

February 4, 2009

Biology Committee Draft Conference Call Summary
February 4, 2009

Biology Committee: Dave Irving, Melissa Trammell, Pete Cavalli, Krissy Wilson, Dave Speas, Shane Capron, Tom Pitts, and Tom Nesler. The environmental groups and CREDA were not represented at the meeting.

Other participants: Tom Chart, Angela Kantola, John Shields, Trina Hedrick, John Hawkins, Jana Mohrman, and Kevin Bestgen.

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

1. Discuss content of the Recovery Program's Flaming Gorge Flow Request letter due to Reclamation by the end of February – Tom Chart noted that Bob Muth had provided some discussion points to the Committee. Dave Speas provided the latest forecasts this morning; he noted that the Yampa is trending toward a moderately wet year at this point. Dave suggested making this year's spring flow request similar to last year's with the addition of recommendations for moderately dry scenario, particularly for the Stirrup. The letter might describe the 2008 base flows and indicate that our request may be similar this year, but a more detailed baseflow request may come later. The group agreed. Tom Chart suggested that we may want to indicate interest in a more specific experimental base-flow release to disadvantage smallmouth bass in 2010. Shane Capron suggested including a summary of the rationale for that and any data we've collected to date. With regard to peak and duration, we know that 15,000 cfs will allow the fish to move easily in and out of the Stirrup; we don't know if 14,000 cfs would be adequate. Tom Chart noted that Reclamation has been very helpful staying in touch; we'll rely on field observations and determine actual connection flows at the Stirrup. Trina said she didn't think sedimentation has been significant. Trina and her crew will take depth measurements at the breach this year. > The Program Director's office will draft a letter and circulate it to the Biology and Management committees for review next week.
2. Approve Project # 125 synthesis report – John Hawkins has addressed the comments he received in late October. John said the discussion has been rewritten, and he's added discussion regarding the history of control/treatment. John said Tom Nesler asked about tag data, which John said he believes is best addressed outside the context of the report. Shane said it seems discussion on potential shift in size class might have been warranted (with regard to potential impact of removal) (whether or not size shift was observed). Line 785 in discussion probably should say we “propose” instead of “believe.” Shane said he still has concerns beginning at line 815 and will suggest a re-write something like “Although we observed declines in abundance that we attributed to our removal, compensatory mechanisms including recruitment and emigration offset much of our effort as would be expected in a large metapopulation...” >John Hawkins will work with Shane to revise that portion and send it back to the Committee for final review by a date certain (no later than early next week). With that change, the report will be accepted as final and >John will finalize it.

3. Approve entrainment report – The authors have worked hard to respond to the extensive comments they received. Trina said the biggest changes in the report were how they discussed the effectiveness of entrainment and entrainment rates. Kevin said entrainment increases at increasing flow stages, but not necessarily faster than flow. Dave Speas Conclusions p 56 “in wetlands w multiple breaches, the upstream breaches will capture more beads than downstream...” makes it sound like upstream will capture more regardless of configuration of downstream breach; suggested reword to “captured” to tie it specifically to the study. Trina will clarify that (and also address single vs. multiple inflow breaches). There’s a typo on page 15 line 353 typo (2007, not 2008). Krissy noted there’s also an extra space on line 1245. With regard to travel time, Melissa suggested that if a daily mean flow average is being used, they need to note that there may be hourly differences that may impact entrainment. Dave Speas pointed out the need to use consistent language in describing where the beads were more thoroughly mixed. Melissa suggested a recommendation to evaluate retention of larvae in flow-through wetlands (to help discern if flow-through wetlands are indeed better); Pete concurred. Kevin said he thinks this would be affected by many variables and this is a relatively small issue, and that it also would have to be addressed in single-breach wetlands. Melissa and Pete agreed that an additional recommendation wasn’t needed, then. Retention may be discussed in the floodplain synthesis report, but Dave said he doesn’t want to lose track of evaluating whether these floodplains can over-winter fish. Trina said she agrees that over-wintering fish needs to be evaluated; they will modify the recommendation to address over-wintering. Melissa asked about the Dudley’s comments that weren’t addressed. Kevin said they did end up addressing most of Dudley’s comments, except for things like analyzing results and comparing with particle diffusion models. The Committee accepted the report with the foregoing changes. >Trina and Kevin will revise and finalize the report.
4. Next meeting – February 20 meeting in Grand Junction at the Doubletree from 7 a.m. to 2 p.m. (coffee and refreshments to be provided) to discuss RIPRAP revisions and assessment, Program Guidance, and new/revised FY 09 scopes of work.

Attachment 1

Assignments carried over or modified from previous meetings:

1. Tom Czaplá 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 Czaplá. >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. 7/22: Report and initial cost estimate provided mid-July; BOR & USFWS discussing construction and contracting options. Tom Czaplá said Reclamation likely will contract the planned building refurbishment (insulation, dehumidifiers, etc.) with assistance from FWS Engineering; with the goal of getting bids by the end of the calendar year. 1/15: Chuck reported that Reclamation is close to sending their RFP request to Salt Lake with the goal of work being conducted from the first of May through mid-October. Current cost estimates range from \$300-\$500K (annual funds) for a complete refurbishing of the system, new insulation, and one to two dehumidification systems.*
2. 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 received the draft today and provide it to the BC by the end of July. 8/18: Nesler will provide Billy Atkinson's upper Yampa "strategy" report to the Biology Committee by September 18 (Nesler's and Chart's birthday). 10/30: Tom Nesler and Sherm Hebein will revise Billy's report and provide that to the Recovery Program (Biology Committee, NNFSC, PI's, etc.) along with an outline of CDOW's strategy for nonnative fish management in the Yampa River above the diversions for discussion as part of the nonnative fish workshop. Tom Chart said it would be very helpful to have that outline before the December. 9-10 workshop. Sherm noted that Billy removed >2,000 np from Catamount this year (>4,000 np total). 1/15: The upper Yampa strategy has been separated out and provided to the Committee; Billy's report is still being revised.*
3. The Program Director's office will work with CDOW and Aaron Webber on the potential for designing a permeable, hydrologically-stable (gravel?) berm to prevent northern pike access to the oxbow slough at RM 151 on the Yampa, 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). 8/18: Tom Chart said Sherm will try to get someone from CDOW on this as soon as possible. The Biology Committee would like a date certain on this; >Sherm Hebein will accelerate this. 10/30 said CDOW has contacted the property owners of the RM 151 backwater, but hasn't been able to meet with them yet. Mark Wernke from Reclamation is willing to take a look at the property with CDOW. A fairly long berm would be required (>3,000') and we'll need to determine the best type of berm (more permanent configurations could be very expensive). The funding source would need to be determined, with Partners for Fish and Wildlife, lottery funds, grant funds, etc. as possible sources to be explored. 1/15: Tom Nesler said they plan to get engineers develop specs/estimates this spring for something like a 10-year berm structure; the next step will be to find funding (perhaps as a habitat project through GOCO). This would be the first of three or four such projects. Tom Pitts suggested that if the Program provides some matching funds (annual or capital), it might improve the probability of getting GOCO money. Tom also suggested that if we have a project in the hopper, we might be able to compete for end-of-year Reclamation funds.

4. 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. 7/11: Utah and Wyoming have reviewed; Colorado and FWS reviewing (FWS comments due 9/5/08). Colorado has shared the draft Procedures with their legal counsel and expects to provide any comments within two weeks. Krissy said Utah's legal counsel still needs to review this. 10/16: The PD's office is responding to Wyoming's recent comments, then will send these revisions to the States and Service for review, with the goal of beginning the surnaming process in November. 10/30: Tom said Bob Muth sent the revised stocking procedures to the States and the Service on October 22. Krissy said Utah has some new concerns about moving fish from one body to another and potentially spreading quagga mussels. >UDWR will provide draft language for review. Dave Irving said we also need to be sure we're not transferring mussels on equipment. Colorado and Utah have equipment-cleaning protocol in place. Sherm said they're using Sparquat for disinfection and Krissy said UDWR is using Quat128. Tom Nesler added that where the draft Procedures suggest certain stocking may become routine, we need to consider potential mussel transfer. 1/15: Tom Chart said Nesler has addressed the quagga mussel spread issue along with some other minor revisions; they've met with Krissy and UDWR is okay with the changes. After double-*

checking with Kevin Gelwicks in Wyoming, the Program Director's office will move this forward for NEPA compliance (should be able to rely on the original document) and the Regional Director's signature.

5. 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). 7/11: Data have been submitted by Vernal CRFP, Badame, Hedrick, Hawkins, Bestgen, Bestgen/Zelasko and Burdick. 4 August 2008: Harry Vermillion submitted an extract from ADAMAS in the appropriate format to Chuck McAda on August 4th. The extract included Colorado River data from 2003 and 2007; Gunnison River data from 2007; and Yampa River data from years 2004 - 2007. 8/18: >Chuck will send the most recent version of the database to the NNFSC; and the NNFSC will review status of the data with Chuck and Travis after the Biology Committee meeting. 10/30: Tom Chart said the NNFSC will follow-up on this at the workshop, most of the data are in; we need to determine how quickly we can get the 2008 data added. 1/15: Chuck said all the data are in through 2007. Delete all foregoing text. Researchers need to have all their 2008 data **IN THE CORRECT FORMAT** to Travis by March 1, 2009 (data not submitted in the correct format will be sent back with a copy to the appropriate Biology and Management committee members). Similarly, Biology and Management committee members will be notified of any data not submitted by March 1.*
6. 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, 7/25, 8/18: *Pending. 1/15: delete after this meeting; the Program decided to go with an RFP for the second-level synthesis.*
7. 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 #3, above.) 1/15: The Upper Yampa strategy will be directly incorporated into the Yampa River Aquatic Management Plan (which will be completed by May 1, 2009).*
8. The PD's office needs to schedule a humpback chub population monitoring workshop.

Pending (the Program Director's office will discuss this with Rich Valdez); a workshop might also include discussion of humpback chub broodstock. 10/30: Tom Czapla said this is still pending. He would like to see the workshop address the issue of first acceptable population estimates.

9. 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 (with a cc: to the County commissioners and others, as appropriate). *Pending. 1/15: John Hawkins suggested a thanks to Ron Dellacroce and his supervisor in State Parks who provide a translocation site, facilitate our putting fish into Elkhead, and allow access to the boat launch areas critical to Yampa River management efforts.*
10. 1/15: Melissa suggested following up on signage at the translocation ponds acknowledging that the Recovery Program has provided the fish (but keeping in mind the concern re: potential elevated Hg levels; which CDOW will investigate).
11. Within the next month, >the Service and Program Director's office will provide the Committee a draft addendum to the White River report that will present the measured flow requirements in a historical hydrologic perspective. The Program Director's office also will research where we left Schmidt and Orchard's draft report on peak (channel maintenance) flows and recommend whether to have it reviewed by the geomorphology panel. The Program Director's office will use the information currently available to >develop a position paper on Price River flow recommendations for Committee review. *10/16 Pending; out by the end of November-1/5: February 2009.*
12. Dave Irving will call the Mantle Ranch landowner to give him an update on work to raise *Gila* in captivity (since the Ranch's cooperation made it possible for the Service to get the fish out to the hatchery quickly). *10/30: Dave Irving sent him a letter. CDOW and the Park need to discuss the future of the captive Gila in light of plans for those fish as broodstock under Three Species conservation and Colorado's Management Use agreement with the Park (Tom Nesler and Melissa will work on this). 10/30: Pending. The Program Director's office will move forward to establish a Yampa River humpback chub broodstock using young fish. Tom Czapla will work with Melissa on a letter to the Park. 10/30: Pending. Czapla said he's been drafting a refuge/broodstock plan for discussion within the Service, then for sharing with the Park Service and the Recovery Program. Tom Nesler and Krissy Wilson also are working on related roundtail plans. 1/15: Dave Irving said the landowner is open to our returning, as long as we coordinate with Ron Velarde. The fish are doing well at the Ouray hatchery and they believe they have 29 humpback chub. Dinosaur National Monument has asked what our plans are for the other fish. Dave will try to set up a conference call on this on February 5. Tom Nesler said disease testing will be required before any fish can be returned to the wild. Utah, Wyoming, and Colorado are considering a proposal for use of the roundtails for broodstock. Tom Czapla said he'd like to keep the humpback chub in captivity and conduct genetic testing (perhaps on some of the roundtail, also).*
13. Biology Committee members will provide comments on the nonnative fish priorities document by December 1 (and the NNFSC can discuss this as part of their December 12

meeting). *Comments were received from Trina Hedrick.*

14. Biology Committee members are invited to provide questions/expectations for the 2nd level synthesis to Tom Chart by November 28. The NNFSC will have a conference call at 8:30 a.m. on December 1 to further discuss the RFP. *1/15: No comments were received.*
15. John Hawkins will talk to Grant Wilcox in CDOW's Fort Collins office to see if smallmouth bass movement data can be mapped.
16. John Hawkins will revise the #125 report (in discussion with the commenters), and provide a copy to the Committee by January 5 so they can review and approve it at their January 15 meeting. *1/15: Revisions have been made; Tom Chart will send this to the Biology Committee next week and this will be on the next meeting agenda.*
17. Krissy Wilson will work with Zane Olsen to make sure that Wahweap's budget for FY 09 is accurate. *1/15: Krissy said UDWR now has Wahweap under their hatchery system. The FY 09 budget is still \$237.8K, but may be reduced in future years as they carefully track costs.*
18. Trina Hedrick, Dave Irving, et al. will prepare a rough draft SOW for removal of small nonnative fishes in the Green River in advance of the nonnative fish workshop. *1/15: Dave Irving said they met yesterday to discuss the draft scope of work; Leisa said they'll revise the draft to scale the scope back somewhat and include drift net samples. Tildon said the focus will be on verifying larval drift and arrival into the nursery reach and manipulating a few backwaters (blocking, etc. after removing all nonnative fish) to determine subsequent fish community effects. The revised scope will be reviewed by the PD's office, then it will come to the BC for approval in advance of the next meeting.*
19. Angela Kantola will send out a revised reports due list after this meeting.
20. Tom Nesler will check on the status of Lori Martin's report (98a).
21. Tildon Jones will draft objectives for potential catfish removal from the Green River for NNFSC review.
22. Kevin Bestgen will let the the Committee know within the next month if there are ways of using recaptures on subsequent passes in the population estimate (when the tagging pass isn't done first).
23. The PD's office and CRFP-GJct will coordinate with CDOW on the development of a Colorado River native fish monitoring component for Program Guidance.
24. Tom Nesler will find out why CDOW is limiting upper Yampa in-river electrofishing to the 2.5 miles of the Yampa River south of Steamboat Springs.
25. Tom Nelser will look into existing fines and enforcement for illegal stocking (suggestions were made that the disincentives needed are real possibilities of CDOW closing

sportfisheries like Elkhead and significantly fining those who illegally stock fish).

26. The PD's office will e-mail PI's and the Committee with instructions for revising nonnative fish scopes of work.
27. Leisa will finalize and distribute the report for project 123. *Done.*
28. Tom Chart will provide Kevin Bestgen's smallmouth bass presentation to the BC for review prior to the February 4 conference call. *Done.*

New Assignments

1. The Program Director's office will draft a Flaming Gorge flow request letter and circulate it to the Biology and Management committees for review next week.
2. John Hawkins will work with Shane Capron on a small revision to the #125 report, send that revision to the Biology Committee for final review no later than early next week, then finalize the report when the revision is accepted.
3. Trina and Kevin will revise and finalize the entrainment report.

March 24, 2009

Biology Committee Draft Meeting Summary
Doubletree Hotel, Grand Junction, Colorado, February 20, 2009

Biology Committee: Dave Irving, Melissa Trammell, Pete Cavalli, Krissy Wilson, Dave Speas, Shane Capron, Tom Pitts, and Tom Nesler. The environmental groups and CREDA were not represented at the meeting.

Other participants: Mike Mills (CUWCD), Tom Chart, Angela Kantola, Bob Muth, Tom Czapla, Bob Burdick, Chuck McAda, Doug Osmundson, and Jana Mohrman.

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

CONVENE 7:00 a.m.

1. Review/modify agenda – The agenda was revised as it appears below.
2. Approve Biology Committee meeting (January 15, 2009) and conference call (February 4, 2009) summaries. The Committee added “interim” before “goal of 30 smallmouth bass per mile under item #5 in the January 15 summary. >Angela Kantola will post the revised summary to the fws-coloriver listserv. No changes were made to the conference call summary.
3. Review assignments. See list of at the end of this summary.
4. Discussion and review of new/revised FY 09 scopes of work. The Committee will provide any additional comments by e-mail; >the Program Director’s office will send out revised SOW’s by March 13.

RZ-Recr: More effort may be needed to determine outmigration (e.g. additional population estimate work like that at Baeser).

123a: Pete Cavalli will send questions to Tildon. Is seine really 300-400ft.? >Dave Irving will make sure Tildon has applied for an amended COR.

98a&b, 125: Change title from “translocation” to “management.”

144: New project that CRFP and UDWR are proposing on backwaters may be a better way of looking at native fish response (but still want to keep ISMP in place). Krissy said Trina agree with the need to maintain collection of the 20-year data set. The idea would be to combine these two projects. Dave Speas noted that original SOW called (and paid) for report in August 2008 (this may also apply to #138); we need to be sure we’re not paying for reports twice.

Colorado River fish community: The Committee supports the concept; >the Program Director’s office will get a scope of work to the Committee as soon as possible.

154: >Tom Chart will check on status of the Tribe's and CRFP's SOW and try to get to the Committee by March 13. Leisa provided a SOW (~\$15K) to Tom Chart for looking at feasibility of weir on Duchesne and/or Yampa rivers. \$20K placeholder, but \$15K for weir feasibility plus CRFP assistance (need cost estimate). Dave Speas suggests considering new project number.

Green R. backwater nonnative fish: >The Program Director's office will finalize the draft SOW, make sure drift sampling at Split matches the 90's protocol, and get it to the Committee by March 13. Some detail might be added on how we'll prepare for beaver, etc. damage. Dave asked if it would be appropriate to conduct some disease testing on these fish (or perhaps surrogates or fish from the lower Green River) to make sure we don't have any major pathogen or contaminant problems. Bob Muth agreed. Krissy suggested we start by sampling surrogates, then go from there. We also should see what Dexter is finding.

Upper Yampa habitat: >The Program Director's office will contact Jeff Blakeslee, then get back with CDOW and Reclamation.

PIT tags: \$50,000 worth ordered; >Dave Speas will let Angela know how much more he can order under the contract this year and in subsequent years (probably can order at least another \$100+K this year).

151: These funds may go toward genetic testing. Any additional sampling would be in FY10 budget.

Baerer pump: Would a used pump be adequate (and perhaps less costly)? UDWR may also want to provide input, since this is a portable pump on a trailer that could be used at Baerer and at Stirrup for back-up. (UDWR does have some pumps they use at Stirrup).

15: Tom Czapl recommends that the costs for larval fish identification in other studies be made part of this #15 SOW. Kevin Bestgen needs know work needed from LFL; The Program Director's office will make sure PI's and Bestgen coordinate on all appropriate SOWs.

Razorback sucker remote PIT tag arrays: Dave Speas recommended developing the RBS monitoring plan before deploying an array at the spawning bar.

Razorback monitoring: Melissa asked if this should include some bonytail monitoring. Since bonytail are strongly associated with structure, we might want to concentrate on that sort of sampling (perhaps put in Program Guidance for FY10-11).

5. RIPRAP revisions and assessment

General

The Program Director's office should inquire about potential assessment of where pipelines are and which ones need shutoff valves.

Rename first/second level syntheses project syntheses and programmatic synthesis.

Melissa suggests considering beginning more intentional bonytail monitoring. Krissy noted that Utah conducts a Health Condition Profile (HCP) on fish before they are stocked as part of Utah's hatchery program. Wahweap will implement this procedure on bonytail prior to stocking. Bonytail that are sacrificed for disease certification will be used so that no additional bonytail will need to be sacrificed. >Krissy will provide the HCP protocol to Tom Czapla.

Add a note that the Program Director's office will be scheduling a humpback chub population estimate monitoring workshop this summer.

Need to mention pending development of a basinwide razorback sucker monitoring plan.

Green

Add note that we expected a trade-off between temperature and elevated baseflows on the Green River, but it went better than we expected.

! Entrainment report completed Feb. 9 '09.

The strong year classes reference in III.A.4 were '06 and '07, not '07 and '08.

Mention the new Green River backwater study beginning in '09.

Only FWS is adding catfish to their nonnative fish removal work (not UDWR)

Yampa

>Bob Muth will send the Maybell report to the Committee in March.

Colorado

With regard to the 10,825, Dave Speas noted there are quagga mussels in Granby (among many other locations).

Dave Speas noted there will be a need for monitoring to determine if flows from Aspinall are sufficient for recovery in this section of the Colorado River (below the confluence with the Gunnison River).

Why are all the floodplain O&M and monitoring tasks shown as TBD? Tom Chart said the C-6 Hyd work (determining connections, etc.) was done by Reclamation in '08; when we get that report, we should be able to update these. >Tom Chart will check on the status.

Gunnison

! Draft Aspinall EIS completed.

6. Review of draft FY 2010-2011 Program Guidance:

Based on requirements of the Flaming Gorge biological opinion, the Program Director's office may need to provide a write-up on why a real-time temperature gage is not workable for the Green/Yampa confluence (for FG BO req.)

UDWR believes water quality issues also need to be addressed (they saw several fish kills in the White this year that they believe may be attributable to contaminants. PD's office agreed this is a good recommendation and the FWS-ES offices would address this portion.

The Green River floodplain investigations study should show "funding TBD."

More effort may be needed at Stirrup to determine outmigration (e.g. additional population estimate work like that at Baeser (FY 09 forward).

Project #146 should mention that Maybell also is a potential site for deployment of a floating weir.

The nonnative fish "second level synthesis" should be re-titled "programmatic synthesis" and the funding distribution among years corrected.

Krissy said she believes \$200K/year will be adequate for the Wahweap hatchery, but UDWR will let the Program know if that changes. They have hired an assistant there.

>Dave Irving will make sure that Bruce's larval razorback collections in the Green River (#22f) are included in the COR.

The razorback monitoring plan should be clear that sampling will coincide with pikeminnow estimate sampling to minimize impacts to the fish (if possible).

The Committee discussed a new start to develop a bonytail monitoring plan in 2010 (implementation in 2011). This also should consider data that might be gathered via the passive PIT-tag monitoring arrays.

Tom Czapla asked >Krissy Wilson to consider having some of the June Sucker PIT tag array results, carp removal, etc. presented either at next January's researchers meeting or a Biology Committee meeting. >Mike Mills will e-mail the information about the June Sucker March 17-18 meeting to the fws-coloriver listserv.

7. Review reports due list – See list. Dave Speas emphasized that we need to quit continually revising due dates. Realistic deadlines should be established up-front and maintained. Bob Muth agreed. The Committee decided that for revised dates, the PI will make a recommendation to the coordinator, who will forward the recommendation to the Committee for consideration. >Angela will establish a new category for the reports due list called "new due date *requested*". The Committee will continue to schedule adequate time to review this list. "Original due date" will always be the very first due date established in the first scope of work (unless a report is delayed to incorporate additional field work, etc., in which case that will be explained). Tom Nesler pointed out that the best way to enforce report due dates is through individual performance plans and evaluations. Program participants need to expect their performance standards to reflect report due dates. The issue of data quality control was

raised (applies to ALL studies). The Biology Committee emphasized the need for field office supervisors to maintain strict data quality control at every step of the process. With regard to the Westwater humpback chub report from 2003-2005 that's been on hold, Melissa recommended finalizing that report without waiting for the workshop, and then incorporating any changes as a result of the workshop into the next report (another alternative would be to drop the 2003-2005 report and include the analysis from these years in the current Black Rocks/Westwater report). The PD's office will take this under consideration.

8. Schedule next meeting – Conference call March 24 8 -10 a.m. to discuss revised FY 09 scopes of work; Web conference April 20th 1:30-3:30 p.m. (and possibly that morning, if needed) to review final reports (note: reports must be completed by April 6th).

ADJOURN 1:45 p.m.

Attachment 1

Assignments carried over or modified from previous meetings:

1. 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 received the draft today and provide it to the BC by the end of July. 8/18: Nesler will provide Billy Atkinson's upper Yampa "strategy" report to the Biology Committee by September 18 (Nesler's and Chart's birthday). 10/30: Tom Nesler and Sherm Hebein will revise Billy's report and provide that to the Recovery Program (Biology Committee, NNFSC, PI's, etc.) along with an outline of CDOW's strategy for nonnative fish management in the Yampa River above the diversions for discussion as part of the nonnative fish workshop. Tom Chart said it would be very helpful to have that outline before the December. 9-10 workshop. Sherm noted that Billy removed >2,000 np from Catamount this year (>4,000 np total). 1/15: The upper Yampa strategy has been separated out and provided to the Committee; Billy's report is still being revised. 2/20: outline strategy provided prior to last meeting.
2. The Program Director's office will work with CDOW and Aaron Webber on the potential for designing a permeable, hydrologically-stable (gravel?) berm to prevent northern pike access to the oxbow slough at RM 151 on the Yampa, 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). 8/18: Tom Chart said Sherm will try to get someone from CDOW on this as soon as possible. The Biology Committee would like a date certain on this; >Sherm Hebein will accelerate this. 10/30 said CDOW has contacted the property owners of the RM 151 backwater, but hasn't been able to meet with them yet. Mark Wernke from Reclamation is willing to take a look at the property with CDOW. A fairly long berm would be required (>3,000') and we'll need to determine the best type of berm (more permanent configurations could be very expensive). The funding source would need to be determined, with Partners for Fish and Wildlife, lottery funds, grant funds, etc. as possible sources to be explored. 1/15: Tom Nesler said they plan to get engineers develop specs/estimates this spring for something like a 10-year berm structure; the next step will be to find funding (perhaps as a habitat project through GOCO). This would be the first of three or four such projects. Tom Pitts suggested that if the Program provides some matching funds (annual or capital), it might improve the probability of getting GOCO money. Tom also suggested that if we have a project in the hopper, we might be able to compete for end-of-year Reclamation funds. 2/10: The PD's office considers this a high priority and will contribute funds, if available (see revised FY09 budget). This project also was submitted in the Service's list of potential projects for the Economic Stimulus Package. 2/20: Recovery Program funds likely available; CDOW working to get engineers on the ground; Nesler considering different approaches (berm, fill the oxbow, etc.). Muth and Chart discussed with Uilenberg; Warnke available when landowner grants access. Bob Muth suggested Jeff Blakeslee of TNC may know the landowner.

3. 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.* 7/11: *Utah and Wyoming have reviewed; Colorado and FWS reviewing (FWS comments due 9/5/08). Colorado has shared the draft Procedures with their legal counsel and expects to provide any comments within two weeks. Krissy said Utah's legal counsel still needs to review this.* 10/16: *The PD's office is responding to Wyoming's recent comments, then will send these revisions to the States and Service for review, with the goal of beginning the surnaming process in November.* 10/30: *Tom said Bob Muth sent the revised stocking procedures to the States and the Service on October 22. Krissy said Utah has some new concerns about moving fish from one body to another and potentially spreading quagga mussels. >UDWR will provide draft language for review. Dave Irving said we also need to be sure we're not transferring mussels on equipment. Colorado and Utah have equipment-cleaning protocol in place. Sherm said they're using Sparquat for disinfection and Krissy said UDWR is using Quat128. Tom Nesler added that where the draft Procedures suggest certain stocking may become routine, we need to consider potential mussel transfer.* 1/15: *Tom Chart said Nesler has addressed the quagga mussel spread issue along with some other minor revisions; they've met with Krissy and UDWR is okay with the changes. After double-checking with Kevin Gelwicks in Wyoming, the Program Director's office will move this forward for NEPA compliance (should be able to rely on the original document) and the Regional Director's signature.* 2/10: *Bob Muth discussed the need for additional NEPA with the Service's solicitor – not needed. Final revisions addressing a lingering State's concern over regulatory requirements was resolved Feb 10, 2009. We are now seeking signatures.*
4. Researchers are to submit all their nonnative fish data to Chuck McAda by April 1 (the Program Director's office will send 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). 7/11: Data have been submitted by Vernal CRFP, Badame, Hedrick, Hawkins, Bestgen, Bestgen/Zelasko and Burdick. 4 August 2008: Harry Vermillion submitted an extract from ADAMAS in the appropriate format to Chuck McAda on August 4th. The extract included Colorado River data from 2003 and 2007; Gunnison River data from 2007; and Yampa River data from years 2004 - 2007. 8/18: >Chuck will send the most recent version of the database to the NNFSC; and the NNFSC will review status of the data with Chuck and Travis after the Biology Committee meeting. 10/30: Tom Chart said the NNFSC will follow-up on this at the workshop, most of the data are in; we need to determine how quickly we can get the 2008 data added. 1/15: Chuck said all the data are in through 2007. Delete all foregoing text. Researchers need to have all their 2008 data IN THE CORRECT FORMAT to Travis by March 1, 2009 (data not submitted in the correct format will be sent back with a copy to the appropriate Biology and Management committee members). Similarly, Biology and Management committee members will be notified of any data not submitted by March 1. 2/10: Pending. PD's office will send out a reminder.

5. 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 #3, above.) 1/15: The Upper Yampa strategy will be directly incorporated into the Yampa River Aquatic Management Plan (which will be completed by May 1, 2009). Tom Nesler will remind Sherm Hebein about this due date.
6. The PD's office needs to schedule a humpback chub population monitoring workshop. Pending (the Program Director's office will discuss this with Rich Valdez); a workshop might also include discussion of humpback chub broodstock. 10/30: Tom Czaplá said this is still pending. He would like to see the workshop address the issue of first acceptable population estimates. 2/20: Bob Muth said he's talked with Rich Valdez and their considering a workshop with the PI's in May or June. If the current drafts indeed satisfy the current contract obligations, then the PD's office will provide those to Dave Speas.
7. 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 (with a cc: to the County commissioners and others, as appropriate). Pending. 1/15: John Hawkins suggested a thanks to Ron Dellacroe and his supervisor in State Parks who provide a translocation site, facilitate our putting fish into Elkhead, and allow access to the boat launch areas critical to Yampa River management efforts. 2/10: Muth and Chart will work with Debbie Felker to get letters out prior to the 2009 translocations.
8. 1/15: Melissa suggested following up on signage at the translocation ponds acknowledging that the Recovery Program has provided the fish (but keeping in mind the concern re: potential elevated Hg levels; which CDOW will investigate). 2/10: Chart will discuss this with the I&E Committee at their meeting Feb 12, 2009. 2/20: The PD's office met with the I&E Committee last week; it was suggested that a sub-group of that Committee work with the

Nonnative Fish Subcommittee to discuss/implement appropriate signage (keeping in mind on concerns regarding mercury levels).

9. Within the next month, >the Service and Program Director's office will provide the Committee a draft addendum to the White River report that will present the measured flow requirements in a historical hydrologic perspective. The Program Director's office also will research where we left Schmidt and Orchard's draft report on peak (channel maintenance) flows and recommend whether to have it reviewed by the geomorphology panel. The Program Director's office will use the information currently available to >develop a position paper on Price River flow recommendations for Committee review. *10/16 Pending; out by the end of November-1/5: February 2009. 2/20: Bob Muth said he's making good progress on this and he'll have a draft to the Committee by early March.*

10. Dave Irving will call the Mantle Ranch landowner to give him an update on work to raise *Gila* in captivity (since the Ranch's cooperation made it possible for the Service to get the fish out to the hatchery quickly). *10/30: Dave Irving sent him a letter. CDOW and the Park need to discuss the future of the captive Gila in light of plans for those fish as broodstock under Three Species conservation and Colorado's Management Use agreement with the Park (Tom Nesler and Melissa will work on this). 10/30: Pending. The Program Director's office will move forward to establish a Yampa River humpback chub broodstock using young fish. Tom Czapla will work with Melissa on a letter to the Park. 10/30: Pending. Czapla said he's been drafting a refuge/broodstock plan for discussion within the Service, then for sharing with the Park Service and the Recovery Program. Tom Nesler and Krissy Wilson also are working on related roundtail plans. 1/15: Dave Irving said the landowner is open to our returning, as long as we coordinate with Ron Velarde. The fish are doing well at the Ouray hatchery and they believe they have 29 humpback chub. Dinosaur National Monument has asked what our plans are for the other fish. Dave will try to set up a conference call on this on February 5. Tom Nesler said disease testing will be required before any fish can be returned to the wild. Utah, Wyoming, and Colorado are considering a proposal for use of the roundtails for broodstock. Tom Czapla said he'd like to keep the humpback chub in captivity and conduct genetic testing (perhaps on some of the roundtail, also). Melissa Trammell will provide a summary of their recent conference call. Some of the roundtail chub will be returned to the Monument. Czapla is preparing a management plan for the humpback.*

11. John Hawkins will talk to Grant Wilcox in CDOW's Fort Collins office to see if smallmouth bass movement data can be mapped. *Sherm Hebein has discussed this with Grant; this can come off the list.*

12. Krissy Wilson will work with Zane Olsen to make sure that Wahweap's budget for FY 09 is accurate. *1/15: Krissy said UDWR now has Wahweap under their hatchery system. The FY 09 budget is still \$237.8K, but may be reduced in future years as they carefully track costs. This can come off the list.*

13. Trina Hedrick, Dave Irving, et al. will prepare a rough draft SOW for removal of small nonnative fishes in the Green River in advance of the nonnative fish workshop. *1/15: Dave Irving said they met yesterday to discuss the draft scope of work; Leisa said they'll revise the draft to scale the scope back somewhat and include drift net samples. Tildon said the focus will be on verifying larval drift and arrival into the nursery reach and manipulating a few*

backwaters (blocking, etc. after removing all nonnative fish) to determine subsequent fish community effects. The revised scope will be reviewed by the PD's office, then it will come to the BC for approval in advance of the next meeting. UDWR and USFWS revised this SOW and it will be sent to the BC in time for their discussion of the FY09 Work Plan on Feb 20, 2009.

14. Tom Nesler will check on the status of Lori Martin's report (98a). *No word as of Feb 10, 2009; this will be an issue in the Service's upcoming Sufficient Progress Review. 2/20: CDOW working on it (no new BOR funds until this and the annual report are completed). Tom said Sherm has promised these reports will go to Tom Chart within 2 weeks.*
15. Tildon Jones will draft objectives for potential catfish removal from the Green River for NNFSC review. *Tildon Jones provided objectives, which were reviewed by the NNFSC on Jan 29, 2009; Utah (Krissy Wilson) approved this addition to Project 123a on an experimental basis. Vernal-CRFP and UDWR will revise their SOW accordingly.*
16. Kevin Bestgen will let the Committee know within the next month if there are ways of using recaptures on subsequent passes in the population estimate (when the tagging pass isn't done first). *2/20: Pending; Tom Chart will discuss with Kevin.*
17. The PD's office and CRFP-GJct will coordinate with CDOW on the development of a Colorado River native fish monitoring component for Program Guidance. *2/20 Doug Osmundson has drafted a scope of work and CDOW's Jim Logan is preparing one, also. Tom Chart said the likely approach will be to repeat Rick Anderson's work near Corn Lake and perhaps re-starting the ISMP in that area.*
18. Tom Nesler will find out why CDOW is limiting upper Yampa in-river electrofishing to the 2.5 miles of the Yampa River south of Steamboat Springs. *Tom checked with Sherm Hebein, who provided the following explanation: There are two significant stream sections below Catamount: 4 to 5 miles of private followed by 2.5 miles of Chuck Lewis SWA intermixed with small private holdings. CDOW has been working with landowners in both sections. In the 4 to 5 mile section of private there are some wealthy landowners that are doing stream channel improvements directed to speeding water flow and eliminating pike-conductive backwaters. In the Chuck Lewis SWA to Steamboat section, CDOW has performed \$500,000 of stream improvement to date with another \$500,000 lined up to further narrow the channel and remove backwaters. Private off channel pond owners are being approached for their approval for pike removal followed by replacement with trout (state fish hatchery products). So far, CDOW does not have approval to enter the patchwork of private landholdings in the 4 to 5 mile section for pike removal by electrofishing. Sam Finney's 98a work refers to the 2.5 mile section where Billy is doing channel improvement work and pike removal. He will perform two-pass electrofishing in this section to remove pike and perform population estimates on whitefish and trout. The 2.5 mile section ends where the stream gradient increases and subsequently enters Steamboat Springs city limits. As landowners focus more on trout and less on pike, if there's a need to expand pike removal into those reaches, CDOW will consider that.*
19. Tom Nelser will look into existing fines and enforcement for illegal stocking (suggestions were made that the disincentives needed are real possibilities of CDOW closing

sportfisheries like Elkhead and significantly fining those who illegally stock fish). *Pending.*

20. The PD's office will e-mail PI's and the Committee with instructions for revising nonnative fish scopes of work. *Changes were characterized on the "For BC" tab. Krissy and Dave asked that they be cc'd when the PD's office makes requests of the PI's.*
21. The Program Director's office will draft a Flaming Gorge flow request letter and circulate it to the Biology and Management committees for review next week. *Done. Bob Muth noted Shane's comments regarding base flows and asked the Committee if they want any reference to base flows in this letter. Dave Speas said Reclamation **would** like to have a reference to base flows in the letter; the BC agreed. Shane said he concurs with mentioning base flows, but thinks it should be more similar to last year's letter, making it clear that it's preliminary at this time and more rationale will be provided in the later letter requesting base flows. Dave Speas said it would be helpful if there was reference to what hydrologic categories to which the 15,000 cfs for 5 consecutive days would apply to average and moderately dry hydrologic conditions. Bob Muth said he would clarify the request (the hope is that these flows would be available, within operations under the ROD, under both average and moderately dry conditions). Dave Speas will review Shane's comments and get back to Bob by Monday.*
22. John Hawkins will work with Shane Capron on a small revision to the #125 report, send that revision to the Biology Committee for final review no later than early next week (*done*), then finalize the report when the revision is accepted. *Done; remove from list after this meeting.*

New Assignments

1. Angela Kantola will post the revised January 15 meeting summary to the fws-coloriver listserv. *Done.*
2. The Program Director's office will send out revised 2009 SOW's by March 13.
3. Dave Irving will make sure Tildon has applied for an amended COR for 123a and that Bruce's larval razorback collections in the Green River (#22f) are included in the COR for that project.
4. The Program Director's office will get a Colorado River fish community scope of work to the Committee as soon as possible.
5. Tom Chart will check on status of the Tribe's and CRFP's SOW and try to get to the Committee by March 13.
6. The Program Director's office will finalize the draft Green R. backwater nonnative fish SOW, make sure drift sampling at Split matches the 90's protocol, and get it to the Committee by March 13.
7. The Program Director's office will contact Jeff Blakeslee, then get back with CDOW and Reclamation on the Yampa habitat work.

8. Dave Speas will let Angela know how many more PIT tags he can order under the contract this year and in subsequent years (probably can order at least another \$100+K this year).
9. Krissy will provide Utah's HCP protocol to Tom Czaplá.
10. Bob Muth will send the Maybell report to the Committee in March.
11. Tom Chart will check on the status of Reclamation's 2008 work under C-6 Hyd.
12. Krissy Wilson will consider having some of the June Sucker PIT tag array results, carp removal, etc. presented either at next January's researchers meeting or a Biology Committee meeting.
13. Mike Mills will e-mail the information about the March 17-18 June Sucker meeting to the fws-coloriver listserv.
14. Angela Kantola will send out a revised report due list and will establish a new category for the list called "new due date *requested*".