

Biology Committee Webinar Summary
1:00 p.m. – 4:00 p.m., Tuesday, March 6, 2012

PARTICIPANTS

Biology Committee: Harry Crockett, Melissa Trammell, Dave Speas, Tildon Jones for Dale Ryden, Krissy Wilson, Jerry Wilhite, Tom Pitts, and Pete Cavalli. The environmental groups and CREDA were not represented.

Others: Pat Martinez, Tom Chart, Angela Kantola, Matt Breen, Kevin McAbee, Tildon Jones, Jana Mohrman, Mark Wondzell (NPS), John Shields, Michael Mills (Utah), Amy DeFreese, and Tom Czapla.

CONVENE: 1:00 p.m.

1. Review/modify agenda – Tom Chart mentioned that today is the deadline for comments on the draft Flaming Gorge flow request letter and Larval Trigger Study Plan. Melissa Trammell suggested including a burbot risk assessment and will submit a comment on that today. Dave Speas asked about the RIPRAP reference to smallmouth bass in the Dolores River, expressing concern that he hadn't heard about this sooner. The Nonnative Fish Subcommittee needs to discuss appropriate response (Angela added this to the RIPRAP). Dave added that this is of grave concern with humpback chub populations just stream in the Colorado River. Krissy said that per the 2006 report, the UDWR 2005 Dolores River surveys did not detect smallmouth bass, but largemouth bass were detected in a few locations. Krissy discovered later during the call, however, that a smallmouth bass was observed, but not captured in 2007.
2. Updates:
 - a. Price River position paper – Tom Chart described his proposal for revising the position paper wherein he characterized water user comments in four general categories, and proposed responses to each. Tom also noted Pete Cavalli's e-mail of February 22 with additional comments. Pete directed the Committee to Tom Pitts' comment on page 15 regarding tributaries and progress toward recovery throughout the whole basin. Pete understood the importance of taking a basin-wide perspective in any Section 7 consultation, but wouldn't that perspective, by definition, include the tributaries? Many BC members thought it should. Tom Pitts thought that Tom Chart should proceed with a next draft based on the responses provided to the Water User's comments. Tom Pitts asked that preliminary analysis provided at the end of Tom and Jana's response document be discussed with respect to the entire period of record. Melissa thinks it's important that the revised draft characterize the Price River as occupied habitat which has some level of contribution to recovery. As mentioned in his responses, Tom Chart agreed to take a closer look at the sampling conditions that occurred in 2001, 2002, and 2005 (including sampling occasions when endangered fish were not collected, as per Tom Pitts' suggestion), but he doesn't think collection of one pikeminnow in each of those years contributes much to the discussion of habitat conditions suitable for endangered species use. Again, this caused Tom and Jana to focus on endangered fish use in 1996 and 1997. Tom thinks the revised approach of characterizing conditions suitable to endangered fish use of the Price River in terms of a range of flows is more realistic than the previous draft. Tom Chart thinks tributaries have an important biological contribution (perhaps more important than we know), and we need to clearly describe that biological importance in this paper. Melissa Trammell agreed. Tom Chart indicated that he feels from a technical perspective an appropriate set of recommendations would include: a) maintain the status quo and; b) if possible, improve conditions. However, he recognized that the ultimate decision of where and how to expend Program resources will be made by the Management Committee. Tom Pitts suggested including a recommendation that the Service and Utah work with the Price River Enhancement Committee to see what could be done

to improve conditions in the Price River. Krissy agreed that there's a need to form a partnership with an existing group. Tom Pitts will provide Tom Chart with information about this group (*done*). >Based on his proposal and today's discussion, Tom Chart will provide a revised draft for the Committee's consideration (by April 20). Related tributary conversation: under the Three Species work, Utah installed a passive PIT array a few miles below Woodside in November (data have to be manually downloaded). Another array will be installed near the confluence on March 12. Harry Crockett said in the San Juan Program, CPW installed a couple of PIT arrays last September and has detected six unique pikeminnow using Yellow Jacket Canyon tributary. With regard to critical habitat, Dave Speas noted criticisms that the designations were made based on data collected 20 years ago and asked Tom Pitts how the water user community viewed the importance of critical habitat and where we implement recovery actions. Tom Pitts clarified that the Service defines critical habitat, and while it may be fair to say that those designations are out of date, the designations themselves do carry weight. Kevin McAbee said critical habitat does not, by itself, drive recovery actions (e.g., June Sucker in Utah Lake). The Service uses critical habitat designations in Section 7 consultations more than anything else. Kevin does not know of any Service direction that prioritizes recovery actions in critical habitat over other occupied habitat. Kevin does not envision the Service revising critical habitat for these fishes. Melissa asked if it might be time to revisit the (need for the) critical habitat appendix to the RIPRAP text. >The Program Director's office will consider this.

- b. White River flow recommendations – Jana Mohrman is beginning to work on these again and plans to have another draft out by mid-summer.
 - c. Tusher Wash mortality study and selective barrier – Tom Czapla said we're moving forward on two fronts: 1) developing an RFP for a mortality study (Dave Speas hopes to have it posted in early April and award an agreement this year for work to be conducted in 2012/2013); and 2) investigating the potential for an electric barrier at the head of the canal (with Smith-Root). Kevin said we now know a third turbine was added in the last few years and that there are two distinctly different types of turbines (two of each) at the site. Reclamation is estimating the cost of a coffer dam that would be required to install an electric barrier. Kevin was surprised at Smith-Root's high cost estimate of a barrier (not including construction), and wondered if it's competitive. Melissa has not been able to find information on the effect of an electric barrier on larvae, but we will need to look at that. Melissa asked if Bob Norman asked Thayn again about the potential to buy out the facility. Dave Speas noted that one of the *ad hoc* committee's three recommendations last fall was to go ahead and screen the canal (separate from the hydro facility). Kevin McAbee suggested that once we have the mortality study, this project would be well-suited for a structured decision making process; several agreed. Tildon asked if Darryl Snyder's work on electric fields referenced larvae. Melissa said he did, but it's not clear if the field strengths or life-stages were comparable. Tom Chart said Smith-Root has some information on impacts by life-stage, but emphasized that we are just investigating alternatives at this point. Pete noted that we discussed electric barriers with regard to pike habitat on the Yampa River and were told they wouldn't work in a downstream configuration. If there's new information on these barriers, we'll want to be sure to consider that as it relates to nonnative fish management. In response to an observation that electronic barriers may not be as effective in precluding downstream fish movement, Dave described that the orientation of an electronic barrier at Tusher could "deflect" fish safely downriver.
3. Review previous meeting assignments (see Attachment 1).
 4. Review reports due list – The Committee reviewed the list and made minor revisions.
 5. Schedule next meeting and suggest agenda items – Agenda items will include: review of #144 report; Price

River report, Tusher Wash update, and perhaps a Dolores River update from NNFSC. The Committee scheduled their next meeting as a webinar on May 4 from 9 a.m. to 4 p.m. with a one-hour break for lunch.

6. Consent items: Review and approve: a) January 12, 2012 Biology Committee Walton Creek conference call summary (sent by Melissa Trammell 1/25/12) – approved, no comments; b) January 26, 2012 Biology Committee meeting summary – Angela Kantola will revise and finalize (*done*).

ADJOURN 3:55 p.m.

Attachment 1: Assignments
(Asterisked items also on meeting agenda)

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. & 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.
 - *5/6/10: The Program Director’s office will complete the addendum to the White River report and provide a status update and recommendation on the draft Schmidt and Orchard report on peak (channel maintenance) flows for Biology Committee review by July 1, 2011.*
 - *Sent to BC July 1, 2011. 9/30/11: conflicting comments have been received, Tom Pitts has asked Jana for an extension on the comment deadline (extended to Nov. 2). See also agenda item #3c.*
 - *3/6/12 **Jana Mohrman** will provide a revised report to BC and WAC by mid-summer.*
2. & **Program Director’s office (Jana Mohrman and Tom Chart)** expect to provide a draft of the Price River report by the end of August 2009. *7/13/09: Dave Speas said the goal for the Narrows EIS is to get it out for public review in the fall, so the above schedule should work. The PD’s office will keep the Service’s SLC-ES shop in the loop on Price River.*
 - *12/12/10 Program Director’s office will use the information currently available to >develop a position paper on Price River flow recommendations for Committee review. The Program Director’s office will revise the draft Price River position paper and get it to the Biology Committee within the next week, with comments due a month later.*
 - *Price River position paper sent 12/30/10 with comments due Jan. 31/ 11. UDWR may submit a Price River PIT tag proposal for “activities to avoid jeopardy” funding.*
 - *3/11/11: **Tom Chart** will respond to comments and revise the report (in consultation with the Service) and bring it back to the Committee by July 1, 2011.*
 - *6/21/11: Sent to Biology Committee; on 7/12/11 agenda (7/12/11: review/approval deferred to 9/30/11 at Tom Pitt’s request); 9/29/11 Pitts’ comments submitted; 9/30/11: >**Tom Chart and Jana Mohrman will meet with Tom Pitts** to work out technical issues and get recommended revisions back to the Committee as quickly as possible. The Committee tentatively approved the report pending Committee e-mail (or potential conference call) approval of changes to be provided via the listserv from Tom Chart subsequent to he and Jana meeting with Tom Pitts. Tom Chart anticipates clarifying hydrologic analyses, but not overall report recommendations. Tom Pitts will still file a report on the non-technical issues. These issues were discussed at the [Management Committee on October 12](#). Potential technical revisions pending.*
 - *1/26/12 **Tom Chart** circulated Tom Pitts’ recent draft technical and programmatic/policy comments and he and **Jana Mohrman** convened a small group (Tom, Jana, Tom Pitts, Krissy Wilson, and FWS-ES Utah (Amy DeFreese or other) to review the comments.*

- 2/21/12 Tom Chart provided BC with draft responses to the water users' concerns along with a list from Tom Pitts of water user issues still not addressed.
 - 3/6/12: Based on his proposal and today's discussion, **Tom Chart** will provide the Committee with a revised draft by April 20.
3. &The **Program Director's office** will prepare a list of issues to be resolved regarding Tusher Wash screening (e.g., levels of mortality acceptable for what size classes, potential O&M costs, etc.) to help move this decision forward (and provide that to the Biology Committee and the Service). *Done.*
- 5/6/10: A **small group (Melissa, Kevin McAbee, Dave Speas, Tom Pitts, and Tom Czapla)** will work with **Kevin Bestgen** to review/build on the risk assessment, focusing on understanding existing impacts and what could be gained by various screening options. Tentatively, it would seem the best choice would be fish friendly runners with a screen on the irrigation ditch (contingent on further analysis). *BC to submit proposal to MC by 12/31/10.*
 - 12/13/10 BC discussion: The Biology Committee recommended >starting with a literature review (there may be good information from low-head structures in the eastern U.S.); working on outlining what would be needed in a mortality study (including engineering considerations); and further investigating whether the owners would consider full or partial decommissioning.
 - 3/1/11 As **Kevin McAbee** gets engineering info from the irrigators, he will share it with the ad hoc group. **Kevin** also will inquire more about the purpose of the 9" (at riverbank) – 20" (at center) concrete cap, to determine whether it is to benefit the existing diversion, or both the existing diversion and the proposed diversion on river left.
 - 5/13/11: Dave provided questions from Juddson Sechrist; the **Tusher ad hoc group** reviewed and discussed these on April 4 (summary sent to BC 4/20/11), agreed to have another meeting (site visit) this summer, and re-iterated the need for an initial literature search/review focusing on fish mortality at other sites with small hydro-electric facilities and smaller hydraulic head differentials. Krissy Wilson would like to participate in the site visit. >**Tom Czapla** will schedule the site visit (and talk to Kevin McAbee to see if he can arrange for the group to tour the inside of the facility). The **Program Director's office** and **Reclamation** will discuss how to accomplish the mortality study after information needs and timeframe are determined.
 - 9/30/11: The **Program Director's office** will ask if **Brent Uilenberg** and **Bob Norman** can provide description/specifications of the hardware at Tusher to help us understand if it can be retrofitted (11/8/11: awaiting reply). **Tom Czapla** will send a Doodle request to reconvene the ad hoc group to discuss who should do the literature review.
 - 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. 3/6/12: *The RFP will go out in early April.*
4. & 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. Discussion of humpback chub and back up pikeminnow broodstock were prominent in this meeting. Horsethief pond water may be whirling disease positive, but Krissy said that Utah can apply for a variance from their Fish Health Board since the fish will be stocked where whirling disease is present and razorback are not known to carry WD.
 - 6/2/11: Core ad hoc group identified: Harry Crockett, CDOW; Krissy Wilson, UDWR; and Pete Cavalli, WFG; Dale Ryden and/or Dave Schnoor, Travis Francis, USFWS; Dave Campbell and Scott Durst, San Juan Program; and input from hatchery managers as needed (particularly as it pertains to space at facilities).
 - 3/6/12: Tom Czapla will send out a draft revised ISP by March 31, 2012.

Humpback Chub (population estimates)

The **Program Director's office** will communicate with Gary White to determine how many and which of the questions from the HBC workshop to focus on. *Pending*. **Derek Elverud** will provide the database for Westwater for Gary White to combine with Black Rocks, which will require a separate SOW.

- *5/13/11: Black Rocks and Westwater data have been transferred to Gary White; **Program Director's office** will check to make sure we've got this analysis covered. 3/6/12: Done and 131 SOW revised accordingly.*

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.*
- *1/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. **Tom Czapla** will send out the briefing paper he received with the humpback chub genetic data to the Biology Committee (*done*). **Melissa Trammell** will review *Dexter's new plan to see if it may impact this (also will talk to Tom Czapla)*. 3/6/12: *This is 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.**
- *1/26/12: **Tom Czapla** will provide researchers direction on collecting fin clips from adult humpback in Westwater and Black Rocks and other populations, i.e., Cataract Canyon, Desolation/Grey Canyons, Yampa Canyon, or wherever else they may be encountered. 3/6/12: pending*
- *3/6/12: **Tom Czapla** will remind the humpback chub genetics ad hoc group to submit comments.*

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.

Razorback Sucker

& **Dale Ryden** and **Dave Schnoor** will summarize Ouray hatchery needs (water source for Randlett and generator for Grand Valley) and submit it to the Program via Tom Czapla. **Dale** also will seek Service funding. The report will include a discussion the relative risks of power outages at Grand Valley. Melissa suggested that for the long-term, we need a feasibility study for alternative water sources for Randlett.

- *5/13/11: Dale said Reclamation says alternative water sources would have a \$10M price tag. The Service has been discussing the manganese problem and will convene a group to discuss (Program Director's office, hatchery folks, Reclamation, etc.). Dave Schnoor has explored the idea of a generator for the Grand Valley unit. The **Service** should have a more comprehensive idea about these things in a few months.*
- *7/6/11: Dale e-mailed write-up (discussed briefly at 7/10-11 BC meeting).*
- *8/24/11: Service purchased Grand Valley Unit generator. Service/Reclamation met to discuss manganese; proposal to hire contractor and install additional filters pending.*
- *9/30/11: Proposal for **contractor** review of alternatives for remediating manganese approved by Management Comm. 3/6/12: **Tom Czapla** will check on the status, as the contractor has not yet been onsite.*

Bonytail

- **Dave Schnoor** will write up his thoughts on bonytail stocking and temperature (3/6/12: draft provided to Tom Czapla, Dave Schnoor revising and will send to BC). The **Mumma and Wahweap hatcheries** will compile their records of stocking temperatures and provide that to **Tom Czapla** for consideration as part of the integrated stocking plan.
5. The **Biology Committee** will work on prioritizing their list of potential additional capital projects at a future meeting. *Ongoing*. By September 22, 2010, **Committee members and others** who suggested capital

project ideas will provide short explanatory/descriptive text (preferably just a paragraph), and then the **Committee** will decide when to take the next steps (individual ranking, group discussion of combined ranking, etc.). *UDWR comments submitted; next BC discussion on hold.*

6. 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. Reclamation approved a CU study (through "other activities to avoid jeopardy") to crossbreed suckers and test fitness. 1/11/12: Discussed on 1/5/12 NNFSC call.*
7. Northern pike synthesis – 5/13/11 **Harry Crockett** will let **Billy Atkinson** know it will be helpful to compare the recruitment information to Billy's tag records from above Hayden (Harry will ask Billy to make his data available to Kevin Bestgen and Koreen Zelasko). *In process.*
8. Spring Flows 2011 – aerial photography - 7/10/11: *See Attachment 2 for reaches flown. The **Program Director's office** will look into potential partners to help fund stitching and georeferencing. 8/24/11: In progress. 9/30/11: CWCB's floodplain mapping unit has offered to assist. COE may help, but hasn't found funds yet. WAPA also may be interested. 1/26/12: Program contingency funds added to cover stitching; also georeferencing and habitat delineation for the 13 floodplain sites.*
9. **Krissy Wilson** will forward the Committee UDWR's plan for larval light trapping in Flaming Gorge Reservoir (looking for burbot) when she gets it. *9/30/11: this survey for larval burbot couldn't be completed as the likely window was missed this year; willing to consider in next year's work plan. This will be discussed at the nonnative fish workshop. 1/11/12: Gardunio said burbot are attracted to light during larval stage, but such trapping in winter could be difficult. 3/6/12: **Krissy** will provide the annual report (and other relevant reports) to the Committee; **Pete Cavalli** will forward a copy of Wyoming's report(s), also. **Krissy** said she asked and they do not capture smallmouth bass or burbot just below the dam. **Melissa Trammell and Pat Martinez and Krissy Wilson** will work on a Flaming Gorge burbot risk assessment.*
10. The **Program Director's office** will make a recommendation regarding whether or not to password protect the PIT tag GIS site. *2/24/12: Jana Mohrman spoke with the FWS Regional Office, and they didn't think we needed to password protect the site. Kevin McAbee suggested and Patty Gelatt agreed that the risk from any negative use of the data (poaching, etc.) is so small that it is outweighed by the positive use of getting data out to the general public (education, research, etc.); however, it is important to protect spawning locations (3/6/12: Tildon Jones said he doesn't think spawning locations could be discerned from the available data).*
11. **Tom Chart and Jana Mohrman and Kirk LaGory** will convene fish biologists involved in developing flow recommendations and geomorphologists (e.g., John Pitlick and Cory Williams) to identify logical next-steps (e.g., is MD-SWMS modeling the best way to proceed) to evaluate flow recommendations, particularly on (but not limited to) the Gunnison where sediment transport is so important. *Pending.*
12. New 2012 SOWs and revisions:
 - **Jana Mohrman** will work with Reclamation on the aerial photography SOW. *Pending*
 - **Jana Mohrman, Tom Chart and Kirk LaGory** will work on a SOW to assemble a team to interpret the findings of Project 85f. *Pending*
 - **Tom Chart and Jerry Wilhite** will work with **Argonne** on a SOW for the C-6 Hydro work to assist with physical aspects of larval trigger study plan. *Pending.*
 - White River nonnative fish removal - **Colorado and the PD's office** will schedule a public information meeting in Rangely. **Colorado, the Service, and the PD's office** will work to make necessary landowner contacts before the public meeting announcement.

13. **Angela Kantola** will add a place for Reclamation agreement numbers to the final report format on the web.
14. The **Nonnative Fish Subcommittee** will put together a list of reservoirs where we have concerns about escapement and try to begin prioritizing those for treatment. *3/6/12: captures of smallmouth bass in the Dolores need to be included in this discussion.*
15. **Kevin McAbee** will ask BioMark about battery packs for the solar arrays (said to only last ~5 years, with replacements at \$7-11K) and determine if replacements need to be worked into the negotiation with Questar.
16. **Dave Speas** will check on what gets prepared/distributed in the way of a FGWTG meeting summary (per mention in the draft flow request letter). **Kevin McAbee and the Service** will work with Reclamation and the PD to draft a letter that covers the remaining years of the Larval Trigger Study Plan, and will discuss this at the March 8 meeting.
17. **Dave Speas** will check on the ability to order the flat plate antenna equipment now and return it, if needed (e.g., if the Committee doesn't decide to move forward with this). **Reclamation** will purchase the antenna gear and the **Service** will revise the SOW to address BC (e.g. permitting; include spawning bar photos and graphics the Committee looked at over the last few days; other possible application of the gear; and Dr. Bestgen's suggested uses of the data collected). *3/6/12: Equipment ordered last week with goal of getting to Vernal by 3/15/12.* **Jana Mohrman** was to ask Cory Williams if he can predict velocities at the razorback spawning bar site; however, subsequent discussions with Aaron Webber Jones indicated that the flat plate PIT tag reader site that has been chosen will not really benefit from simulated velocities. To begin with, we don't know at what velocity the equipment would be "blown out" anyway. The spawning bar is on the inside of a bend with cobble and gravel substrate (if it was a depositional area, they would see sand). The Service will stake the equipment as strongly as possible.
18. **Jana Mohrman** will investigate the option to install a redundant temperature logger on a separate cable at the Yampa/Green confluence site. **Dave Speas, Jana, Kevin Bestgen, Carrie Cordova and Jim Renne** will discuss all this (including other sites) further. *3/6/12: group has a conference call scheduled for 3/9/12.*
19. **Harry Crockett** will provide a summary of Kenney Reservoir Sampling ('07, '08, '10, no smallmouth detected).
20. The **Program Director's office** will review the critical habitat appendix to the RIPRAP text and consider whether it should remain as written, be revised, or be deleted.