

Biology Committee Meeting Agenda  
July 12-13, 1-5 p.m., 8-Noon  
Clarion Inn, 755 Horizon Drive, Grand Junction, CO

**Thursday, July 12****CONVENE: 1:00 p.m.**

1. Review/modify agenda (Crockett, 5 min)
2. Review reports due list (Kantola, 10 min) – *Angela Kantola will e-mail the Committee an updated reports list in advance of the meeting. Note: the razorback monitoring report and Elkhead escapement report will not be ready for review at this meeting as previously contemplated.*
3. Review previous meeting assignments (see Attachment 1) (All, 25 min)
4. Tusher Wash (Czapla, all 1.5 hours) – *The Committee will discuss options for preventing entrainment at the hydropower plant and irrigation canal at Tusher Wash (e.g., electrical barrier, settling pond, screens, weirs). Please see June 7, 2012, e-mail from Tom Czapla outlining the current situation and providing a decision tree.*

**BREAK (10 min)** (*Note: Angela Kantola and Tom Chart need to depart the meeting by 3:30 p.m. to set up an informational booth about the Recovery Program at the Grand Junction Thursday Downtown Market.*)

5. Review of Nonnative Fish Subcommittee Update (Martinez, 30 min) – *The Committee will get an update on NNFSC activities (the Subcommittee will have met earlier that week).*
6. Electrofishing training course update (Speas, 5 min) – *Dave will provide an update on interest expressed in providing an electrofishing course in Grand Junction in early March 2013.*

**ADJOURN 5:00 p.m.****Thursday, July 12****CONVENE: 8:00 a.m.**

7. Determining natal origin of San Juan River razorback sucker through elemental analysis of scales – (Steve Platania, 1 hour)
8. Lake Powell inflow (All, 1 hour) – *The Committee will discuss the need and potential to sample the Lake Powell inflow for endangered fishes (similar to San Juan and Lake Mead efforts).*

9. Integrated Management of SMB in the White River (All, 30 min.) – *The Committee will discuss what other tools in addition to electrofishing (e.g. floating weir, etc.) we might apply/test/evaluate to rapidly suppress and sustain a reduction of smallmouth bass in the White River.*
10. Submitting PIT-tag data (Ryden or Francis, 10 min) – *PI's need to be reminded to submit their PIT tag data for both endangered and three species as quickly as possible to aid in interpreting the hits on remote PIT antennas.*
11. Schedule next meeting (September?) and suggest agenda items (All, 5 min)
12. Review and approve May 4, 2012 Biology Committee webinar summary (revised summary sent with this agenda). (Note: this is not a “consent item” because the Committee will need to discuss some of the comments received on the summary.)

***ADJOURN by noon***

Attachment 1: Assignments  
(Asterisked items also on meeting agenda);  
(A “-“ before an item indicates it likely 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. & 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** provided the Committee with a revised draft on April 23. Committee discussed; Tom will finalize for MC. 6/26/12: Done and accepted by Management Committee
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. 4/17/12: RFP sent out April 13; proposals due June 29 (which can be cancelled if we decide to pursue a different option).
  - 6/26/12: Reclamation is developing a cost estimate for a coffer dam that would allow installation of an electrical barrier.
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).*
- *4/17/12; 6/26/12: Tom Czaplá send out a rough draft revised ISP to the core group on April 13, 2012 and they held a conference on May 9; hatchery personnel determining if they can grow out 250mm bonytail in 24 months.*

#### 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.*
- *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 Czaplá** 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 Czaplá). 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.*

#### 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 Czaplá.*
- *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 Czaplá** 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 Czaplá). 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 Czaplá** 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. 5/4/12: pending. Fin clips should be taken from all fish identified as humpback chub (also roundtails, under a different project). Tom Chart said it would be great to have a photo of the fish on a grid board; Krissy agreed. Tom Czaplá will include that in the protocol.*

- 3/6/12: **Tom Czapla** will remind the humpback chub genetics ad hoc group to submit comments (6/26/12 comments still pending).
- 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. 5/4/12: Contractor has recommended two options in a preliminary report; likely the selected option will be to install one more bank of filters/BIRM. 6/27/12: contractor made recommendations and Ouray ordered the filter bank and has been replumbing the facility. Contractor may provide report after the install and recheck..

#### 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. Done; Tom Czapla included Dave's recommendations in the draft ISP. Krissy will get river temperature at stocking prior to 2008.
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. Tom Chart noted that the Thunder Ranch repairs are complete, but there will be costs for repair of the Price-Stubb apron, also.
  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. 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). *Done.*
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. 6/27/12: All photos will be stitched with river miles and an index posted to the internet. The Recovery Program has provided \$39,500 to date (including FY11 flights) will provide Reclamation with an additional \$14,385 to complete the work.*
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 and Jerry Wilhite will work on a Flaming Gorge burbot risk assessment (after May 15).*
10. **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.*
11. New 2012 SOWs and revisions:
  - **Jana Mohrman** will work with Reclamation on the aerial photography SOW. *Done.*
  - **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. 6/26/12: *Argonne will shoot breach invert elevations fall 2012 and will purchase more DO sensors for floodplains.*
12. **Kevin McAbee** will ask BioMark about battery packs for the White River pit antenna 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. *Pending.*
13. **Dave Speas** will check on what gets prepared/distributed in the way of a FGTWG meeting summary (per mention in the draft flow request letter). *Dave said the summaries are sent to the FGTWG. 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. *Done.*

14. **Harry Crockett** will provide a summary of Kenney Reservoir Sampling ('07, '08, '10, no smallmouth detected). *Done; Harry provided the following on 4/20/12:*

Our recollection was that both Kenney and Rio Blanco were sampled in all 3 of those years, but when we dug out the data we found that only Rio Blanco was sampled in 2010. I apologize for the misinformation. Although the available data for Kenney are less recent than I thought, the facts remain that we have never collected a smallmouth bass in Kenney Reservoir (which was also sampled several times in the '90s), nor has one been reported to us by anglers. Recent anecdotal accounts from anglers are in agreement with this. Kyle fully intends to sample Kenney in 2012, so we should soon have more up-to-date information, barring unforeseen difficulties. Kyle is going to be a very busy guy.

In both years otoliths were collected for Martinez/Johnson microchemistry studies, and either those researchers or their students/technicians were among the crew.

Kenney 6/28/2007. 4 boat electrofishing stations, effort 18.75 – 21.75 mins each. SE, SW, N and NW shorelines.

<u>Species</u>	<u>N</u>	<u>Length (mm) min-max</u>
Black crappie	3	174-195
Bluegill	1	183
Channel catfish	14	214-359
Common carp	32	216-580
Flannelmouth sucker	1	135
Fathead minnow	14	avg = 60 mm
Rainbow trout	7	208-285
Red shiner	9	avg = 67 mm
Green sunfish	265	9-166

Kenney 5/20/2008. 3 boat electrofishing stations, effort 9.25, 20, and 25.5 mins.

<u>Species</u>	<u>N</u>	<u>Length (mm) min-max</u>
Black bullhead	1	158
Black crappie	17	89-258
Common carp	2	449-593
Flannelmouth sucker	7	201-365
Rainbow trout	54	158-302
Green sunfish	17	79-178

15. **Tom Chart** will finalize the Price River report and submit it to the Management Committee. *Done; Management Committee accepted report 6/26/12.*

16. **Dave Speas** (and any other **Committee members**) will send **Joe Skorupski** additional comments on the #144 report by May 11. **Dale Ryden** will see if there's a citation from a San Juan summary document that he can send Joe (*done*). **Joe** will revise the report and send to the Committee by for final approval by May 25, then the **Committee** will approve via e-mail by June 8 (with no response indicating approval). *6/27/12: Joe provided final revisions 5/27, no additional comments from BC; UDWR just needs to submit final report.*

17. **Principal investigators** will provide e-mail updates on work changes and river conditions and any other pertinent news to the Biology Committee as things develop, since this year's field season will be so unusual. *Ongoing.*
18. \*Tom Pitts suggested **Reclamation** work with **Smith-Root** to put all the Tusher Wash electrical barrier installation costs (barrier, coffer dam, construction, etc.) in a report for the Committee's review. **Tom Czapla** will work with Smith-Root and Reclamation to produce that. Dale said it would be very helpful to clearly identify capital versus ongoing maintenance costs. Tom Pitts suggested we also need to describe the process for making a decision on how to proceed at Tusher, or at least identify what information we will need to make a decision. What actually will happen at Tusher has been something of a moving target, but with their recent federal grant, that may solidify somewhat, so we might be able to create some kind of flow chart or decision tree describing how we would proceed depending on different scenarios. Tom Czapla will work on the cost estimate, decision process/information needed, and provide that to the ad hoc Committee so that we can have something back to the Committee by the next meeting. *Done (see 6/7/12 e-mail from Tom Czapla).*
19. \***Pat Martinez** and **Dave Speas** will poll agencies to determine the number of folks they would want to send to a Program-specific electrofishing course led by Jim Reynolds and what time of year would be best. *In progress.*