruitment question makes the connected backwaters investigation more important. Tom Chart suggested that the scope of work build on Schmidt & Rakowski's work. Melissa cautioned that nonnative cyprinids are likely just as important as physical habitat in limiting recruitment, so the scope should take this into consideration. >The Program Director's office will issue Program guidance for a scope (or scopes) of work on connected backwaters to begin in FY 04. Frank asked who funded Harvey and Musseter's work and how the Committee's recommendation would affect their work. Tom Pitts said the water users funded the research and are awaiting a report. Ray Tenney said he's now giving that report a final internal review before it comes to the Program for review and approval. The Committee can consider the recommendations in that report when they review the final. Ray said the authors were asked to look at whether peak flows are limiting to the endangered fish, but didn't get high flows during the study period. Some data were collected during 2003 high flows, but those data won't be analyzed until later. Ray Tenney reviewed some of the technical constraints of suspended sediment monitoring.

12. Update on floodplain habitat management plans – Rich Valdez said the Green River subbasin plan has gone through the first review by the Program Director’s office and will go out to the Committee in 2-3 weeks. The Colorado River subbasin plan will be submitted to the Program Director’s office in October. Rich reviewed the principles underlying the management plans, then went through the draft Green River plan (providing a handout of his Powerpoint presentation). The plans identify a need for floodplain management activities for many years in the future, and Tom Pitts noted that we don’t have capital funds for those activities. Rich identified research needs, including: 1) assess larval entrainment at key floodplains; 2) evaluate growth and survival of fish in floodplains; and 3) determine feasibility of managing key floodplains as 12 or 24-month reset. Tom Pitts asked that the recommendations be made more direct and succinct. Committee members suggested other uncertainties (e.g. failure to achieve a self-sustaining population of razorback sucker, etc). Since these are management plans, they won’t go out for peer review, but will go directly to the Biology Committee after Program Director review/revision.

13. Research in context of floodplain habitat management plans – Kevin Christopherson outlined past and current research. Uncertainties/research needs include:
 - a. Can NNF be effectively controlled in floodplains? (*reset, other control methods*)
 - b. What larval densities are needed for survival? (*larval survival scopes*)
 - c. Can we reach these densities in reset floodplains? (*bead scope*)
 - d. Can reset floodplains hold razorback for multiple years?
 - e. How long do razorback need to stay in the floodplain? (*remote PIT tag scope, population monitoring*)
 - f. What are the environmental factors needed for razorback to reenter the river? (*remote PIT tag scope*)>Kevin will present a summary of the bead study at the next meeting. >Kevin will post the summary of his presentation to the listserv.

14. The next Biology Committee meeting will be November 17-18 in Grand Junction starting at 12:30 p.m. on Monday and concluding by 3:00 p.m. on Tuesday, November 18. Agenda items will include report review, review of geomorphology scopes of work, and a Powerpoint presentation on the bead study.

Adjourn: 11:45 a.m.

ASSIGNMENTS

1. Tom Czaplá will send out a reminder to PI's to get their data in to Chuck McAda as soon as possible (data are needed so that Chuck can compile for evaluation of stocking success). *(Done)*
2. Kevin Christopherson will review the target levels for catfish on the Green River.
3. Chuck McAda will review the catfish data for the Colorado River.
4. Bob Muth will do a redline version of the nonnative fish policy statement based on the Biology Committee's recommendations, and submit it to the Management Committee. *(Done)*
5. Bob Muth will consider having someone from the Recovery Program staff be part of the Duchesne, Flaming Gorge, and Aspinall work groups and report back to the Committee.
6. Tim Modde will finalize the Duchesne report and get it printed.
7. Kirk LaGory will finalize the geomorphology report and get it printed.
8. Chuck McAda will provide a revised scope of work to prepare a final report on project 85c, the depth to embeddedness study (no additional data collection).
9. George Smith will provide a revised scope of work to prepare a final report on project 85d (George will write the final report).
10. The Program Director's office will issue Program guidance for a scope (or scopes) of work on connected backwaters to begin in FY 04. *(Done)*
11. Kevin Christopherson will present a summary of the bead study at the next meeting.
12. Kevin Christopherson will post the summary of his presentation on floodplain research to the listserver. *(Sent to Biology Committee)*