

BIOLOGY COMMITTEE MEETING

December 14 - 15, 2000

Colorado Division of Wildlife, 6060 Broadway Blvd., Denver, CO

Attendees: Art Roybal, Tom Pitts, John Hawkins, Tom Chart, Matt Andersen, Tom Nesler, Bill Davis, Gerry Roehm, John Wullschleger, Paul Dey, Frank Pfeifer, Pat Nelson, Chuck McAda, Angela Kantola, Kirk LaGory, Tom Nesler, Bruce Haines, Ron Brunson, Mark Fuller, Bob Muth, Michelle Garrison, and Harold Tyus.

Assignments are indicated by >

Upcoming agenda items are indicated by *

New or revised policy is in bold italics.

Thursday, December 14

Convene: 1:00 pm

1. Additions/Revisions to Agenda - The agenda was modified as it appears below.
2. Approval of October 24-25, 2000, Meeting Summary - *Stocking plans revision will be on the agenda for the next meeting. Correction to attendees: Kevin Bestgen was not at the meeting. Correct the spelling of Laverne Cleveland. Under item 7-3, John Hawkins clarified that they understand the concern about flooding and other issues, but believe that the report itself should be biologically based. Under item #2, say that the EA states (as opposed to we agreed in the EA) and quote what is said in the EA. Tom Pitts asked that it be added that this is also discussed in the umbrella floodplain acquisition document. Under item #7, note that comments also were submitted by Reclamation. Under item #6, we agreed that the Committee will not accept a report as final unless data have been submitted.

>In the future, Program coordinators will check with Chuck McAda to be sure that the data have been submitted before sending a report to the Biology Committee. >Action items, responsible party, and due date will be listed at the end of each meeting summary. Delete possibly inbred from Kathy Holley's comment (paragraph 2, page 8). >Angela Kantola will add policy statements that relate to reports to the reports review process and post that process to the web page.

3. Election of New BC Chair - Paul Dey will assume the chairmanship at the next meeting. The Committee selected Tom Chart as the new vice-chair.
4. Discussion/Approval of Revisions to Final Report – The White River and Endangered Fish Recovery: A hydrological, physical, and biological synopsis. Lentsch et al. 1998. The two cover pages will be combined. The Committee accepted the report as final.
5. Discussion of peer-reviewed Green River channel morphology article by Allred and

Schmidt. Can the Committee accept the December 1999 peer-reviewed article with the new Executive Summary prepared by Schmidt? The final draft (May 1999) was never revised per the Committee's request to make the conclusions and recommendations more prominent. Matt distributed a memorandum summarizing the conclusions and recommendations and suggested that he would add these to the report and also replace the old executive summary with Jack's new summary and print it in final. Bill Davis said several of the conclusions do not appear to be supported by the data collected (e.g., #2). Tom Pitts asked what is meant by "downstream" in conclusion #1. What are the alluvial reaches referred to in #2? What is meant by "more recently" and "further from the dam" in #3? Tom noted that page 20 of the report says that climatic change *has* contributed to reduced flood magnitude, so it's inappropriate to say it has *probably* also contributed in the conclusions. Also, the climatic change portion should be a separate conclusion. Add river miles to conclusion #5. Bill suggested that removing salt cedar may be more complex than the recommendations indicate, in that this habitat may be valuable to other species (e.g., in the lower basin, it's being used by southwestern willow flycatcher). Tom Nesler questioned whether the report concluded that the existing hydrology will support recommendation #4. >Utah (Matt Andersen) will revise the conclusions and recommendations, have Jack Schmidt review them, and post to the listserver within 2 months (for review at the February Biology Committee meeting).

6. Status of Report - Nonnative Fish Control by Mechanical Means: Channel catfish and Centrarchid Removal in the Middle and Lower Green River, Utah. Crowl and Badame. 2000. Matt Andersen said a draft has been submitted and has gone through internal Utah review. The authors are revising the report. >Art will e-mail Todd and tell him the Committee would like to see the report out for peer review by the end of January.
7. Status of Tusher Wash Report - Matt said that Pete Cavalli should submit the final version of this very soon.
8. Discussion of reports and recommendations - Committee members discussed how report conclusions and recommendations are translated into action items in the RIPRAP and into recommended Program guidance. >In January, the Program Director's office will post or send to the Committee recommendations from all reports finalized between October 1, 1999 and September 30, 2000 (so that the Committee can review these in considering draft Program guidance and RIPRAP revisions). >Next fall, the Committee will review report conclusions and recommendations and consider those in making recommendations for Program guidance and RIPRAP revisions. Angela Kantola said that the Program Director's office would like ***final reports to be submitted in electronic format (in whatever word processor format it was written) which they will post to the website in Adobe Acrobat format. The Committee adopted this policy as an amendment to the report review process. (This does not change the requirement to also provide final hard copies of the report.)***
9. Channel Catfish Scope of Work - The Committee discussed comments posted to the listserver (techniques for detecting and catching different size classes, data to be

collected, measuring effects of removal on native fish populations). The revised SOW includes electrofishing. >Bruce will further revise the SOW to address monitoring other native fish species in five 1-mile sections (monitoring condition, length/frequency, percent composition, and CPUE). >By January 16, Bruce will post to the listserver the revised SOW addressing this change and the other comments submitted.

10. Second-year survival and growth of razorbacks in floodplain depressions - Ron Brunson distributed a summary discussion which the group discussed. These data will be in the draft levee removal evaluation study report (which is pending distribution for peer review).
11. Backwater depth and Colorado pikeminnow use during fall sampling - Ron Brunson distributed a summary discussion of fall ISMP YOY pikeminnow sampling which the group discussed. Based on extra sampling, Utah believes we need to increase our sampling effort in the middle Green River (we re excluding many shallow backwaters that contain pikeminnow).
12. Discussion of upcoming Researcher s Meeting - Tom Nesler distributed a list of presentation titles submitted thus far for the January meeting. Tom Pitts recommended a panel (perhaps made up of representatives from the Program staff, Colorado, Utah, Reclamation, the Service, and Western) to discuss future research direction from a biological perspective and in light of the fact that research will be driven largely by the Recovery Goals and the 15-Mile Reach PBO. Tom Czaplá should give a report on the stocking program.

December 15

13. Discussion of Responses to Comments/Responses for Final Draft Report: Flow Recommendations to Benefit Endangered Fishes in the Colorado and Gunnison Rivers, Project 54, McAda, May 2000 - Chuck McAda said he modified chapter 4, changing the flow recommendations somewhat and adding text to the discussion of uncertainties. Committee members raised remaining concerns:

Bill Davis - 1) The recommendations seem more theoretical than based upon specific effects of flows on different life stages of endangered fishes. Kirk suggested including a table or matrix identifying the goals and objectives of the flow recommendations by species and life stage. Chuck agreed to do that. 2) The recommendations go beyond the flexibility of dam operations. Chuck said Reclamation is just beginning to model the feasibility of providing these flow recommendations. Other Committee members emphasized that the goal of the report is to identify the flows the fish need. Chuck will check the text which Bill claims call for a return to pre-dam conditions. Bill held his additional concerns in the interest of time.

Tom Pitts - 1) Remains concerned about recommended peak flows to provide floodplain habitat and the lack of recognition that we have a program in place to provide floodplain

habitat. Chuck will acknowledge the floodplain program, but said that the recommended peak flows are not based solely on creating floodplain habitat. Tom will provide Chuck with language addressing his concerns and Chuck will decide if he can incorporate it. 2) The uncertainty section should make it more clear that water may not be available to provide the flow recommendations (modeling is required). 3) The uncertainty section also should note that the impact of the flow recommendations on the Gunnison tunnel and flooding at Delta may be a restraint to implementing the recommendations (Tom will provide language). 4) Uncertainty section should mention that we're trying to define recovery goals and that we don't know precisely what habitat will be required to meet those goals.

Tom Nesler - The report should identify how the recommendations will be modified as the uncertainties are resolved. Frank said this is a valid concern, but it's not the place of the report to say *how* the Program should resolve the uncertainties. Tom agreed this isn't a biological issue, but it will need to be resolved (the Biology Committee should recommend to the Management Committee that the uncertainties be resolved). Tom recommended a change in wording on bottom of page 4-18 on the nonnative fish issue. Chuck agreed.

Art Roybal - Since the recovery goals do not specify that recovery must occur in the Gunnison (vs. the Colorado River), Western has concerns about how we should allocate our limited resources most efficiently. Before they can embrace these flow recommendations, Western would like to see adult razorback survival and razorback reproduction in the Gunnison; until then, the recommendations seem speculative. Frank clarified that there are adult razorbacks in the Gunnison River above Redlands.

Kirk LaGory - The peak flow recommendations in Chuck's report go beyond those in John Pitlick's recently approved report, yet there's no new information to justify the difference. Chuck uses the same data, but draws different conclusions. Chuck makes more use of certain individual transect values of estimated bank-full discharge than Pitlick does. For example, saying that bank-full discharge will be achieved in 82% of the river at a certain flow is an overstatement (bank-full discharge will be achieved in 82% of the *transects*). Pitlick's recommendations were based on the bank-full discharge estimate for different reaches of the Gunnison, rather than for individual transects, which Chuck has used. Chuck countered that he recommends exceeding median bank-full discharge only 30% of the time. Kirk added that the research term was a wet period, which may make Pitlick's recommendations more difficult to achieve, yet Chuck's recommendations go beyond Pitlick's and were achieved only once in 5 years. By making higher peak flow recommendations, Kirk believes we narrow the possibility to manage the flows (e.g., duration) for the fish. Kirk said peak flows in the drier years also need reevaluation. They may be very difficult to achieve (requiring a spill at Crystal Reservoir, for example), yet they do not seem biologically well justified.

Mathew Andersen - Our goal is *recovery* because the fish are endangered (largely due to human impacts). These flow recommendations seem very conservative. If they are in

error, it is only in calling for *slightly* more than the minimum necessary. Given our goal to *recover endangered* fish, to call for slightly more than the minimum is not inappropriate.

John Hawkins - Has a concern regarding the range of base flows. Chuck said he tried to leave some flexibility in the base flow recommendation; to try to put a cap on those is very difficult. John suggested wording for the base flow section on page 4-13 (3rd sentence) along the lines of: Natural variation occurred within the base flow period [and it should inform the base flow target applied within the base flow range.](#)

John Wullschleger - John concurred with Hawkins' base flow concerns, and also asked questions regarding why the recommended peak flows are lower than the historic 22,000 cfs. However, John said he is comfortable approving the report as written.

Tom Chart - Suggested strengthening the base flow recommendations with tables similar to those provided in chapter 3 of the Flaming Gorge report. Tom supports the recommendations as written.

Frank Pfeifer - Recommends adding to the uncertainty section that the recommendations are somewhat of a *mimicry* of the natural hydrograph, but they are not the natural hydrograph. Whether we can recover the fish with this regime is also an uncertainty.

Paul Dey - Supports the recommendations.

Bill Davis - The report should address the apparent discrepancy between the needs of the other native fish (e.g., flannelmouth and bluehead) and the endangered fish.

The Committee voted as to whether to approve the report with the revisions agreed upon. All members except the water users, CREDA, and Western voted to approve the report. Tom Pitts said the water users will ask the Management Committee for an extension on the due date for the minority report (February 2). They also will work with the Service on some language issues before submitting a minority report (>will have comments to Chuck by December 22 to which >the Service will respond by January 15). Any other minority reports also will be submitted by February 2. Minority reports should go beyond identifying issues to recommending resolution. Committee members approving the report recognize that there are policy issues still to be resolved. They also recognize the technical uncertainties that will need to be resolved in the adaptive management process as Gunnison River flow recommendations are implemented.

14. Utah's position on stocking Lake Mohave razorbacks presently in Bounds Pond - Matt Andersen distributed a memo discussing this. Tom Nesler countered the memo, noting that the Genetics Management Plan mentions Lake Mohave as a source of broodstock in three different places (see Upper Colorado River Stock on page 21, for example, which says to further meet the broodstock development need, adult Lake Mohave razorback suckers and/or their sperm should be used to complete the 25x25 paired matings). Frank

emphasized that we are at that point now. With that information, Matt conceded that the practical approach of using Lake Mohave razorbacks is appropriate at this point.

15. Discussion/Approval of Draft Final Report: An Evaluation of the Role of Tributary Streams for Recovery of Endangered Fishes in the Upper Colorado River Basin, with Recommendations for Future Recovery Actions, Project 101, Tyus and Saunders, August 15, 2000. Harold Tyus noted that the objectives of this report were to review and synthesize existing information and identify: 1) direct role of tributaries providing current or historic habitat; 2) indirect role of the contribution of tributaries where fish are not found now (or historically); and 3) obstacles to recovery (streams which may not be amenable to recovery). Harold outlined the reports conclusions, as well as the peer review comments they incorporated and rejected.

Tom Pitts commented that many statements in the report are unsubstantiated, some of the recommendations are invalid, and some are not related to the text. For example, the sentence regarding the Yampa and White rivers at the end of page 27 which says: further flow regulation could have great deleterious effects throughout much of the existing big river fish habitat has no basis in fact in the report or elsewhere. Harold was unwilling to remove this entirely, but is willing to modify the wording to be more specific (emphasizing sediment contribution to the greater system, etc.). Further, Tom Pitts disagrees that the removal of Taylor Draw Dam is justified. No justification is provided (Frank noted the rationale on page 68, item #1).

Tom Chart called attention to the sentence at the top of page 44 temporal pattern of release from Flaming Gorge preserves nothing of the natural hydrograph which does not acknowledge the modified releases. Harold agreed to change that. Frank questioned recommendation #2 on page 68 and asked why they excluded the Gunnison River as a focus of reintroduction efforts. Harold said it was because reintroduction there was already ongoing. Frank said that should be clarified then, because reintroduction is also ongoing in the Colorado River. Harold agreed. Tom Chart noted that one of the tables needs a similar correction (pages 19 and 62). Frank said Tom Czapla has asked that the report prioritize the tributaries based on direct and indirect contributions (and include the actual rankings in the report). The Committee discussed the rankings at some length and Harold agreed to rectify discrepancies. Art distributed Western s comments on the document. Tom Chart suggested that the fact that (especially the smaller) tributaries support large numbers of other native fishes should be brought out in the report. Frank agreed. Tom Chart will provide text. Paul Dey distributed written comments and noted that it is not clear how “potential for reintroduction” was determined.

Tom Nesler agreed with Tom Chart s expectation that the report would focus more on the smaller tributaries. With regard to the ranking, Art said he d like the Committee to come to agreement on what would be included in category 4 (an existing population of adult razorbacks is implied, whereas it might be considered premature to characterize it as an existing population at this point). Harold will clarify the text to make it clear that we re in the early stages of razorback reintroduction in the Gunnison (habitat appears

sufficient to support adults). Also, if the Colorado tributary is defined as the reach above the Gunnison, then it needs to identify adult pikeminnow.

>Committee members will post any additional written comments to the listserver by January 12 (Harold asked that major comments be flagged) >The authors will get a revised version out by February 9 and *the Committee will discuss the report at their next meeting.

16. Budget item - Pat Nelson said that Tim Modde won't be purchasing an ASV (\$32,000) to maintain floodplain water control structures after all, so those funds will be turned back to the Program. The Program Director's office recommends putting the funds into growout pond leases. Matt said Wahweap hatchery had some storm damage this year resulting in erosion near the new ponds. They are identifying what will be needed for repair (probably in the neighborhood of \$10-\$20K) >Tom Czapla will discuss this with Matt and post a recommendation (and estimates) to the listserver.
17. Next meeting: February 20-21 in Grand Junction (starting at 10:00 a.m. on the 20th and adjourning at 3:00 p.m. on the 21st.) Frank Pfeifer will secure a meeting room (preferably the larger one at Reclamation (*12/18 – Frank has reserved a meeting room at Reclamation*)).

Adjourn- 3:05pm

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Angela Kantola will add policy statements that relate to reports to the reports review process and post that process to the web page.

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Art will e-mail Todd Crowl and tell him the Committee would like to see the nonnative fish control report out for peer review by the end of January.

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Next fall, the Committee will review report conclusions and recommendations and consider

those in making recommendations for Program guidance and RIPRAP revisions.

Bruce Haines will further revise the Channel Catfish SOW to address monitoring other native fish species in five 1-mile sections (monitoring condition, length/frequency, percent composition, and CPUE). >By January 16, Bruce will post to the listserv the revised SOW addressing this change and the other comments submitted.

The water users will ask the Management Committee for an extension on the due date for the minority report on the Gunnison River (February 2). They also will work with the Service on some language issues before submitting a minority report (will have comments to Chuck by December 22 to which the Service will respond by January 15). Any other minority reports also will be submitted by February 2.

Committee members will post any additional written comments on the Tyus and Saunders tributary report to the listserv by January 12 (Harold asked that major comments be flagged) The authors will get a revised version out by February 9 and the Committee will discuss the report at their next meeting.

Tom Czapla will discuss repair of erosion near the Wahweap ponds with Matt Andersen and post a recommendation (and estimates) to the listserv.

REVISED/NEW POLICY

Final reports will be submitted in electronic format (in whatever word processor format it was written) which the Program Director's Office will post to the website in Adobe Acrobat format. (This does *not* change the requirement to also provide final hard copies of the report.)

FUTURE AGENDA ITEMS

Stocking plans revision will be on the agenda for the next meeting.

Tributary report.

Allred and Schmidt, channel morphology conclusions and recommendations