

July 13, 2009

Final Biology Committee Conference Call Summary
April 20, 2009

Biology Committee: Melissa Trammell (chairing the call in Dave Irving's absence), Krissy Wilson, Shane Capron, Tom Pitts, Pete Cavalli, Dave Speas, and Tom Nesler. Environmental groups and CREDA were not represented at the meeting. The Service did not designate a specific representative for the call, though Service employees participated.)

Other participants: Michelle Morgan, Sarra Jones (UDWR), Bob Muth, Tom Chart, Angela Kantola, Doug Osmundson, Koreen Zelasko, and Kevin Bestgen.

Assignments are indicated by ">" within the document and listed at the end.

CONVENE 9:30 a.m.

1. Review/modify agenda – The agenda was modified as it appears below. The meeting was to have included a web conference portion, but internet difficulties prevented that and the Biology Committee proceeded with just a conference call.
2. Approve Biology Committee March 24, 2009, conference call summary – The summary was approved as written.
4. Discussion and review of final draft reports:

Osmundson and White: Population Status and Trends of Colorado Pikeminnow of the Upper Colorado River, 1991–2005 – Tom Pitts suggested a table showing approximate lengths and age ranges would be helpful in understanding this paper; Doug will add that. Re: line 488, Tom Pitts asked for clarification about what's meant by biologically significant gene flow (as opposed to enough to affect demographics). Dave Speas asked about using body condition as an indicator of status and trends. Doug said body condition has improved as numbers have increased, so he suggests that concept needs to be revisited. Dave Speas suggested the Program may need to try to examine why Colorado pikeminnow are responding differently in the Colorado and Green rivers. Tom Chart noted that the new backwater study will address Colorado pikeminnow recruitment failure in the middle Green River. Perhaps Kevin Bestgen could include something like Doug's Table 6 (year class strength) in his report. Tom Nesler agreed that we might examine the causal differences in trends between the two populations; but we should not expect synchrony in trends; clearly promoting more strong or moderate year classes in each subbasin is helpful. The ad hoc population monitoring committee may want to discuss the differences in the populations. The Committee approved the report with the few minor revisions mentioned above; >Doug will provide a final version by July (if not sooner).

Zelasko, et al: Survival Rate Estimation and Movement of Hatchery-Reared Razorback Suckers *Xyrauchen texanus* in the Upper Colorado River Basin, Utah and Colorado – Koreen has already presented this information at the researchers meeting, etc. Koreen

explained capture probability related to specific reaches; Melissa suggested including an explanation that there was comparable sampling outside the stocking reaches and why the effort measure was not useful. Melissa asked if a rough estimate of how far we are from meeting our stocking objectives would be possible. Koreen said this would be more involved than it seems and an in-depth cost/benefit analysis would be required (as discussed in the recommendations). The Committee approved the report with the foregoing revision; Koreen said Trina Hedrick had asked for a few clarifications, as well, which >she will include and post a finalized pdf to the listserver by the end of this week and the PD's office will post it to the web.

BREAK 11:30 a.m. - 12:30 p.m.

5. Discussion and review new/revised FY 09 scopes of work (PD's Office, all; 30 min).

Genetic testing of *Gila* from Ouray NFH and Mumma – The Committee discussed the draft SOW e-mailed by Angela Kantola on 4/14/09. Angela said Tom Nesler has asked how closely this can tell us fish are related, can this analysis really tell us if the fish are full siblings (or just a range of probabilities that they are full siblings), for example? This may be an important start, but Tom has cautioned against having too high expectations of the results of this study. Angela noted that the scope says “The result will provide a numeric indicator of relatedness that can be used in concert with other information to optimize breeding strategies to minimize inbreeding.” Dave Speas asked if this work will include genetic confirmation that these are humpbacks and then also give us an indication of the power of the determination of relatedness. Can the results be compared to the Douglas' study? If we only 50-60 humpback chub, and there is room for 86 per plate, then perhaps some of the captive roundtails could be added. Krissy said that they ended up combining some of their family lots in the June Sucker program when some were found to be very closely related. Tom Pitts suggested the scope of work might benefit from peer-review to determine if it will provide the results expected. Tom Nesler said CDOW has some genetics experts with whom he'll share this scope. Melissa noted that Connie has been doing this kind of work on bonytail. >The Program Director's office will get answers to these questions from Connie and get a revised scope back to the Committee. Also, the PD's office will add “if samples received in a timely fashion” after “potentially earlier” in “Final report will be provided no later than September 30, 2010 (potentially earlier).” >The Committee will discuss the scope (via e-mail if possible, or scheduling another conference call, if needed) after we get answers to these questions.

The Committee also discussed the need to review the *Gila* in Captivity draft plan posted by Tom Czapla on March 20th. Melissa said this plan recommends building a broodstock and a refuge of the Yampa River humpback chub population (500 adult fish, capturing 50 per year). Melissa asked if that's the direction the Committee believes we should take, and if so, whether 500 adults are needed as a refuge population (given that the Yampa River population has always been small). Melissa said she would need to discuss this with the Park, and that an EA would be required, at minimum. Shane asked about the relationship of this effort to the Grand Canyon effort and how were looking at developing these two populations from a recovery perspective. Do we need refuges for sub-populations? Tom Chart said our approach has been to use nearest-neighbor fish for augmentation to preserve local adaptations; however, in this case we may need to add

humpback chub from other populations into the broodstock. Committee members will provide comments on the draft back to Tom Czapla by May 20.

6. Review assignments – The status of assignments is annotated at the end of this meeting summary.
7. Review reports due list – With regard to some of the overdue reports, Dave Speas expressed concern that we're relying on a too-limited network of expertise and need to begin to cast a wider net.
8. Schedule next meeting – June 30th conference call from 1:30 – 3:30 p.m. to discuss the Winkelman report and humpback chub draft captive management plan. July 13-14 meeting (1 p.m. to 5 p.m. on the 13th; 8:00 a.m. to noon on the 14th) in Grand Junction to discuss the FY 10-11 work plan.

ADJOURN 1:30 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; full strategy due May 1. 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. 4/20: Tom Nesler said CDOW expects to meet this due date.
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; Wernke available when landowner grants access. Bob Muth suggested Jeff Blakeslee of TNC may know the landowner. 2/20: The Program Director's office will contact Jeff Blakeslee, and then get back with CDOW and Reclamation on the Yampa habitat work. 4/14: CDOW is handling. 4/20: Tom Nesler said they've met with the landowner and Reclamation engineers will do an onsite survey as soon as the snow melts.

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. 4/14: Being routed for ~~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 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. 2/10: Pending. PD's office will send out a reminder. 4/20: Data are still needed on project #98a; Tom Nesler will check with Sherman Hebein.*
5. 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. 2/20: Bob Muth said he's talked with Rich Valdez and is 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.*
6. 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. 2/10: Muth and Chart will work with Debbie Felker to get letters out prior to the 2009 translocations. 4/14: In draft. 4/20: CDOW crews have noted that Elkhead Reservoir is down, which should reduce nonnative*

fish escapement due to spill this spring.

7. 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).* 4/14: *Pending.* 4/20: *Tom Nesler said they first need to get the mercury results to determine if consumption advisories are needed. The nonnative fish subcommittee will discuss further, but not move forward until the mercury question is resolved.*
8. 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~~ end of April.*
9. 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 Czaplá will work with Melissa on a letter to the Park. 10/30: *Pending.* *Czaplá 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 Czaplá 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. Czaplá is preparing a management plan for the humpback.* 4/14: *Czaplá sent out draft plan 3/20/09.*
10. 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. 4/14: Annual report provided; synthesis report still in internal revision. 4/20: Tom Nesler said he and Sherm Hebein have a few comments to reconcile which they will work on this afternoon, so Tom expects to have the report to Tom Chart by later today or tomorrow morning; Tom plans to send the report to the Biology Committee the same day. 4/21: PD's office received 4/21 and will e-mail to BC.

11. 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. 4/20: Still pending, though Tom Chart wonders if this may not shake out in the programmatic synthesis. Tom Nesler said he's content if this is looked at as part of the synthesis. Melissa said she thinks we've confused two issues: 1) the use of multiple-recapture passes and 2) not using the first pass as a tagging pass. The Committee agreed this could be addressed by the synthesis effort and can come off this list. Tom Nesler agreed, but noted that CDOW remains interested in peer review of this and our other methodological approaches to nonnative fish management. Dave Speas said the programmatic synthesis will be thoroughly peer reviewed.
12. 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. 2/20: The Program Director's office will get a Colorado River fish community scope of work to the Committee as soon as possible. 3/24: CDOW will work with Tom Chart to get a draft SOW to the Committee 2 weeks in advance of their April 20 web conference. 4/14: CDOW plans to conduct this work independently of the Recovery Program, so this can come off the list. 4/20: CDOW will implement a pilot study this year (with staff and equipment support from FWS-Grand Junction, if available) in the areas where Rick Anderson worked to determine if a more complete survey is needed. CDOW may provide a presentation on this at the 2010 researchers meeting.
13. 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. Done.
14. Krissy will provide Utah's HCP protocol to Tom Czapl. 4/20: Krissy has asked for a formal write-up from their hatchery folks.
15. Bob Muth will send the Maybell report to the Committee in 4/14: ~~March~~ April.
16. Tom Chart will check on the status of Reclamation's 2008 work under C-6 Hyd. Tom Chart said Terry Stroh is working on the annual report for this.
17. Mike Mills will e-mail the information about the March 17-18 June Sucker meeting to the fws-coloriver listserv. Done.
18. Study Goal #2 on page 3 of the 98a SOW should be clarified (like it is at the bottom of page 6). Done.

19. Tom Chart will talk to Dave Beers and John Hawkins about expected lifespan of electrofishing equipment. *Done.*
20. Aaron will provide more detail on the Baeser pump to Dave Speas as he receives it over the next few days. *4/14: FWS seeking bids.*
21. Kevin Bestgen will put the new work to extend razorback sucker stocking analysis into a stand-alone SOW and provide it to the Committee. *Done; will be posted to the web.*
22. Lower Green larval, juv RBS monitoring pilot study should say work will begin when water temperatures and flows are favorable.” >Tom Czapla will work with Paul Badame to make that change.
23. Tom Chart will work with Brett Johnson to revise the C18/19 SOW to post to the web. *Pending.*

New Assignments

1. Doug Osmundson will provide a final version of the Colorado River pikeminnow population estimate report by July (if not sooner).
2. Koreen Zelasko will provide a finalized pdf of the razorback stocking report by the end of this week.
3. The Program Director’s office will get answers to the questions about the *Gila* genetics scope of work and get a revised scope back to the Committee. Also, the PD’s office will add “if samples received in a timely fashion” after “potentially earlier” in “Final report will be provided no later than September 30, 2010 (potentially earlier).” The Committee will discuss the scope (via e-mail if possible, or scheduling another conference call, if needed) after we get answers to these questions.
4. Committee members will provide comments on the *Gila* in Captivity draft plan to Tom Czapla by May 20.