

Draft Biology Committee Meeting Summary
March 7-8, 2013, Denver, Colorado

PARTICIPANTS

Biology Committee: Harry Crockett, Tom Pitts, Dave Speas, Dale Ryden, Krissy Wilson, Jerry Wilhite, Brandon Albrecht, and Pete Cavalli. Via phone: Melissa Trammell.

Others: Tildon Jones (via phone), Pat Martinez, Tom Chart, Jana Mohrman, Angela Kantola, and Tom Czapla.

Thursday, March 7

CONVENE: 10:00 a.m.

1. Review/modify agenda – A presentation by Pat Martinez on electrofishing was added.
2. Modification of Baeser Bend SOW – Tildon Jones said all floodplains are fairly dry this spring. Rather than pumping to fill Baeser, they want to entrain wild razorback larvae at Old Charley Wash, pump it to keep it full, and then let the fish return to the river in late summer. The Baeser SOW also includes the PIT-antenna on Razorback Bar, which will proceed as planned. Subsequent larval / small-bodied fish monitoring will be conducted under the existing floodplain scope of work (#164). If conditions are similar to 2012, Old Charley will be the only floodplain available to sample. Weekly light-trapping will occur for 4 weeks after connection, and then they will continue sampling as long as they're capturing fish. Dale recommended continuing to sample throughout the season (continued fish capture notwithstanding, in light of San Juan experience finding fish ponds were drained at season's end after not having captured fish for some time). The wild razorback sucker larvae wouldn't necessarily have to be PIT-tagged before being returned to the river. The Refuge is re-negotiating lease of Old Charley with the Ute Tribe; therefore, it's not yet known if the wetland will be available for monitoring. Tom Chart said the Service is working with the Tribe on this at the Regional level. Krissy asked Tildon to consider whether Old Charley would be a good acclimation site for bonytail. Tildon said conditions and likely hydrology likely would make it difficult for bonytail acclimation this year. Old Charley connects to the river at ~5,000 cfs. Tildon said they have some screens they can use to exclude adult fish as the wetland is filling. Tom Chart said he thinks shifting to working with wild larvae is the right way to go and Old Charley is a good site. The Committee approved the modified SOW.
3. Flaming Gorge Flow request letter, initial FWTWG meeting update – Tom Chart said the letter has been sent and focuses on the Larval Trigger Study Plan. The FGTWG met yesterday and discussed the request and potential hydrology. The FGTWG meets again April 5 and will discuss whether larval trigger flows are appropriate if Old Charley access hasn't been resolved. Jerry Wilhite agreed the spring flow predictions are bleak and baseflow predictions even more so. Krissy said Utah hopes to discuss releases from Red Fleet into Stewart Lake prior to April 5. Melissa asked if the selenium contaminant group will want to drain Stewart again; Krissy said options to get flows into Stewart are still under discussion. It appears good progress is being made to meet selenium remediation goals, so water may be available.
4. Review draft revised RIPRAP, RIPRAP assessment and draft FY 14-15 Program Guidance
 - a. Draft revised RIPRAP (tables and text) & draft RIPRAP assessment (see RIPRAP tables)

The Committee reviewed the RIPRAP table and assessment (see notes below and on the RIPRAP text and tables documents, which will be compiled in a revised version provided to the Management Committee prior to their April 2 meeting).

TEXT

In response to a question as to whether Desolation Canyon humpback chub will play a role in developing humpback chub broodstock, Tom Czaplá said we need to do genetic testing.

TABLES

General comments

Jerry asked if we've reached the point where we need to establish revised population targets for nonnative species. Pat said the draft basinwide strategy mentions that this needs to be done and this task likely will be added to the RIPRAP when the strategy is finalized. The smallmouth bass and northern pike syntheses also will address this.

>The Program Director's office will check with Kevin Bestgen on a revised due date for the humpback chub combined population estimate from Gary White. Dave Speas suggested using the 131 analysis of Westwater/Black Rocks to identify clues as to early life history dynamics and recruitment failure; Tom Chart agreed this was a good idea.

ADJOURN: 5 p.m.

Friday, March 8

CONVENE: 8:00 a.m.

Colorado

Colorado & Gunnison: Where in the RIPRAP is the floodplain work recommended in the Aspinall Study Plan (work on Colorado River floodplains like that on Green River)? Dave Speas asked if we're tracking fish use of Colorado River floodplain areas. They're sampled to some extent in the Colorado pikeminnow population estimate in the early spring. Dave asked the PDs office to make sure all high priority research topics identified in the Study Plan.

The Committee discussed the large numbers of fish salvaged from canals each year. Tom Chart said Reclamation has noted that in the future we may want to consider augmenting these screens with e-barriers and/or modifying the screens.

Gunnison

>Harry Crockett will send the Biology Committee a copy of the CPW's Gunnison fish community report.

>Harry will provide the Committee an update on how the screen at Juniata Reservoir is functioning.

Yampa

Tom Chart said the Program Director's office remains concerned about continued translocation of northern pike captured in the Yampa River to the State HQ pond. Krissy noted this is still allowable under the Stocking Procedures, but we'd all like to see pike out of the Yampa basin entirely and therefore would like to see this translocation cease in the future. Pat said he considers the situation on the Yampa River as dire and believes funds for translocation (~\$3K) could be better used. Harry said this is one of the few activities in this area that generates a positive public response. Tom Chart recommended discussing translocation with Colorado as part of the overall conversation on our approach to northern pike in the Yampa River. Harry clarified that Colorado's policy for FY13 is to continue translocation of pike >20" to the State HQ Pond when sampling with hard-bottomed boats as in FY12. All criteria for translocating pike in the Yampa remain the same for FY13 as for FY12.

General comments

Tom Pitts suggested we need to review how we decide what items are complete/ongoing/pending, etc. The meaning of these terms has been lost and is now unclear. Some pending items are scheduled to be implemented in the future, others have no implementation date. Criteria need to be established both for what goes into an assessment and for adding RIPRAP items. The descriptions of RIPRAP items and the assessments need to be action oriented, and not include nebulous terms like "need to be," "should be," etc. Given that the RIPRAP is used by the Service for determining sufficient progress and ESA compliance for 2,000+ water projects, the ambiguities need to be eliminated. >Biology Committee members will provide comments to the Program Director's office by April 15, 2013 (subsequently modified to June 1, 2013 by the Management Committee) and the PD will develop recommendations for how to improve the RIPRAP at a subsequent Biology Committee meeting. >The PDs office will send this same request to the other technical committees and the Management Committee (*done*).

>Pat Martinez will work with States to compile a list of Lake Management Plans.

b. Draft FY 14-15 Program Guidance

Melissa suggested seeking external funding to determine impacts of mercury on Colorado pikeminnow reproduction and larval development. The San Juan Program may be getting involved with work on mercury; >Dave Speas will discuss with Mark McKinstry and the >PD's office also will contact Dave Campbell.

>Pat Martinez, Harry Crockett, Krissy Wilson, Dale Ryden, and Pete Cavalli will review the otolith analysis situation and make recommendations for FY14-15.

The Committee made a few changes to FY14-15 Program Guidance, summarized on the budget tables. The Committee had no comments on the draft Program Guidance text.

5. Draft revised Integrated Stocking Plan and action plan for establishing refugia for humpback chub – Tom Czapla provided an update on the recent conference call and changes to revised draft ISP:

Previous Production Plan

Hatchery	Bonytail	Razorback sucker
Grand Valley		14,895, 300 mm TL
Randlett		14,895, 300 mm TL
Mumma	5,330, 200 mm TL	
Wahweap	10,660, 200 mm TL	
Annual Total	15,990, 200 mm TL	29,790, 300 mm TL

Revised Production Plan

Hatchery	Bonytail	Razorback sucker
Grand Valley	10,000, 250 mm TL	6,000, 350 mm TL
Randlett	10,000, 250 mm TL	6,000, 350 mm TL
Mumma	5,000, 250 mm TL	
Wahweap	10,000, 250 mm TL	
Annual Total	35,000, 250 mm TL	12,000, 350 mm TL

We seem to be getting good razorback survival now, but bonytail have not fared as well; therefore, the draft revised plan shifts more effort to bonytail and proposes stocking larger, but fewer razorback sucker. Bonytail stocking will be moved to spring and summer (instead of fall) to give them more time to acclimate. The Grand Valley and Randlett facilities should have bonytail ready to stock in spring 2014. These proposed changes can be accomplished at current budget levels. (Mumma could double the number of bonytail they produce, but this would cost an additional ~\$40K which the Program Director’s office doesn’t believe we can afford at this time.) Krissy said the Stewart Lake project will be a good test of monitoring success. Harry mentioned the Butch Craig site, also. Tom Pitts asked if razorback survival estimates were applied to bonytail if we would achieve bonytail recovery by 2023; >Tom Czapla will calculate that. Tom Czapla says he thinks the stocking goals in the revised plan are a little conservative, so if anything, we should generally exceed them somewhat. The stocking size is an average. Krissy noted that PIT antennas should provide some information about survivability.

6. Presentation on status of Program’s current data management and options for the future – Tom Czapla sent out a brief issue paper on March 4. The GIS database probably could be used more than it is, but it will only generate 50 hits and that is somewhat limiting. Dave Speas mentioned that folks in the Pacific

Northwest may have ideas for how to better manage remote PIT data. Dale said his office doesn't have tag distribution databases outside the Recovery Program (3-species, San Juan). (Krissy said Utah had to order their 3-species tags from a different company that doesn't provide distribution files.) It also would help if Travis had the 3-species PIT data once fish are tagged. Tom Pitts strongly recommends having database experts /systems analysts define the system needed to process the massive amounts of data that will come available. We need to tell those folks what we need to do with the data and then have the experts tell us how we can do it. Melissa and Pete agreed. Dale said we'll need to keep people like Travis and Scott involved for their understanding of the data. Dale added that having this number of recaptures is a *good* problem to have. Harry recommended that as part of this, "legacy" issues with the data will need to be dealt with once and for all. Tom Chart said he has mentioned this to the SRLCC. One system to address the two recovery programs and the 3-species program would be ideal. We also will need a database manager to work with the systems expert(s). >Tom Czaplak will work with Scott Durst, Travis Francis, and Kevin Bestgen, to develop a problem statement. >Dave Speas will talk to Mark McKinstry about working with this group to develop a scope of work. Krissy reminded the group that sensitive species data must be protected and can't be released to the public without being masked.

7. Electrofishing – A section of the electrofishing workshop (canceled due to ice remaining on Highline Reservoir) was to have been on electrofisher power outputs. Pat Martinez gave the Biology Committee a brief overview of this presentation, showing electrofishing passes, miles, and hours under the Program's six major nonnative fish removal projects. The Program's new standard MBS ETS units require 68% less power output to the river to capture fish compared to GPP units. The literature on this topic emphasizes the importance of using no more power than necessary to capture fish so that electrofishing-induced mortality and injury to fish is minimized. This is another argument in favor of MBS units for any agency having difficulty contracting to purchase them. Pat is providing a table of electrofisher settings for field personnel.
8. Consent Item: Review and approve revised January 14&29 Biology Committee meeting/webinar summary – The revised summary Angela Kantola posted to the listserver on February 2 was approved as written.
9. Schedule next meeting and outline agenda (All, 10 min) – Webinar May 2, 9a-3p with hour break for lunch (agenda items will include a discussion of how to revamp the RIPRAP and the potential need for preliminary studies to inform operations of the soon-to-be rehabilitated Tusher Wash diversion and e-barrier). Webinar July 10, 8-4 with hour break for lunch (the main agenda item will be the FY14-15 work plan).
10. Review reports due list – Deferred; Angela Kantola will send out a revised list.
11. Review previous meeting assignments – Deferred; see Attachment 1.
12. Nonnative fish management activities
 - a. Nonnative Fish Strategy – Deferred. Note that the Management Committee decided it would be good for them to meet with States' Fish chiefs on this topic.
 - b. Update on 2013 plans – Deferred.
 - c. Recovery team – Deferred. Note that The Service has sent letters of invitation to the States to participate on the Colorado pikeminnow recovery team.

13. Updates

- a. White River flow recommendations and management plan. Deferred, see RIPRAP tables.
- b. Tusher Wash diversion rehabilitation, screen, and passage – Deferred, see RIPRAP tables. At their next meeting, the Biology Committee should discuss the potential need for preliminary studies to inform operations.

ADJOURN: Noon.

Attachment 1: Assignments

(Asterisked items on meeting agenda; items preceded by a “-“ can be deleted after this meeting)

Note: the order of some assignments has been changed to group similar items together.

For earlier history of items preceded by an ampersand “&”, please see [previous meeting summaries](#).

1. & Tusher Wash Screening: 1/26/12: **Tom Czapla, Dave Speas and Kevin McAbee** will draft a Tusher Wash mortality study and literature review RFP (or similar) for review by folks who would not be submitting a proposal. 7/12/12: *no proposals were submitted in response to the RFP, >the ad hoc committee will work on completing the literature search portion of the mortality study (which will aid the discussion in the biological opinion). Need to assign lead.*
 - *When the final engineering designs are provided (Kevin McAbee will send the Biology Committee any plans he receives), key Committee members should make another site visit.*
 - *In response to concerns expressed about the loss of fishing opportunities in the canal if an e-barrier is installed, Krissy Wilson will check into other nearby community fishing opportunities.*
 - *On January 16, 2013, interested Biology Committee members met with engineering design firm (McMillen) to discuss design and engineering of the e-barrier and passage.*
 - *The PIT antenna from Maybell will be installed in the Green River canal the week of March 18, 2013. The canal opens for irrigation on April 1, so the installation needs to be done before that.*
2. & Revise the Integrated Stocking Plan (ISP) and related issues. **Tom Czapla** is convening a group to revise the ISP.
 - *5/13/11: Cost-benefit analyses should be included in the revised ISP; Tom Chart said he thinks the Program Director's office can initiate this analysis. Results of the health condition profile meeting held at Dexter in March should be incorporated into the revised stocking plan.*
 - *9/27/12: Revised draft ISP sent to ad hoc group by 9/27/12; comments will be due by the end of October. 3/7/13: the **Program Director's Office (Czapla)** will provide a revised draft by March 31, 2013.*
 - *3/8/13: **Tom Czapla** will calculate whether we can achieve bonytail recovery by 2023 based on planned stocking rates in the draft revised ISP and using razorback sucker survival estimates as surrogate estimates for bonytail.*

Humpback Chub (population estimates)

- *3/7/13: **Program Director's office** will check with Kevin Bestgen on a revised due date for the humpback chub combined population estimate from Gary White. 3/14/13: LFL plans to turn this around as quickly as possible after they receive the most recent data from the Service (scheduled for 3/19/13).*

Humpback Chub (broodstock development / genetics)

- *11/22/11: Conference call to discuss humpback genetics and potential refugia/propagation held 11/2/11; draft action plan materials sent to group from Tom Czapla.*
- *3/6/12: **Tom Czapla** will remind the humpback chub genetics ad hoc group to submit comments (7/13/12 comments still pending). 1/17/13: Some comments received and incorporated; comments still pending from **Trammell**.*
- *As identified in the sufficient progress assessment and requested by the Management Committee, the **Program** will develop an action plan for establishing refugia for humpback chub (avoiding getting bogged down in genetic analysis). Mike Roberts has recommended building in limiting factor/life history studies to better understand what's going on in the system that's affecting humpback chub populations. 1/17/13: **Program Director's Office** will provide outline to Biology Committee by February 28, 2013.*

- *10/16/12: Age-0 Gila from Westwater were going to be brought to the Horsethief Canyon ponds this fall, but river conditions won't allow safe transport until spring (timing will depend on hydrology). Tissue samples from those humpback and fin clips collected from humpback in the field in 2012 will be analyzed by Wade Wilson to provide information needed to determine if we can use local humpback chub for broodstock development, if needed, or if we will need to incorporate fish from the backup broodstock at Dexter NFH (from the Grand Canyon).*
 - *After the ad hoc group meets, Melissa Trammell will draft an Environmental Assessment of the impacts of the humpback chub captivity management plan (also addresses how to deal with captured roundtail chub); **Krissy Wilson** will work with **Melissa** on the EA. **Melissa Trammell** will review Dexter's new plan to see if it may impact this (also will talk to Tom Czapla). 3/6/12: On hold (if even necessary) until the humpback chub ad hoc committee finishes their plan. If fish are not removed from the Yampa River, an EA won't be needed.*
3. Hybrid suckers: The **Program Director's office** will follow up on establishing a process to track percentages of hybrid suckers using standardized protocol for identification of hybridization at fish ladders and in monitoring reaches. *Pending. 1/11/12: Discussed on 1/5/12 NNFSC call; process pending from **Pat Martinez** (lower priority). 10/16/12: Pat will check with LFL about offering a course on sucker identification. 11/14/12: LFL has developed a preliminary, hypothetical matrix to aid in identifying hybrid catostomids. 12/7/12: discussed at the December 5-6, 2013, Nonnative Fish Workshop; key folks will review materials at the researchers meeting in hopes of providing a guide to "standardize" identification of hybrid suckers by agreeing to use a common set of identification aids (pictures, meristics, etc.), so we can be more efficient and confident in identifying sucker hybrids basinwide as a means of tracking the incidence or increase in this genetic threat by nonnative suckers to native and endangered catostomids. 3/13/13: **Pat Martinez** compiling identification guide and will distribute soon.*
 4. & Flaming Gorge/Green R burbot: **Melissa Trammell and Pat Martinez and Krissy Wilson and Jerry Wilhite** will work on a Flaming Gorge burbot risk assessment. *10/16/12: They held a conference call August 30 and October 15; will have another call November 20, and Melissa will present something to the nonnative fish workshop (done). UDWR is funding two studies (food web and early life history). Late this season, Tildon tried baited hoop nets and other methods in the Green River and did not capture burbot. 12/7/12: **Melissa** will provide a draft to the ad hoc committee members in early February. 1/29/13: **Melissa** asked if **UDWR** could include larval burbot sampling near the spillway in their current work in Flaming Gorge; **Krissy** thought they could. Tildon asked and **Krissy** said they're not doing any sampling in the tailrace for burbot.*
 5. & Nonnative fish management follow-up:

From January 14 and 29 meeting/webinar:

- **Melissa Trammell** offered to work with **Travis** and report other nonnative fish data (e.g. gizzard shad, nonnative fish captured during Colorado pikeminnow estimates to the Committee each year. The **Program Director's Office (Pat)** will provide specific protocol for handling nonnative fish during other work like Colorado pikeminnow estimates (i.e., which species to target, measure, take otoliths from, etc.) and reporting the data. Walleye, pike, gizzard shad, and other anomalous fish all should be removed. The **Committee** will review the report **Melissa** provides in working with **Travis** and then discuss what further analysis may be needed.

- In 2013, population estimates for smallmouth bass will only occur in Project 125. The **Committee** will reconsider resuming the smallmouth bass population estimates throughout the current Yampa River population estimate reaches in 2014, based on an analysis from André.
- The **Committee** agreed to suspend all mark / release of northern pike Program-wide in 2013. They made a **firm agreement** to revisit this issue (northern pike population estimates) when results of the northern pike synthesis are available.
- **Harry Crockett** will check to see if Colorado's Parks folks might be interested in administering a harvest incentive program.
- **98c & Upper Yampa: Potential PIs** and the Biology Committee will discuss possibilities for 2014 and make a recommendation for consideration during the 2013 nonnative fish workshop. **Colorado Parks and Wildlife** will review landowner permission for access. Meanwhile, **Harry** also will see if by any chance Billy could add an electrofishing pass from Steamboat to Hayden to the 98c work they've been funding (in 2013).
- **Pat Martinez** will confirm whether Brett's work will address analyzing previously-collected otoliths to determine if Duchesne River & Starvation Reservoir sources of smallmouth bass or walleye.
- **Matt Breen** will provide proposal for FY14-15 that they believe would monitor native fish response (e.g., sampling fish through time throughout the summer).
- The **Program Director's office and Vernal-CRFP** will work to develop a proposal for a smallmouth bass harvest incentive program on the White River.

Red Fleet: **Krissy Wilson** thinks water drawn down from Red Fleet can go into Stewart Lake and will get more information to the Committee. **UDWR, the Service, and Reclamation** also will discuss Stewart selenium issues.

6. **Fire impacts:** **Dave Speas** will invite the SRLCC Science Coordinator, John Rice, to come and discuss this with the Biology Committee (or at the Researchers Meeting) ways agencies might coordinate to prevent or mitigate impacts of wildfire on endangered fishes. *12/7/12: Dave said John is interested (but can't make the researchers meeting) and will continue to work with him to get him to a meeting 1/29/13: or webinar (perhaps more likely given travel restrictions). Tildon said this is on the radar of BLM's Vernal office with regard to the Wolf Den fire. Tom Chart plans pitched monitoring impacts of some of these fires to the SRLCC at their Denver workshop Feb 20-22 (along with Lake Powell monitoring and database management). Tom and Dave Campbell are discussing this with Kevin Johnson and John Rice, so he will bring this up with them and include Dave Speas.*
7. **Database Management:** The **Program Director's office** will work to define the overall problem/need to improve data management in light of the increased PIT antenna data, draft an overall schedule, and bring that back to the Committee in advance of the December meeting for discussion. *3/8/13: PD's office provided draft prior to the March Biology Committee meeting. Tom Czapla will work with Scott Durst, Travis Francis, and Kevin Bestgen, to develop a problem statement. Dave Speas will talk to Mark McKinstry about collaborating with this group to develop a scope of work...*
8. **Reports:** For the Elkhead escapement report, **Kevin Bestgen** will send the Committee revised verbiage related to the lake management plan, get that approved, and revise the report, also addressing other comments discussed; *pending*. **Kevin Bestgen** will provide a revised due date on the smallmouth bass synthesis.
9. **Protocol for documenting fish captures:** **Tom Czapla** will provide protocol for the scope of work format (or other appropriate venue) for how Program PIs will consistently document significant fish captures with

photos, etc. (E.g., new nonnative species, information from fish kills after fires, etc.) Krissy suggested the protocol also should include checking for ripeness and noting if fish are tuberculated. 12/7/12: *The PDs office will provide a due date. The Committee discussed how to document in the database things like fish kills, oil spills, etc. Access software allows linking to all kinds of information (including photographs). Information on mortalities may include things like PIT tags. Our existing database can clearly handle information on mortalities; we need to emphasize that these data need to be collected and submitted.*

10. Revised report review and flow recommendation approval process: 3/8/13: *Now posted to the web:* <http://www.coloradoriverrecovery.org/committees/biology-committee/biology-report-review-process.html>
11. **Joe Skorupski** will modify the Stewart Lake SOW (FR-165) and submit it to the Program Director's Office to post to the web. *Done; [on web](#).*
12. The **Program Director's Office** will post the SOW for the stationary PIT detection system in the Green River Canal to the web. *Pending.*
13. RIPRAP
 - **Harry Crockett** will send the Biology Committee a copy of the CPW's Gunnison fish community report.
 - **Harry Crockett** will provide the Committee an update on how the screen at Juniata Reservoir is functioning.
 - **Biology Committee members** will provide comments on improving the RIPRAP to the Program Director's office by April 15, 2013 and the **Program Director's Office (Kantola)** will develop recommendations for how to improve the RIPRAP to begin discussion at the May Biology Committee meeting. The **PDs office (Kantola)** will send this same request to the other technical committees and the Management Committee (*done*).
 - **Pat Martinez** will work with States to compile a list of Lake Management Plans.
14. FY 14-15 Program Guidance
 - **Dave Speas** will discuss with Mark McKinstry and the **Program Director's office** will contact Dave Campbell about studies to determine impacts of mercury on Colorado pikeminnow reproduction and larval development.
 - **Pat Martinez, Harry Crockett, Krissy Wilson, Dale Ryden, and Pete Cavalli** will review the otolith analysis situation and make recommendations for FY14-15.