

February 19, 2008

Biology Committee Meeting Draft Summary
February 15, 2008
[Country Inn & Suites](#), 4343 Airport Way, Denver, Colorado

Biology Committee: Chuck McAda for Dave Irving, Shane Capron, Melissa Trammell, Kevin Gelwicks, Krissy Wilson, Dave Speas, and Tom Nesler. The water users, environmental groups and CREDA were not represented at the meeting.

Other participants: Tom Chart, Angela Kantola, Tim Modde, Cassie Mellon, Bob Muth, Tom Czapla, Rich Valdez., Brett Johnson, Kevin Bestgen, Via phone: Trina Hedrick, Leisa Monroe, and Mark Fuller.

Assignments are indicated by “>” and at the end of the document. (Note: under the review of the RIPRAP assessment, the “>” character before a RIPRAP item number indicates items likely to result in a measurable population response, a measurable improvement in habitat for the fishes, legal protection of flows needed for recovery, or a reduction in the threat of immediate extinction).

CONVENE 8:00 a.m.

1. Review/modify agenda – The agenda was modified as it appears below.
2. Approve Biology Committee meeting summary for January 17, 2008 – The meeting summary was approved with two revisions: a) change “Dave Speas” to “Kevin Bestgen” under item 5a at the top of page 3; and b) delete “eliminating the water quality monitoring” from item #11. >Angela Kantola will post the revised summary to the listserver (*done*).
3. Review assignments from January meeting – Annotated assignments are shown at the end of this summary (completed assignments were deleted).
4. Review reports due list – The Committee reviewed this list and made revisions. >Angela Kantola will post the revised list to the listserver. Rich Valdez gave a brief presentation on the research framework project. Charts and maps have been developed that show species use by reach and life stage; these will eventually have a GIS link. They’ve currently included information from ~130-140 reports from the last 10 years, with the intent that the Program would use this system to catalog the entire library of information on the endangered fish in the upper basin. The goal is to develop a GIS-linked database that would be updated annually by the Program Director’s staff entering keywords from all final reports. Rich said they plan to wrap up the database by July or August and he will have a draft report completing Phase I to the Committee by mid-August. Rich said he still needs to go through the reports and identify the keywords. >Krissy Wilson will send Rich similar information that UDWR worked on some years ago. Krissy Wilson noted that the due dates for project #138 need to be corrected (to 2008).

5. Update on status of overdue synthesis reports (#98a, Martin and #125 Hawkins) – Tom Chart said the Management Committee directed the Program Director’s office to draft a letter for John Shields to send to the Larval Fish Laboratory (report #125) and the Colorado Division of Wildlife (report #98a) alerting them to the seriousness of continued delays and potential consequences if these two reports are not completed soon. Bob Muth said he expects John will send that letter by next week; it requests the report by the end of February or the issue will be raised to the Implementation Committee. Both Tom Nesler and Kevin Bestgen said they believed the deadline will be met.
6. Recommended revisions for FY 08 nonnative fish work – Tom Chart reviewed changes:

Proj #	Proj Name	*Costs in 08 SOW	Δ \$\$	Explanation
98a	CDOW Yampa	\$112,587	\$134,457 (\$21,870 increase)	Increases to cover temp costs, motels, add 3 passes in Juniper and Upper Maybell; add smb removal in these reaches as well (OK for RM 90-80; still undecided for 100-90)
98b		\$149,800	0	Increased effort in Sam’s backwater
115	Lodore	\$84,400	0	No changes
123a	Echo – Split Mtn.	\$181,087	0	Enough passes already; will do 2 mark passes; double tagging
123b	Uintah Basin	\$137,312	0	Propose 2+10 passes; budgeted for 10, but they’re OK; double tagging
125	Mid Yampa	\$215,980	\$222,900 (\$6920 inc.)	Add 2 passes at Lilly; no change in Little Yampa Canyon
126a	Colorado	\$151,424	0	Get up to 4 add’l. passes from CPM pop est.
126b	Co Riv assist	\$12,007	0	Colorado was going to try to cover costs of moving LMB
140	Yampa native	\$56,656	\$75656 (\$19,000 inc.)	Push work into Lilly park; restore full year funding
new	Cross Mtn	0	\$14,669	3 trips; 3 miles each
new	Ute Tribe		\$36,370	2 Deso trips + 1 Duchesne; \$10K in-kind from Ute Tribe; total \$46,370
* as posted on web				
Instream Flow				
124	Duchesne riffles	2597 (2007 costs)		No new scope other than new nnf above?

Melissa Trammell asked if the permit for #98b will specify that northern pike will not be translocated into the Yampa SWA while there's still a threat of connection to the river. >Tom Nesler will discuss this within CDOW and let the Committee and the PI's know where to translocate fish. >Tom Chart will follow up with Tim Modde and Tom Nesler on additional sloughs that may need attention under #98b, and the best methods (gill nets instead of trammel nets, etc). Tom also will ask Sam Finney about the area just downstream of Carpenter Ranch on river right. Tom Chart said the Nonnative Fish Subcommittee supported these changes; the Biology Committee concurred, as well.

7. Review for final approval of Upper Yampa River synthesis report (98b) and middle Green River northern pike synthesis report (109).

109: Trina said they were able to incorporate most of the comments; some information changed as a result of reviewing the data to address comments, but the trends remain the same. Melissa noted that the middle paragraph of page 23 discusses a decrease in rates; clarify to indicate that that these projects are conducted at different times of the year, so it's more likely an issue of timing. With regard to the recommendation to focus more on electrofishing and trammel netting for northern pike, it seems that fyke nets actually caught the most fish. Trina will re-think this (perhaps better explaining the rationale for emphasis on electrofishing and trammel netting). Melissa recommended deleting everything after the first sentence in the first recommendation and making specific recommendations (gear, time, etc.) for early spring removal efforts. Dave Speas noted that two of the reviewers were interested in learning more about capture of other nonnative fishes, which has been removed. Melissa replied that was misleading because the data weren't recorded every year. Dave asked about how one reviewer's question on northern pike captures and hydrology was addressed. Trina said she didn't include the data back to the 90's because it would be misleading. Kevin Bestgen agreed. The Committee approved the report with the foregoing revisions. >Trina will revise and finalize the report.

98b: Tom Nesler said he was surprised at the inclusion of Elkhead fish escapement in the study site section; however if this red letter section is moved to only be part of the discussion, it's acceptable. The use of the term "drastic" on line 404 is inappropriate, however, and should be changed. Tom noted that the sixth point likely cites speculation by Hawkins. Tom said he also was surprised at Melissa's persistence regarding what this report says about tagged fish and their origin. Krissy noted that item #3 needs more explanation. The term "drastic" in item #4 needs to be changed. Melissa clarified that her comments also have focused on making sure Sam supported his recommendations with the data (and offered Sam suggestions showing how/where the data supported the recommendations). Melissa added that in all three sets of her comments, she's recommended bulleted conclusion statements (which is Program format); but Sam has resisted. Tom Chart agreed bulleted conclusions need to be made. Tim Modde will discuss this with Sam. Krissy asked for more explanation on item #5, also. Tim suggested that since the next step with this report is the second-level synthesis, perhaps we should just be sure we have the information needed for that and go ahead and finalize these reports. If they're not going to be better explained, then Krissy recommended taking out #3, 5, and 6 (on pages 2-3). Tom Chart noted some of this explanation is in Sam's memo to Pat Nelson. The Committee maintained that the explanations need to be

in the report. Krissy noted that some of the explanations in the memo aren't particularly strong (e.g., weak confidence intervals, etc.). >The Committee asked Sam Finney to revise the report using track changes for the Committee's re-consideration. Tom Nesler noted that he doesn't necessarily support the emphasis recommendation #4 places on mechanical removal (Tom believes the current efforts to reduce and control pike at the source, etc. are a better approach), but he will leave that to Sam's discretion.

8. Discussion of the Yampa River nonnative fish management strategy – Tom Chart said his hope is to get Biology Committee approval today so it can be sent to the Management Committee for their consideration. Rich summarized changes he made to the previous draft: 1) provided better definition to each of the actions under the six elements (reduced from seven); 2) numerous textual (versus substantive) changes; 3) changed the language that suggested the I&E program needs to focus more broadly to develop angler support to recommendations to target angler groups more narrowly; 4) under early detection, identified need for Program Director to establish protocol to facilitate transfer of information regarding discoveries of new nonnative species in the system; 5) to information and data management, added an action to develop a comprehensive nonnative fish management database (which Chuck McAda has already begun); 6) added an action c3 under Prevention, to identify sources of nonnative fish; 7) under R&D, added more emphasis on identifying criteria for native and endangered fish responses; 8) added language to look at exploitation models and use those in evaluation; and 9) added a timeframe through 2013 showing all the elements and actions. Rich said he thinks this document is more than a formality responding to a directive, and that there was much learned in the process of developing it. Rich emphasized the importance of keeping in mind the uncertainties, risks, and contingencies: 1) invasion by new species or sudden expansion of existing species; 2) effect of mechanical removal on population viability; 3) time required to control problematic nonnative fish; 4) compensatory response by target species; 5) response by native and endangered fishes; 6) minimize source populations; 7) support from anglers; 8) effect of other nonnative fish; 9) time at which to stop removal or reallocate effort. Krissy suggested including red shiner in the list of other species; Bob Muth said we probably should include all the small-bodied nonnative cyprinids. Bob noted that the exploitation model estimates of the time required are based only on mechanical removal and do not take into consideration other methods of control (disrupting redds, using flows to disadvantage nonnatives, etc.). Rich will clarify this. Shane suggested clarifying that 65-80% is a target *annual exploitation rate*. Rich will do this. Dave noted that under action H-2, we need to clarify that the nonnative fish subcommittee will provide guidance. On the table, Dave noted that FY 2008 is almost half over and asked if some of the dates on the timeline on page 17 are realistic. Rich will reconsider these. Tom Nesler noted that Randy Hampton suggested changing “public support for” to “public understanding of the need for” in the I&E section (pg 6, Section I). Tom said Randy also noted that “Support from Anglers” (Uncertainties, Risks, and Contingencies, Item 7, page 20, is also an unnecessary and unachievable goal. Anglers don't have to “support” the program, but they do have to have an understanding that the program is a logical, rational, science-based approach to addressing the recovery of the endangered species and the potential harm if the program did not exist. Rich will make the change Randy recommended and remove the “Support from Anglers” portion from Uncertainties, Risks, and Contingencies. >Rich and Tom Chart will revise the strategy per the foregoing comments, and then submit it to the Program Director to send

to the Management Committee. Bob Muth noted we may need to add items from this strategy to the Yampa RIPRAP table (perhaps essentially drop the timeline into the RIPRAP).

9. Nonnative fish subcommittee update

- a. Next steps in review of selected upper basin reservoirs' nonnative fisheries, outlet works and operations, and potential for fish escapement – Dr. Brett Johnson reviewed project C-18/19, his proposal to get it back on track since the graduate student left, and the suggested addition of a reservoir emigration risk analysis. The first year of work is done (most field samples collected). Brett would like to hire a new graduate student to get this project back on track, but the final report for the chemical fingerprinting of nonnative fish in reservoirs portion will be delayed by two years (to September 2011). Brett proposes to add a reservoir emigration risk analysis component to this study, and that portion would be completed at the end of September 2009. Bob Muth asked if operational recommendations would be part of the reservoir emigration risk assessment and Brett said he thought they could include that. Melissa suggested this is important work, but cautioned against waiting until 2011 to make any management recommendations for reservoirs from which we know escapement occurs. Brett said he could prioritize and analyze samples from reservoirs the Program is particularly interested in prior to getting a new graduate student hired. Meanwhile, Tom Nesler said we'll continue to target areas where we know we have a nonnative fish source problem. The Committee agreed that >Brett should develop a revised scope of work for their consideration. Dave asked that agency folks be sure to let him (as well as the PD's office) know of these kinds of setbacks to projects receiving Program funds from Reclamation as he is responsible for contract extensions, etc.
- b. Nonnative Fish Subcommittee – Krissy Wilson said Utah would like to be on this subcommittee (with Cassie and Krissy as alternates for one another).
 - i. Tag losses – A list of pros and cons was prepared for full fin clips versus PIT tags as a second “tag.” The Subcommittee recommends focusing on the full fin clip this year to address Floy tag loss. Some movement data may be compromised, but this method should tell us what we need to know about tag loss (without requiring field crews to take the time to check every bass for a PIT tag). The Committee discussed what questions this would answer (e.g., only short-term tag loss, not project specific, and no movement, survival, or growth data). Shane, Tim and Melissa clarified that PIT tags would be required to get the data needed to determine exploitation rates for each project. Brett encouraged PIT tagging, noting that Floy tag loss is very high. Brett said the smallmouth bass literature does not support the concern that a full fin clip may change fish behavior. The Committee considered the options and decided to go with full fin clips as a second mark (in addition to Floy tags) for smallmouth bass in the Yampa and Green rivers (for this first year, as an estimate of short-term tag loss). >Based on Brett's comment, Tom Chart will make a

recommendation for different fin clips by study (Note: this doesn't apply to the work on the Colorado River.)

- ii. Second-level synthesis – Tom Chart said the Program Director's office recommends working with Rich Valdez as soon as possible to compile the information into one standardized database to begin with to focus the questions in preparation for an RFP. >Researchers are to submit all their data to Chuck McAda by April 1 (the PD's office will send out an e-mail notification on this). The Committee concurred. The Program Director's office will modify Rich's scope of work as needed to accommodate this.
10. Population estimate data analysis – Tom Czaplá referenced earlier discussions of training PI's in Program MARK and difficulties Doug Osmundson has had in getting statistical help with the Colorado pikeminnow population estimate data. Tom said we've talked with Gary White about working on the Colorado pikeminnow data (as a first step), and perhaps also helping with humpback chub estimates. Training PI's in Program MARK is fine if they want to pursue that on their own, but the Program believes we need expertise for more in-depth analysis (i.e., looking at survival, as Kevin Bestgen did on the Green River). Gary White has both the time and interest to work on this.
11. Review and comment on draft RIPRAP assessment and RIPRAP tables, etc.

RIPRAP assessment

>*25 IIIA2c – Melissa suggested that the numerous exclamation points on nonnative fish removal activities unrealistically portrays our fairly mixed success: we are not getting native fish response yet, and our direct removal efforts are not as successful as this might indicate. Dave Speas concurred. Tom Chart agreed we should show native fish response as a shortcoming. However, it does seem the Program has responded as best as it could from year to year, and that's really what the exclamation points are meant to indicate. Melissa suggested that IIIA2c be neutral (as well as the I&E item). Tom Nesler concurred, but noted that we did reach our target with smallmouth bass removal on the Colorado River, which should be documented. The PD's office agreed and will modify this section and add more context.

25 IIIB6 – Leave as neutral and change to “are revising.”

26 IVA4c4 - This was done as an emergency reaction to potentially dwindling population; however, it did take significant agency and landowner cooperation, which should be noted. Add “Successfully captured more than a sufficient number of yoy chubs which are surviving well in the hatchery...”

25 IIIA2c2 – The second-level synthesis hasn't yet been compromised, but the workshop discussion was hampered.

>*29 IA3d – Note that temperature requirements also were met.

29 IC2 – Explain the problem (report still needs to be revised). >The Program

Director's office will make sure the Price River flow recommendations are posted on the web.

30 IE1 – Cassie said USU's 3-species study captured both an adult pikeminnow and adult razorback close to the confluence; a 53mm YOY pikeminnow was captured just downstream of the 24 bridge.

31,32 IVA1d, VD Re-phrase "Stocked razorback sucker are behaving like wild fish" (also at >42 IVA3b and 46 IVA2c). >Also, Tom Czaplá will verify "Razorback sucker larvae are surviving through the first year in the Green River.

34 IIIA >Tom Nesler will check on the status of revision of the Yampa River Aquatic Management Plan.

>* 36 ID2a Krissy objected to the portrayal as a "significant accomplishment" since passage can't be incorporated into the Myton Diversion rehabilitation (which negatively affects other native fishes). Bob Muth clarified that this diversion never had fish passage. Tom Chart noted that it will provide flows for both endangered and other native fishes, however.

RIPRAP revisions (text and tables)

General

III.A.2.c.(2) May need to be re-worded to reflect second-level synthesis.

Yampa River

Need to incorporate action items from Yampa River Nonnative Fish Management Strategy into the RIPRAP.

White River

Melissa emphasized the importance of the A1 items in light of oil and gas development and asked when work might be scheduled. Bob Muth agreed, but it's still TBD. Bob added that this also applies to the San Rafael.

12. Schedule next meeting – 1 p.m. on April 28 through ~noon April 29th in Grand Junction.
>The Program Director's office will arrange a meeting room.

ADJOURN 4:00 p.m

Attachment 1

Update on assignments completed or underway:

1. The Service will discuss Program activities with BLM and other agencies (e.g. NPS, BOR) to develop guidelines for the type of activities (e.g., major construction versus operational) requiring NEPA compliance. *1/18: Pat Nelson and Bob Muth spoke with Dan Alonso who's agreed to talk with BLM; Dan doesn't believe NEPA will be required. Pat will know more next week. 3/1: Dave Irving and Pat Nelson have been in contact with BLM. At present it appears that BLM is supportive of Recovery Program actions to assist in recovery of the endangered fishes. They requested that we submit proposals to them (in NEPA format; for their files) prior to proceeding with certain types of recovery activities (such as rotenoning, pumping, etc.). The need to develop such proposals would be determined on a case-by-case basis after making contact with BLM. 3/7: Pat said a programmatic NEPA will require more effort and he will begin to work on that as soon as he can. 4/23: Pat said this is on hold right now; we'll clarify roles and responsibilities for this during the 4/24 floodplain discussion. Site-specific NEPA, landowner permission, permits, water rights, Section 7, etc., will be the responsibility of the principal investigator. 7/16: Pat Nelson said it appears NEPA will be required on all our proposed work on BLM properties (just finished on the Stirrup; Tim Modde is working on NEPA for Baeser). A programmatic NEPA could take 1-2 years, unfortunately. Tom Chart endorsed the idea of a programmatic if possible. Tom said that if Tim Modde is willing to draft a list of all the possible floodplain activities we may want to do in the Green River, that would be helpful. (Currently working on an EA for Above Brennan, Stewart, and Baeser). 10/31: The programmatic-approach EA passed Vernal BLM ~ a month ago and should have approval in ~3 weeks. 1/17: SLC BLM has requested formal Section 7 consultation, but it should be done by the end of February 2008. (Paul Abate in the FWS SLC office is working on this.)*

Assignments carried over or modified from previous meetings:

1. Tom Pitts will ask the WAC to adopt a report review procedure similar to the Biology Committee's. Tom Pitts will recommend changes to the Program Director's office for discussion at the next Biology Committee meeting. *Pending.*
2. 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 PD's office will be working on this and the Price River items in the coming months.*
3. Bob Muth will talk to Dave Campbell about funding from the SJRIP for the cyprinid key. *4/24: Pending (Chuck McAda and Darrel Snyder have been discussing this). 7/16: San Juan Program funding doesn't look promising, although San Juan funding is reflected in the scope of work. 10/31: >The PD's office will follow up with Sharon Whitmore on this. 1/8: San Juan PD considering. 2/15: San Juan Coordinating Committee to consider on Feb. 22.*
4. John Hawkins will change "procedures" to "guidance" and delete "U.S. Fish and Wildlife Service" from the fish handling procedures cover page. Comments on the draft should be

submitted to Tom Czapla and John Hawkins by May 31. Tom Czapla will do a first-cut revision, and then send it out for broader review. The Program Director's office will take the lead to incorporate comments, make revisions and get this document formalized. 7/16: *Tom Czapla will have a draft to Bob Muth by the end of this week, then it will be sent back to the Biology Committee for review before it is finalized. 1/17: Will be out by end of February.*

5. 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 PD's office will complete this in conjunction with White River report follow-up). 1/8: Pending.*
6. 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: In progress.*
7. 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: *PD'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: PD's office e-mailed Clayton, et al requesting confirmation; 2/15: Shane said we should have confirmation within a couple of weeks.*
8. Pat Nelson and Dave Speas will discuss the draft floodplain vs. flow synthesis RFP. 1/8: *RFP pending. 1/17: Dave said this should be posted by the end of the month. Melissa Trammell suggested that the Biology Committee should somehow be involved in this process (e.g., chair sit on the TPEC) Dave Speas says this assumes the chair's agency isn't planning on bidding, and noted that although non-Federal employees can sit on a TPEC, they cannot vote. Anyone contributing to the writing of the RFP must sign a conflict of interest form. The RFP is based on language in the FG Study Plan. Bob Muth said that RFP's will always be based on Program Guidance. Tom Pitts said it's not important to him that a Biology Committee sit on the TPEC, as long as the TPEC is technically qualified. Further, it would not be possible for one person from the Biology Committee to represent the entire Committee. >Dave Speas will notify the Biology Committee when the RFP is advertised on grants.gov so that those who may be interested in serving on the TPEC can volunteer (done). Dave will chair the TPEC and select the TPEC members. 2/15: Krissy said she thought the BC chair should be on the TPEC; >Dave Speas will check on the conflict of interest rules (re: whether Krissy could be on the TPEC if UDWR wanted to bid). Other members will be Dave and Tom Chart.*
9. 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.

10. The Program Director's office will make a recommendation to the Committee as to the meaning of "periodic monitoring" in Cataract Canyon. *10/31: Based on recovery goals: generation time (every 3 years). Melissa noted that the next scheduled monitoring would be calendar year 2008. >The PD's office will convene a conversation regarding methods for monitoring small chub populations. 1/17: Pending.*
11. The Park Service will send copies of Tim Modde's Yampa Canyon smallmouth bass report to the Biology Committee and the PD's office when it is finalized. *1/17: Pending, but probably won't be finalized for a year or so. Melissa suggested that Tim needs to revise the report based on Brett Johnson's comments, but Tim said he needs to discuss some of the comments with the Park Service before he makes the revisions.*
12. 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.*
13. The Program Director's office will review the information gathered to date on reservoir operations and potential nonnative fish escapement and call for a scope of work to follow up. *1/17: >PD's office will develop or call for a scope of work. 1/29: Pending. 2/15: Will be included in Brett Johnson's proposed revision to C-18/19.*
14. The Program Director's office will develop a proposal by February for the Committee's consideration on how best to proceed with program MARK training for PI's. *2/15: Training PI's in Program MARK is fine if they want to pursue that on their own, but the Program believes we need expertise for more in-depth analysis (i.e., looking at survival, as Kevin Bestgen did on the Green River).*
15. Tom Nesler will look into the possibility of CDOW meeting nonnative fish removal crews and transferring fish (on both the Colorado and Yampa rivers). *2/15: Commissioner Coors is considering a Commission resolution to take CDOW off nonnative fish removal efforts.*
16. Tom Nesler will look into expanding smallmouth bass removal into Yampa River RM 100-90 (which would be under Lori Martin's study). *2/15: Pending.*
17. The PD's office will work with CDOW and Sam Finney on the potential for designing a permeable, hydrologically-stable (gravel?) berm that prevents NP access to the oxbow slough, then clean it out once and for all. *2/15: Pending.*
18. 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.

19. Tom Nesler will see if he can provide Rick Anderson's Colorado River fish community data to both Chuck McAda and Rich Valdez. *2/15: Pending.*
20. Bob Burdick will revise his Colorado River nonnative fish removal synthesis report based on the Committee's comments and finalize it. *2/15: Pending.*
21. 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..*
22. The Program Director's office will work with UDWR and the committees to craft the Program's request for Flaming Gorge flows to support the Stirrup study. *2/15: In draft; Tom Chart said their draft flow target based on previous years' observations is 15,000 cfs for 5 consecutive days to connect the Stirrup. Letter also may address future baseflow operations to disadvantage nonnative fishes. Krissy said the PIT-tag reader array will be installed in May in advance of connecting flows. Tom Chart noted water quality concerns at the Stirrup this winter.*
23. Dave Speas will ask Wayne Hubert what information he could make available to PI's on sucker hybridization at this point. *The manuscript is in draft at this point, but it shows that the fish can be correctly identified in the field. Chuck McAda will provide photos to UDWR of fish they consider hybrids (done). 2/15: Krissy Wilson said UDWR will pull all the information together for field personnel. Krissy said they think it's important to document amount of hybridization; Rich Valdez noted it also will be important to document geographic distribution.*
24. Tom Czaplá will work with Pat Martinez to get the summary table and other important information out to the PI's before the start of field season. Standardizing rubber rafts will be the next step after we get done with the aluminum boats. *Pending.*

New Assignments:

1. Angela Kantola will post the revised 1/17/08 meeting summary to the listserver. *Done.*
2. Angela Kantola will post the revised reports due list to the listserver.
3. 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. Tom Nesler will discuss with CDOW and let the Committee and PI's know where to translocate northern pike from the Yampa River while there is still risk of the Yampa SWA ponds connecting to the river.
5. 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.

6. Trina Hedrick will revise and finalize the project #109 report.
7. Sam Finney will revise the report for project #98b using track changes for the Committee's re-consideration.
8. Rich Valdez and Tom Chart will revise the Yampa nonnative fish strategy per the Committee's comments, then submit it to the Program Director to send to the Management Committee.
9. Brett Johnson will develop a revised C18/19 scope of work for the Committee's consideration
10. Tom Chart will recommend different fin clips by study (of smallmouth bass in the Green and Yampa rivers).
11. Researchers are to submit all their nonnative fish data to Chuck McAda by April 1 (the PD's office will send out an e-mail notification on this).
12. 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.
13. The Program Director's office will make sure the Price River flow recommendations are posted on the web.
14. Tom Nesler will check on the status of revision of the Yampa River Aquatic Management Plan.
15. The Program Director's office will make arrangements for the April 29-29 meeting in Grand Junction.