

Biology Committee Meeting
February 10-11, 2004
Grand Junction, Colorado

Biology Committee: Frank Pfeifer, Tom Nesler, Tom Pitts, John Hawkins, Melissa Trammell, Tom Chart, Gary Burton, Kevin Christopherson, Kevin Gelwicks and Bill Davis (via phone for certain agenda items on Tuesday, February 11).

Other participants: Pat Martinez, David Smith (CWCB and CRWCD board member), Anita Martinez, Dave Speas, Bob Muth, Tim Modde, Bob McCue, Tom Czapla (via phone for population monitoring workshop and RIPRAP review agenda items), George Smith (via phone on Wednesday morning) Chuck McAda, Pat Nelson, Angela Kantola, Patty Schraeder-Gelatt, Al Pfister, Bill Miller, and Ray Tenney.

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

Tuesday, February 10

1. Review agenda and assign a timekeeper; review previous meeting summaries/action items - The agenda was revised as it appears below. The January 15 meeting summary was approved as written. >Tim Modde will post Bill Davis’ comments on Kitcheyan’s report to the Committee. Tom Nesler said the CDOW collection permits will require folks to coordinate with Pat Martinez regarding what species he needs for the isotope study. John Hawkins said he incorporated the cost of floy tags in his scope of work. John Hawkin’s scope of work for translocating northern pike provides for coordinating with CDOW if any fish are to go to Rio Blanco. The Committee made minor changes to the January 29, 2004, conference call summary (>Angela will post the revised summary to the listserver).
2. Elect new vice-chair - Tom Nesler was elected vice-chair.
3. Review reports list - Angela Kantola noted that the Management Committee decided that reports will have “late” in the status column if the date identified in the scope of work is not met (the date due to the coordinator, that is). The “revised due date” column will identify the new expected due date and the comments column will describe why the report is late. The Program Director’s office will revise the reports due list accordingly. Pat Nelson asked how the Committee wanted to deal with reports for studies with significant change in direction (e.g., “Evaluation of larval razorback sucker drift into floodplain wetlands after reconfiguration of levee breeches). The Committee agreed that a fully detailed annual report would be adequate (with the citation added to the appropriate line item in the RIPRAP). >The Program Director’s office will revise the list accordingly.
4. Review request for additional funds for C18/19 Stable Isotope Analyses of Centrarchid

Concentration Areas - Pat Martinez said they've discovered that the most promising isotope analysis techniques are more costly than originally thought. Funds provided to date are adequate for the first step (identifying elements and isotopes to use), but they will need \$25,000 more to accomplish the second and third steps (application of the technique). Frank asked the likelihood of determining whether nonnatives come from ponds or the river if additional funds are provided. Pat said he believes they're on the trail of the proper markers, and he has very high confidence that they will be able to determine the source of the fish. Tom Nesler asked about the utility of determining additional markers (e.g., barium or magnesium, at an additional cost of \$5,000), and Pat said that since they already have someone in place to do this work, they would like to determine if these markers could be used (and whether these markers might be even more accurate or possibly less expensive). The Committee expressed support for the additional \$25,000 if it will indeed tell us the source of these nonnative fish, but did not support the additional \$5,000 to determine other markers. >Pat Martinez will provide a revised scope of work reflecting the additional \$25,000 to Pat Nelson.

5. Modde - Development of White River flow recommendations - Tim Modde introduced the study and discussed the shortcomings that resulted from inadequate flows. Tom Nesler questioned the sentence that says the curves provide both a "reasonable" and "imprecise" approximation of habitat, and Tim agreed to delete that sentence. Tom Nesler asked if it's appropriate for the 5th conclusion to say "the curve break analysis showed..." Tim will delete the 5th conclusion and put the 6th in the discussion. The Committee pointed out a number of typographical and similar errors. >Tim will make the changes and finalize the report.
6. Birchell & Christopherson - Evaluation of survival and growth of razorback sucker stocked into middle Green River depressions - Kevin noted that major revisions to the overwinter population estimate resulted in this coming back to the Committee. The Committee pointed out a number of typographical and related errors. >Kevin will make the changes and finalize the report.
7. Martinez - Pond reclamation - Anita Martinez summarized the work, noting that all fish were removed from 71 ponds and other ponds were screened. Regarding reinvasion, Anita said she suspects all ponds will reinvade (in addition to the 65% they found to reinvade), it's just a matter of when. Anita will add a list to the report that shows when the ponds were re-sampled. Tom Nesler asked about the lower reinvasion rate of largemouth bass and Anita said she found that interesting, but believes green sunfish (which did reinvade) have a much greater impact. The bulleted recommendation statements should be put in the executive summary. >Anita will finalize the report.
8. Criteria for upper Yampa nonnative fish management - Tom Nesler described his draft nonnative fish escapement criterion and estimation and walked the Committee through the example he provided. Pat Martinez cautioned careful consideration of threshold percentages and distance moved over time. Kevin Christopherson suggested considering the question from a different angle – determine a threshold from the perspective of an acceptable level of the fish community in critical habitat. (Otherwise, for example, x% nonnative fish escapement from a large reservoir with several thousand nonnative fish is

a very different situation than x% of nonnative fish escapement from a small reservoir with a few hundred nonnative fish.) Frank noted that the percentage threshold previously discussed was derived *only* from the level of catfish escapement above which we decided it would be a waste of resources to continue to stock catfish in Kenney Reservoir. Bob Muth said he doesn't think a threshold is needed – the trigger is if you can't deplete nonnatives in the target reach due to immigration of fish from another reach. We don't yet know that information. Committee members may wish to provide Tom Nesler additional specific comments regarding how we measure, what we measure, and “how much is too much.” >Tom Nesler will re-draft the document and send it back out to the Committee. Pat Martinez noted that smaller pike may not be caught and tagged; Pat noted the importance of knowing growth rate and distance moved per year.

9. Annual reports update - Bob Muth said the annual reports will be out by the end of February.
10. Colorado SWSI (Statewide Water Supply Initiative) summary - Melissa Trammell described the effort underway by CWCB. For all river basins, SWSI is developing a matrix of all water development projects under consideration and has projected water demand through 2030 to identify gaps between supply and demand. This will be used to determine how to use Colorado's water most efficiently. They've formed basin roundtables and are in round two of those basin meetings. Melissa noted that from what she's seen at this point, environmental concerns and recovery flows seem to be pretty low on the radar screen. Tom Pitts said he's participating in the study and providing information on critical habitat, flow recommendations, etc. The study was started about six months ago and is scheduled for completion in November 2004 (extension likely). Colorado has historically been very averse to anything resembling a “water plan,” so this represents a step forward in that regard. Bob Muth noted that Gerry Roehm and George Smith have been attending many of these meetings. >Gerry Roehm will keep the Committee informed.

Wednesday, February 11

11. Review of sediment monitoring scope of work (#85f) - George Smith said data will be collect data for: 1) validating flow recommendations for the Gunnison, Colorado, and Yampa rivers; and 2) starting to collect baseline information for the deferred connected backwaters project. The connected backwaters work would begin next year (after review and recommendations by the geomorphology peer review panel) and would look at how flow and sediment builds bars and how the bars are depleted as sediment decreases. Tom Pitts and Frank Pfeifer asked that the scope clearly state a Recovery Program final report as an end product at the end of three years (with a deadline of spring 2008). (If USGS also wants produce a Water-Resource Investigations report, they can do that, but the Program wants the Program report by spring of 2008.) USGS also will need to submit annual reports within the Program timeframe. Under end products, Tom Pitts asked for clarification on what's meant by “assist with management decisions on water and land management issues.” Gary Burton asked why these sites were selected; and George said it was to collect data to validate flow recommendations (since we decided it wasn't appropriate to collect data at sites where we aren't yet doing the habitat data collection).

Gary Burton suggested reviewing similar work by Topping, Reuben, and Melis in the lower basin. >Gary will send the reference to George and George will add it to the scope of work. >George Smith will make the requested modifications to the scope of work (including adding some discussion to the introduction of why we selected these sites at this time). George also will explain how these data will be linked to habitat in the future. The Biology Committee approved the scope with the foregoing revisions.

12. Recommendation for population estimate/monitoring workshop - Tom Czapla reviewed the outline for a population estimates workshop in July or August of this year. The goals of the workshop would be to review our existing populations estimates, assess the accuracy and precision of each estimate, and make recommendations to the Service on which point estimates are acceptable for tracking demographic criteria in the Recovery Goals. Bill Davis offered some questions/concerns to be considered in the workshop and suggested we may also want to involve someone like Anderson (CSU), Burnham or Pollock to help us look at the upper basin data and determine if we're getting what we need. The Committee agreed not to include lower basin folks at this workshop. Subsequent workshop(s) would involve lower basin folks. Several Committee members suggested the first two items on Bill's list should be addressed in this workshop, but the last two items might be better addressed in a follow-up workshop. Tom Czapla said our intent has always been to go to a more robust model, but he doesn't believe we have the information yet to do that (except perhaps for Colorado pikeminnow in the Colorado River). Tom Nesler asked if we want to hold the first workshop before inviting additional expertise; Tom Chart suggested Burnham is already familiar with some of the data the Program is collecting and would offer good expertise. Tom Czapla noted we might want to have the workshop in Ft. Collins to facilitate participation by folks like Burnham and Ryel. Regarding timing, Tom Chart and Gary Burton asked if the workshop could be held earlier (e.g., to provide input on possible shift in approach in Cataract Canyon). Tom Czapla and Melissa suggested early July might be a possibility. Dave Speas recommended also considering variation in capture possibility (size or age of fish, abiotic or seasonal effects). Tom Czapla agreed. >Tom will revise the outline and will talk to Kevin Bestgen to see if he would have a population estimate in time for a meeting April 6-7 (Tom also will check with other participants on this date).
13. Capital Projects - Brent Uilenberg distributed a February 11 version of the capital projects budget table. To balance the budget, this table "zeroes out" Hartland passage and screening, and does not include costs for screening Elkhead Reservoir. These items certainly can still be discussed, but we do have to stay within the cost ceiling. Melissa Trammell said she'd like the Biology Committee to have an opportunity to prioritize these items, especially the biological priority of enlarging Elkhead Reservoir (since the Committee has twice said they didn't support increasing base flows at the expense of taking flows off the peak). Melissa said that the National Park Service and others believe that some of the other alternatives for meeting the Yampa River flow recommendations might have been better than enlarging Elkhead (but they haven't yet seen the response to their comments in the final Yampa River Management Plan). Frank noted that what little flexibility remains is primarily in FY 06 and FY 07; Brent agreed, noting flexibility in FY 06 costs for hatchery facilities (ponds) and possibly Tusher Wash screening. Frank said everyone's bottom line concern is probably related to screening Elkhead. Brent

pointed out that if Colorado wants to maintain a viable sportfishery in Elkhead Reservoir, it's not without precedent to place the costs on the beneficiaries. Frank said he believes it's paramount to screen Elkhead if it's going to be managed for a warmwater sportfishery. Frank agreed that passage and screening of Hartland is probably the lower priority of the items on the capital projects list. Brent said that although Price-Stubb passage, Redlands screen and the Government Highline Screen aren't yet under contract, substantial resources have been invested in design and negotiations. Tom Pitts and Tom Nesler suggested that the Biology Committee needs to make a recommendation on: 1) whether or not Elkhead needs to be screened; and 2) if Hartland fish passage and screen are the lowest priority list of as-yet-uncommitted capital projects. Tom Pitts noted that the San Juan Recovery Program is way behind on getting their capital projects underway, but the legislation prevents shifting funds from one Program to the other. The Biology Committee would like to provide input (e.g., have a feedback loop in place) when the point is reached where certain capital projects have to be cut to meet the budget ceiling.

14. Approach to review/revision of *Ecological and physical processes during spring runoff and summer baseflows in the Colorado River* ("15-Mile Reach bug report") - Ray Tenney distributed a proposal for updating the current draft report with biological and physical data for 2002 and 2003. The Committee agreed that additional data will be incorporated and the report sent to peer/BC review by March 31 (the Program also will send the report to the geomorphology peer review panel at the same time). The authors will make a presentation on the report at the April 28-29 meeting. All peer review comments are due by April 31 and Biology Committee comments will be due May 15. The final draft will go to the Biology Committee by June 15 and the Committee will schedule it for review/approval at their next meeting (at least two weeks) after June 15. >Gerry Roehm will help coordinate this review process.
15. Elkhead escapement issues, screen design options, and Colorado's draft Elkhead lake management plan - Pat Nelson described potential escapement under the various screening options (see document posted to the listserver on January 27, 2004). Frank Pfeifer cautioned that this analysis doesn't identify the standing crop nonnative fish the reservoir and translocating additional fish from the Yampa River into Elkhead Reservoir could increase the standing crop and the escapement. Ray said their 404 application doesn't currently include warmwater fish management and screening, but it could still be added. The Committee discussed screening options, the feasibility of complete screening given the inevitability of trash getting in the net (and the expense and risk of removing the trash), what nonnative fish species are of greatest concern, the expected continued presence of warmwater fishes in Elkhead Reservoir, the value of the sportfishery in Elkhead, and options for minimizing spills. Frank Pfeifer suggested that if we agree that escapement is a serious problem, then the best way to minimize escapement is to screen the 450 cfs from the outlets and the spillway for a total of \$1.33M. Tom Nesler suggested we could endorse screening the 450 cfs now, and leave the spillway net as an option. Kevin Christopherson said he thinks it's a cost/benefit decision (is it better to spend money preventing escapement or controlling it once it has occurred?). Frank said Colorado's draft lake management plan needs to identify whether their management would be the same whether or not the reservoir is completely screened. >Tom Nesler will determine that and send out a revised draft lake management plan by February 20.

Kevin Christopherson asked why the plan calls for stocking largemouth bass and Tom Nesler said they will monitor densities, but want to be able to stock fish, if needed. Committee members will provide comments on the current draft(s) by February 18. >Pat Nelson will post Bill Miller's annual report by February 13. By that same date, Bill Miller will post a table of escapement by week by species (with average daily discharge) and also post the 2002 update to his 1996 report (and hopefully the 1996 report, also). >Tom Nesler will provide Pat Martinez' smallmouth bass presentation by February 13. The Biology Committee will have a conference call on February 27 from 9 a.m. to 11 a.m. to decide what screening they recommend for an enlarged Elkhead Reservoir. The Service and the States will consider this recommendation in finalizing the lake management plan and in determining the option to minimize fish escapement from Elkhead Reservoir (which will serve as the action for the PBO).

16. Review of Program Director's recommended RIPRAP revisions and assessment -

RIPRAP REVISIONS - Major changes are shown below, minor and typographical changes were noted on the table, but not recorded in the meeting summary.

Add item(s) for sediment monitoring work (either in the General plan or in the river-specific plans).

General Recovery Program Support Action Plan

IVE2 add "and revise augmentation plans as needed."

VA2 Add new item to "Evaluate population estimates" (ongoing, every year).

Green River Mainstem Action Plan

No changes.

Yampa and Little Snake River Action Plan

No changes.

Duchesne River Action Plan

ID1 Status for coordinated reservoirs report is "late."

White River Action Plan

IB2 The White River flows report item should say that the initial report is complete (Modde 2004), but explain report limitations. Determine when public meeting and policy can be accomplished.

Colorado River Mainstem Action Plan

No changes.

Gunnison River Action Plan

- 1A Check dates for Gunnison River biological opinion and related items (probably should be moved out three years, not just one year).
- IB1 Yes, Colorado's review of scientific basis of flow recommendations is complete now that the report has been finalized.
- IIB1f Need to show how flows below Redlands Diversion will be delivered after FY 05.
- IIB2g2-3 Hartland Diversion screen should be "to be determined." Program Director's office should check to see if the design has already been done.

RIPRAP ASSESSMENT

The check and X symbols didn't translate well. >Angela Kantola will try different symbols or a conversion format that will maintain the checks and x's in both WordPerfect and Word.

General Recovery Program Support Action Plan

- ID1 Note that White and San Rafael rivers plans/opinions are scheduled to be done in outyears.

Green River Mainstem Action Plan

- IIA3c Numbers of razorback sucker captured in the Green River that are from those originally stocked into floodplain wetlands aren't being determined.
- IIIA4c Low flows (not public opposition) affected implementation of channel catfish study design.
- IVA1c Improve explanation. Identify the facility that stocked fish came from. Wahweap didn't meet the 8" bonytail requirement. Kevin Christopherson commented that additional growout capacity may be needed. The Committee asked >the Program Director's office to determine what needs to be done to achieve the numbers and sizes in the stocking plan next year into the future.

Yampa and Little Snake River Action Plan

- IIIA1b1&1d Several Committee members questioned whether northern pike and smallmouth bass removal should be characterized only as an accomplishment, since not very many of these fish were removed from the system, and work was delayed due to delays in issuing permits. Both of these items will be changed to show both a check and an X.
- IIIA1c1 The Program Director's office will check Fuller's report to see if catfish populations were reduced in Yampa Canyon (or if just the average length of catfish was reduced).

White River Action Plan

- IB2 Change to note White River report accepted, but additional work would be required to develop a flow recommendation.
- IB2a&b Public meeting and policy likely will need to be moved out beyond 2004-2005.

Colorado River Action Plan

- IVA3&4b Stocking plan goals not met, so these should have X's.

Show accomplishment of Black Rocks humpback chub population estimate (if this wasn't included in the 2002 RIPRAP assessment).

Gunnison River Action Plan

- IVA2b Stocking plan goal not met, so these should have X's.

17. Next meeting - Conference call on February 27 from 9 a.m. to 11 a.m. to make a recommendation on Elkhead Reservoir screening. Meeting April 28-29 in Grand Junction, starting at 10:00 a.m. on April 28 and adjourning by 3:00 p.m. on April 29. Agenda items will include: review of the Pat Martinez report on review of Colorado's nonnative fish stocking regulations, review of the Hawkins pike removal report, presentation of *Ecological and physical processes during spring runoff and summer baseflows in the Colorado River* ("15-Mile Reach bug report") (final not due to BC until June 15, however), discussion of criteria for upper Yampa nonnative fish management, update on SWSI, (Statewide Water Supply Initiative), and a follow-up discussion on the population estimate workshop (assuming the workshop is held April 6-7).

3:00 p.m Adjourn

ASSIGNMENTS

1. Tim Modde will post Bill Davis' comments on Kitcheyan's report to the Committee.
(Posted 2/11/04 by Bill Davis.)
2. Angela Kantola will post the revised summary January 29, 2004, conference call summary to the listserv.
3. The Program Director's office will revise the reports status list (e.g., noting late reports and removing projects from the list that now won't require final reports).
4. Pat Martinez will provide a revised scope of work reflecting the additional \$25,000 for the isotope work (#C-18/19) to Pat Nelson.
5. Tim Modde will revise and finalize the White River report.
6. Kevin Christopherson will revise and finalize the evaluation of survival and growth of razorback sucker stocked into middle Green River depressions report.
7. Anita Martinez will revise and finalize the pond reclamation report.
8. Tom Nesler will re-draft the upper Yampa River nonnative fish management criteria and send it back out to the Committee.
9. Gerry Roehm will keep the Committee informed about Colorado's SWSI (Statewide Water Supply Initiative).
10. Gary Burton will send the Topping, Reuben, and Melis reference(s) to George Smith.
11. George Smith will make the requested modifications to the sediment scope of work.
12. Gerry Roehm will help coordinate *Ecological and physical processes during spring runoff and summer baseflows in the Colorado River* ("15-Mile Reach bug report") through the review process.
13. Tom Czaplá will revise the population estimate workshop outline and will talk to Kevin Bestgen to see if he would have a population estimate in time for a meeting April 6-7 (Tom also will check with other participants on this date).
14. Tom Nesler will determine if Colorado's management of Elkhead Reservoir would be the same whether or not the reservoir is completely screened and send out a revised draft lake management plan by February 20.
15. Committee members will provide any comments on the current draft(s) Elkhead Reservoir management plan by February 18.

16. Pat Nelson will post Bill Miller's annual report on nonnative fish escapement from Elkhead by February 13.
17. Also by February 13, Bill Miller will post a table of escapement of nonnative fish from Elkhead Reservoir by week by species (with average daily discharge) and also the 2002 update to his 1996 report (and hopefully the 1996 report, also).
18. Tom Nesler will provide Pat Martinez' smallmouth bass presentation to the Committee by February 13.
19. Angela Kantola will try different symbols or a conversion format that will maintain the checks and x's in the RIPRAP assessment document in both WordPerfect and Word.
20. The Program Director's office will determine what needs to be done to achieve the numbers and sizes in the stocking plan next year into the future.