

Revised August 18, 2008

Biology Committee Meeting Summary  
Grand Junction Holiday Inn, June 13, 2008

Biology Committee: Dave Irving, Shane Capron, Melissa Trammell, Kevin Gelwicks and Pete Cavalli (replacing Kevin), Krissy Wilson, Dave Speas, , Tom Pitts, Tom Nesler and Bill Davis (via phone, items 9-14). The environmental groups were not represented at the meeting.

Other participants: Tom Chart, Sherm Hebein, Angela Kantola, Cassie Mellon, Koreen Zelasko, Kevin Bestgen, Travis Francis, and Bob Muth.

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

*CONVENE 8:00 a.m.*

1. Review/modify agenda – The agenda was modified as it appears below.
2. Committee chair – The Committee agreed to put chairmanship back on a calendar year basis. Krissy will serve through the end of December 2008.
3. Approve Biology Committee web conference meeting summary for April 28-29, 2008 – The summary was approved as written.
4. Review assignments from April meeting – See assignments list, below.
5. Review reports due list – The Committee reviewed and edited the reports list; >Angela Kantola will post a revised list to the fws-coloriver listserver. >The PD’s office needs to schedule a humpback chub population monitoring workshop.
6. Nonnative Fish Subcommittee updates
  - a. Prioritization of recommendations from previous workshops – These recommendations have now been prioritized by the Nonnative Fish Subcommittee. Table 1 contains more of the detail and outlines something of a phased approach (reflecting both time and intensity); Table 2 is a distilled prioritization of the “major heading” recommendations. Tom Pitts suggested this now be worked into an implementation plan for the RIPRAP. Angela Kantola added that these recommendations also need to go to the I&E Committee, then input from both committees will go to the Management Committee. The Biology Committee concurred that the I&E-related items need to be handled by the I&E Committee. The Committee recommended adding an item to the list: “Increase communication between I&E and BC committees.” On a related note, >The Program Director’s office and CDOW will send letters of thanks to Sherriff Tim Jantz for the use of the Craig Justice Center Ponds for nonnative fish translocation. The Committee agreed to first review list of recommendations (ignoring priority and timing for the moment). Tom Nesler noted that the words “prevent” and “eliminate” are absolutes that may reflect more than we can do (e.g. “eliminate” pike from Catamount...). Perhaps

“reduce” is more appropriate. The Committee annotated Table 1 (attached). Tom Pitts asked if it would help for UDWR and CDOW to have a staff person dedicated specifically to nonnative fish management. Krissy said this might fit within their category of invasive species management. Sherm Hebein said CDOW also will have a new staff person working on invasive species as of July 1. When Tom Nesler’s position is filled, that person also would spend significant time on nonnative fish management issues (Nesler’s position is expected to be advertised within Colorado in the next month). >Tom Chart will revise the recommendations based on the Committee’s comments and get it back to the Biology Committee in advance of the August meeting. Ideas for how to prioritize and phase the activities are welcome.

- b. Data synthesis: update on first level reports and plans for second level synthesis – Discussed under assignments and the reports due list.
  - c. Demo project to remove nonnative fishes from middle Green River nursery backwaters – Questions or comments should be sent to Bob Muth and Tom Czapl. This work is tentatively planned for the week of July 14.
7. Results of hatchery-reared razorback sucker survival assessment – Koreen Zelasko presented the results of her comprehensive assessment of the assumptions and demographic parameters for razorback sucker in the Program’s integrated stocking plan (report will be submitted to the PD’s office by the end of August). Robust capture estimates are possible due to increased sampling and numerous recapture events over the last several years. Koreen compiled and proofed data from the Program’s capture database maintained by Chuck McAda’s office, grouped the data by seven river reaches, and looked at length at stocking, stocking year, stocking season, and stocking reach. The database consisted of >153,000 individual stocked razorbacks and >2,800 recapture events. The stocking plan assumes survival rates of 0.50 for 2-year-old fish, 0.60 for 3-year-old fish, and 0.70 for adults. Koreen found survival of any fish over any interval after year one to be .75, but only .06 for an average-sized (260 mm TL) stocked fish for the first interval (where we had assumed 0.50 - 0.60). Clearly, the first interval post-stocking has a major influence on survival. Summer-stocked fish had the lowest survival, even though on average these fish were the largest at stocking. Otherwise, the survival rates for each season increased with size, especially at 400 mm. The integrated stocking plan calls for a minimum 300 mm at stocking, for which Koreen found <0.14 survival rate averaging across stocking seasons. (The mean length at stocking for all the fish in the database was 260mm.) The cost-benefit of stocking fewer, larger fish vs. more, smaller fish should be determined (and should be fairly simple to accomplish). Overall, capture probabilities were low, but could be increased by stocking larger fish and, likely, by a consistent capture efforts targeted at razorback suckers. Questions raised by the Committee included:
- When did we reach the stage where we think we began stocking razorbacks in the best condition possible?
  - Is there a curve-break that indicates optimal stocking size?
  - Can we analyze survival of fish raised in floodplains and/or ponds vs. in the hatchery? (More of this type of data should be available in the future.)

The Committee thanked Koreen for her excellent presentation and looks forward to her final

report.

8. UDWR “Stop Poaching” proposal (to add Program funds to reward for information leading to arrest and conviction of those illegally-stocking nonnative fishes (also to be reviewed by the I&E Committee) – Krissy Wilson said this proposal relates to the discovery of illegally-stocked walleye in Red Fleet Reservoir in Utah. A press release was issued advertising a \$2,500 reward (from Utah Bass Foundation, Rocky Mountain Anglers and UDWR); Utah would like the Program to add up to \$10,000 to that. The Committee discussed how the reward would be structured (amount of each reward, when funds would be transferred, etc.). Should rewards be *up to* \$10,000? What would the Program be asked to provide if there were more than one conviction in a single year? We will need to carefully define what is meant by “arrest and conviction” (e.g., what happens if the perpetrator pleads guilty to a lesser conviction, etc.). The Committee supported the concept, but realized that more review and discussion is needed, including with agency staff with more experience with Operation Game Thief. The rewards definitely need to be commensurate with fines. This proposal should be discussed at the next Western Fish and Wildlife Agencies meeting and at the Colorado Fish and Wildlife Council. The Committee generally felt the States should take the lead on this, and that the Recovery Program should not be highlighted from a public relations standpoint. The Colorado-Wyoming AFS chapter just signed a resolution against illicit introductions, so this kind of proposal fits well within those goals. While the States review and discuss this idea further, it would be helpful if the Management Committee would consider how the Program might provide some funding in support of the State’s efforts for rewards like this.
9. Floodplain updates – Tom outlined results from the Stirrup. The equipment was in place before runoff, but there were enough technical difficulties that it was only fully operational part of the time (less than a week out of three). However, important lessons were learned for future operations. We did learn that these areas are important to adult, as well as larval fish. One pikeminnow detected moved over 200 miles upstream. We may not have gotten any over-winter razorback survival, but it was a very hard winter in the Uintah Basin. Dave Speas said he had hoped for better results during these very critical three weeks. Krissy noted we did go with the less expensive array, and that the winter conditions prevented getting equipment installed earlier. At Thunder Ranch, Tom Chart said repairs at the dike seem to have held. At Baeser Bend, Dave Irving said they began filling in early May and stocked 40,000 larval razorbacks there the first week in June. Baeser has ~5’ of water and didn’t overtop, so things are going well. Another 80,000 larval razorback in ponds at Ouray might be stocked in Baeser later this year. Excess bonytail produced from the Wahweap ponds also will be stocked in Baeser. The \$9-10K pump cost turned out to only get the pump onsite (doesn’t cover fuel, maintenance, forklift for placing the pump, etc.), so this will be important for future reference.
10. Flows Update – Tom Chart reviewed spring hydrographs, peaks, and the dates aerial photography and videography were captured on the Colorado, Gunnison, Yampa and Green rivers (attached). Aerial photography work was done to capture the very high flows this year. Chuck McAda has expressed interest in capturing base flows on the Gunnison, also. The Gunnison high flow photography also meshed well with the USGS sediment work. Coordinated reservoir operations were able to extend the shoulder of the descending limb of the peak on the Colorado somewhat. Kevin Bestgen said they’ve been working through the

data collected to understand smallmouth bass spawning on the Green and Yampa rivers, and should have some information soon regarding when bass spawn and how they might be disadvantaged with flows and temperature.

11. UDWR report of age-1 bonytail and razorback captures – Paul Badame reported via e-mail on lower Green river (RM 0 – 120) sampling (three passes, April 22 - May 27, flows 8,000 - 20,000, temperatures 11 -19° C): overall numbers of pikeminnow were lower in all size classes compared to the past two years; numbers of razorbacks captured were the highest in the last three years. During pass two (May 7), a likely spawning bar where flannelmouth and razorback suckers have been observed in spawning condition in the past two years was sampled: approximately 10-15 ripe pairs of razorback suckers were encountered, but no flannelmouth were observed. Probable confirmation of past spawning success for razorback in the lower Green river was captured this year in the form of 3 age 1+ razorback (119-120mm). Bonytail captures continue to be low as seen over the past two years of sampling, however, two of the six captured this year were >400mm and the largest (450mm) was untagged and unmarked. The smallest individual captured was 96mm. Although positive field identification is not possible for this fish, in Paul’s opinion by observation, it was not a roundtail or humpback (ray count 11 over 11 [dorsal / anal], color very white to silver, small nuchal hump present, and caudal peduncle already very distinctively long and narrow relative to the rest of the body). >Krissy will ask Paul if he got photos of the bonytail. Kevin emphasized that this is incredibly important to document.
12. Draft tracking mechanism for “anecdotal” (pre-report) fish capture information – Angela Kantola showed the Committee a draft spreadsheet which the PD’s office plans to use to record annual fish capture data like Paul Badame’s report (above). The Committee supported this idea. >The Program Director’s idea will polish this up and recommend how it be maintained and distributed.
13. Glen Canyon NPS Iceberg Canyon proposal – Krissy Wilson said Quent forwarded this proposal which requests excess bonytail from Wahweap in 2009 to reintroduce to Iceberg Canyon on Lake Powell. However, bonytail produced in the ponds were not considered excess to the Recovery Program last year (they were stocked at the Above Brennan site). We may be interested in stocking some bonytail at Baeser this year, but we don’t yet know what our plans would be in 2009. >Tom Czaplá will determine how many fish the Program may need and talk to Quent about the number of fish he expects to have and how many are needed at Iceberg Canyon (probably hundreds to a thousand). The Committee is willing to provide fish if they are excess to our needs in the upper basin. Bill Davis said it doesn’t seem like much would be gained if Iceberg Canyon was inundated by Lake Powell, so there should be a contingency plan for salvaging the fish if inundation is expected. Melissa said she thinks the goal is to provide a semi-natural situation, not a production facility.
14. Schedule next meeting – 1 p.m. on August 18 through noon on August 19 in Salt Lake City; >Krissy will arrange a meeting room. Agenda items will include: Review of reports #125?, #C-6-RZ, 143?; FY 09 work plan changes; White River and Price River flow recommendation reports update; nonnative fish subcommittee recommendations; next Committee chair. Tom Nesler mentioned that CDOW was able to provide all of Rick Anderson’s data to Rich Valdez.

*ADJOURN 1:45 p.m.*

## Attachment 1

### **Assignments carried over or modified from previous meetings:**

1. The Program Director's office will provide the Biology Committee with a summary of what the White River flow recommendations report said and what the shortcomings were 4/23: *This will be provided to the Biology Committee in advance of the July 16 meeting. 7/16: Deferred to next meeting. 10/31: Tom Chart said the Program Director's office will be working on this and the Price River items in the coming months. 4/28: Dave Irving has been working on this report, the next step is to discuss it with the PD's office. 6/13: PD's office and Dave Irving meeting week of to work on this and the Price R. report July 8-10; recommendations expected to go to BC by end of August.*
2. Craig Walker and George Smith will work together to finalize the Price River report using the table of exceedances that George provided. Craig will provide a report to George that discusses using surrogate streams, and if it seems appropriate, George will add that analysis. 7/16: *George said he didn't receive anything other than reference material on this and Craig has now taken another job within UDWR. George said he believes the work he did looking at the San Rafael is the most appropriate approach; >George will add his San Rafael analysis into the Price Report. 10/31: George has been working on this, putting technical information in appendices, and adding San Rafael hydrology. The Program Director's office will complete this in conjunction with White River report follow-up. 1/8: Pending. 4/28: Still pending. 6/13: See #1, above.*
3. Bob Muth will call Dave Campbell regarding options for compatibility between databases since the SJRIP is moving their database to FWS. 7/16: *Bob Muth said Dave agrees this is a good idea and will be getting back to Bob on how to proceed. 1/17, 4/15, 6/13: In progress.*
4. Shane Capron will get a firm commitment from Clayton Palmer and Kirk LaGory re: Western's contribution for additional report costs for this project 85f (sediment monitoring) in FY 2009. 10/31: *Program Director's office has verbal commitment; will seek firm commitment. 1/17: Bob Muth will check with George Smith re: his conversation with Clayton Palmer. 1/29: Program Director's office e-mailed Clayton, et al requesting confirmation; 2/15: Shane said we should have confirmation within a couple of weeks. 4/14: Western has indicated they are committed to providing \$32,600 in FY 09; e-mail confirmation requested.*
5. Tom Czapla will work to get the questions regarding what hatchery repairs are needed at Grand Valley resolved as soon as possible. 10/31: *Grand Junction working to get cost estimates; \$44.4K funds placeheld. 1/17: Chuck said that a larger de-humidifier would be too costly; their current plan is to repair the walls so they can withstand the humidity. The Biology Committee expressed interest in a full solution. >Chuck will provide the full estimate to Tom Czapla. >Bob Muth will discuss the possibility of using capital funds with Brent Uilenberg. 2/15: Reclamation & FWS working on getting this contracted; dehumidifier will be installed first, then walls will be repaired. 3/31: Reclamation waiting for report from an HVAC mechanical engineer on what's needed for dehumidification. Due to oil and gas activity in the Valley, they've had difficulty getting anyone to work on this relatively small project. 6/13: Contractor visited site June 5; appraisal study pending.*

6. Tom Nesler will see if CDOW can provide a report on Billy Atkinson's work on pike in Catamount and the river below. Update provided at nonnative fish workshop; workshop participants recommended CDOW provide some kind of management plan. *1/17: Billy will provide a Catamount pike removal document/strategy by the end of February. 4/15: Nesler will provide update at BC. 4/28: Tom has reminded Billy that this is overdue and will try to get it to the BC as soon as possible. 6/13: Nesler just received the draft today and will provide it to the BC by the end of July.*
7. The Program Director's office will work with CDOW and Sam Finney on the potential for designing a permeable, hydrologically-stable (gravel?) berm to prevent northern pike access to the oxbow slough, and then clean it out once and for all. *2/15, 4/15: Pending. 4/28: Chart has discussed with Nesler and with the Partners for Wildlife Program, also. Will focus on this summer/fall. 6/13: CDOW will be contacting the landowner regarding access, if they are amenable, then CDOW and Program will determine a feasible solution (before the end of spring runoff).*
8. Tom Nesler would like to know if there are enough adult native fish remaining in the Yampa River to detect a native fish response. He will discuss ways of determining this with Kevin Bestgen and Tom Chart. *4/15, 4/28: Nesler, Bestgen and Chart will review existing information and consider fisheries investigations in Yampa tributaries (to determine if there is a seed source of native fishes). Once Chart and Nesler and Bestgen determine the scope of effective monitoring, CDOW and the Program can discuss whether this would be funded by CDOW outside by the Program or if the Program would also provide funding. 6/13: Pending.*
9. Tom Chart will review the latest draft of the nonnative fish stocking procedures and get comments back to the States no later than February 15, then Krissy, Kevin, Tom, and the Service will submit it for agency review (one month review time). *2/15: Dates need to be modified. 4/14: Group discussing a few more revisions before seeking agency approval. 4/28: Krissy said a bill passed in Utah's latest legislative session (the Aquaculture Revitalization Act) took away Utah's ability to issue a COR to anyone with a private pond; Krissy will provide language incorporating that within two weeks. Kevin Gelwicks should have comments back from Wyoming by early June, but doesn't expect anything substantive, and will try to expedite their comments. Tom Chart said Tom Nesler realized we may have missed stipulations that would apply to private pond owners within critical habitat outside the 100-year floodplain. Krissy will review that; she thought that a private pond outside the 100-year floodplain would still be covered if it had the potential to connect. Melissa suggested including language regarding extending and revising the document; Tom Nesler said we're on a 5-year revision schedule. 6/13: A subgroup met yesterday, Wyoming has reviewed and provided comments, and Utah also has reviewed it. Further streamlining is underway,*
10. Krissy Wilson will send Rich Valdez the information that UDWR worked on some years ago which is similar to what Rich has been entering into the research framework database. *4/28: Krissy has located the information and will review and provide it to Rich. 6/13: Krissy said the files didn't have the information she thought they did; however, she found a file of references she will send to the PD's office, and she'll also check some additional files.*

11. Tom Chart will follow up with Tim Modde and Tom Nesler on additional sloughs that may need attention under #98b, and the best methods to use (gill nets instead of trammel nets, etc). Tom also will ask Sam Finney about the area just downstream of Carpenter Ranch on river right. *4/15: Tim Modde and Sherm Hebein have coordinated on appropriate gear type; Finney will review data to determine if sites in addition to RM 151 oxbow need to be sampled. 6/13: Tom Chart said he thinks every site possible being sampled; Tom Nesler suggested looking at the data after this year to determine if there are other sites that need attention. This can come off the list subsequent to this meeting summary.*
12. Researchers are to submit all their nonnative fish data to Chuck McAda by April 1 (the Program Director's office will sent out an e-mail notification on this). *4/28: Tom Chart said Chuck had only received data from Tim Modde ten days ago. Trina said they're making sure their data is in the right format. Tom Chart said that at a minimum, he would like the data sent to Chuck even if it's in the old format. >Tom Nesler will check on Lori's data; >Krissy will check on Moab's data. All the data on captured nonnative fish should be submitted, not just data on tagged fish; >Chuck will make sure the correct data are submitted and work with principal investigators if anything is missing. 6/13: Krissy said Utah has submitted their data. Tom Chart said Tim Modde submitted Vernal's data; Tom will get with Chuck to determine what data are still needed and e-mail the PI's. Tom Nesler will check on Lori's data. Sherm suggested cross-checking with CDOW's data system to be sure all data is in both places (Chuck's database and CDOW's).*
13. The Program Director's office will modify Rich Valdez' technical assistance scope of work as needed to accommodate the initial work on the second-level nonnative fish management synthesis. *4/14, 6/13: Pending.*
14. Tom Nesler will check on the status of revision of the Yampa River Aquatic Management Plan. *4/14: Colorado's new completion date is May 1, 2009. In the interim, CDOW will need to produce an Upper Yampa River strategy to assist the Program in our prioritization of 2009 field activities. This strategy should ultimately be incorporated into the Aquatic Wildlife Management Plan for the Yampa River Basin. 4/28: Tom Nesler said they don't plan to provide a formal strategy, but will describe what they (primarily Billy Atkinson) are doing down through Steamboat and with regard to isolating sloughs in Sam Finney's reach. See #6, above.*
15. Krissy will send UDWR's remaining comments on the project #110 report to Dave Irving. *6/13: Done; report still being finalized.*
16. Tom Chart will work with UDWR, Brett Johnson (who originally suggested using weirs), and the Nonnative Fish Subcommittee to further discuss the Green River weir proposal from a broad, programmatic approach, and try to learn more about potential answers to the questions raised today. *6/13: Pending.*
17. Dave Speas will send the CSU floodplain proposal out to everyone (*sent to Angela Kantola*) and the Program will put it on the website (*pending*).

## **New Assignments:**

1. Angela Kantola will post a revised reports due list to the fws-coloriver listserver.
2. The PD's office needs to schedule a humpback chub population monitoring workshop.
3. The Program Director's office and CDOW will send letters of thanks to Sherriff Tim Jantz for the use of the Craig Justice Center Ponds for nonnative fish translocation.
4. Tom Chart will revise the nonnative fish workshop recommendations based on the Committee's comments and get it back to the Biology Committee for review in advance of the next meeting.
5. Krissy Wilson will find out if Paul Badame got photos of the 96mm bonytail he captured on the lower Green River.
6. The Program Director's idea will polish the draft spreadsheet for tracking annual "anecdotal" fish capture information and recommend how it be maintained and distributed.
7. Tom Czaplá will determine how many bonytail the Program may need from Wahweap and talk to Quent about the number of fish he expects to have and how many are needed at Iceberg Canyon in 2009 (probably hundreds to a thousand).
8. Krissy Wilson will arrange a room for the August 18-19 meeting in Salt Lake City.