

January 17, 2008

Biology Committee Meeting Final Summary
October 31–November 1, 2007
Grand Junction, CO

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

Other participants: Tom Chart, Chuck McAda, Angela Kantola, George Smith, Tim Modde, Cassie Mellon, Sam Finney, Paul Badame, Rich Valdez., Kevin Bestgen, Chuck McAda, Pat Martinez, Lori Martin, and Patty Gelatt, and Al Pfister. John Hawkins participated by phone on Thursday morning.

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

Wednesday, October 31

CONVENE 1:15 p.m.

1. Review/modify agenda–The agenda was modified as it appears below.
2. Approve July 16-17 meeting summary–The Committee made one modification to the summary; >Angela Kantola will post the revised summary to the listserver (*done*).
3. Review assignments from previous meetings - The Committee reviewed assignments from previous meetings (as listed in the meeting agenda). Assignment updates, those still pending, and new assignments can be found in the assignment list in Attachment 1.
4. Review report for Colorado River centrarchids isotope study (C18/19, sent to BC by Pat Nelson on August 31)–For future reference, Tom Nesler noted that the Committee’s protocol that a report comes to the Committee *before* manuscripts are submitted for publication. The Committee discussed the report recommendations; Tom Nesler suggested the second recommendation regarding focusing centrarchid control in backwaters and beaver ponds may be one the Program will want to follow up on in the late summer when these habitats are isolated from the river, particularly larger ones in the Grand Valley. The Committee approved the report as written.
5. Acceptance of "Channel Monitoring to evaluate geomorphic changes of the mainstem of the Colorado River" by John Pitlick - Tom Pitts said his comments were addressed and he recommends acceptance of the report (although it needs a date on the cover). The Committee accepted the report as revised.
6. Review reports due list–Angela Kantola distributed an updated list which the Committee discussed. >Tom Nesler will follow up on the Yampa pike sources report. >Tom Chart

will work with Trina Hedrick and Kevin Bestgen to establish new due dates for the larval razorback sucker drift report by mid-November. > Paul Badame will send out the comments received from Lew Coggins and Chuck McAda on the Cataract report (*done*); BC comments will be due two weeks later. Melissa said The Park Service and Tim Modde are withdrawing their request for Program approval of the Yampa Canyon smallmouth bass report, having successfully drawn attention to the smallmouth bass concerns. >The Park Service will send copies of the report to the BC and the PD's office for their information when it is finalized. >Angela Kantola will distribute a revised reports due list based on the Committee's review.

7. General discussion of nonnative fish management synthesis reports and review for final approval of 3 reports listed below—Tom Chart emphasized the importance of completing these reports in advance of the nonnative fish workshop. Four reports (Kevin Bestgen's Project 115 and 140, Sam Finney's Project 98b, and Bob Burdick's Project 126) have been revised in response to comments. . The first three of those will be discussed by the Biology Committee today—approval of the Project 126 report will be on the next BC mtg agenda. We are awaiting revised versions of three reports (Project 110; 109; 123). These PIs have committed to submitting revised versions by November 30. We have yet to receive a first draft from John Hawkins (Project 125) and Lori Martin (Project 98a). John and Lori also have committed to submitting a first draft by November 30. Annual reports also will be critical pieces of information for the nonnative fish workshop. Melissa noted that the Committee will have five synthesis reports to review within two weeks (between the end of November and the nonnative workshop). PIs will again be asked to provide short handouts on their projects for the workshop (about a week in advance). Tom Chart said these will be similar to last year's and >he will send out a request for those handouts in the next week or two. Tom said he does believe there's a need for a second level of synthesis of the synthesis reports and perhaps that can be discussed during the nonnative fish workshop.

- a. Project 115 - Bestgen, K.B. et al. 2007. Non-native fish removal in the Green River, Lodore and Whirlpool canyons, 2002-2006, and fish community response to altered flow and temperature regimes, and non-native fish expansion - Kevin said he didn't receive too many comments on this report. Kevin noted that he hasn't yet talked to Bob Burdick about a standardized metric for "degree days," but agrees we need to do that. The Committee discussed the report, including the many factors at play in Lodore Canyon and the potential for nonnative fish control through flow and temperature manipulation in addition to mechanical removal. The Committee approved the report as written.

- b. Project 140—Bestgen, K.B. et al. 2007. Native Fish Response to Removal of Non-native Predator Fish in the Yampa River, Colorado. Tom Nesler noted that since this work has shown that the native fish aren't responding, the recommendations are good ones in that we have to determine what to do next. Melissa suggested clarifying that the first recommendation is an endorsement of continuing the Program's increased removal efforts. The Committee approved the report with this revision.

c. Project 98b–Finney, S. T. and G.B. Haines. 2007. Northern Pike Removal, Smallmouth Bass Monitoring, and Native Fish Monitoring in the Yampa River, Hayden to Craig Reach, 2004-2006. Sam outlined the changes he made in response to comments. Krissy noted that table 3 on page 23 needs a unit of measurement. Krissy asked why we're placing pike in ponds where they can escape back to the river; Sam said the State Wildlife Area ponds rarely reconnect, but anglers may be (illegally) releasing fish back to the river. Sam will clarify the last sentence under "angler returns." Rich Valdez asked if Sam could estimate how many tagged, relocated fish may have gotten back into the river (via escape or angler transfer), perhaps just a ballpark estimate using capture probability. Sam said that if there were significant returns to the river, he would expect it to have shown up in their catch rates. Tom Nesler noted Colorado may need to check to see if any pond berms need to be fixed. Tom said he does not agree with Sam that personal communication and unpublished literature should not be relied upon in making critical reports. Tom's main concern has to do with statements regarding escapement from Elkhead, and as a result, he is not inclined to approve the report as written. Dave Speas concurred that too many comments were dismissed (e.g., sometimes text was just deleted rather than the comments being addressed). Sam said that mid-course changes in the project meant that consistency could not always be maintained, which made this a difficult report to write. Dave Speas said he'd like to see a better discussion of correlation between abundance and CPUE in the report. Dave will review his comments on nonnative fish and angler returns and provide any further comments to Sam directly. Melissa said she doesn't understand synthesis as just "boiling it down," and she also wanted to know more about some of the things included in the first draft of the report, so she was disappointed that Sam responded to comments by deleting questioned text. >Tom Nesler will review his comments and Sam's responses and provide rebuttals to Sam and the Committee. >Dave Speas and Melissa Trammell will do likewise. Then >Tom Chart will work with Sam Finney and Dave Irving to reach resolution and provide responses to the Committee on remaining issues (as an interim step to seek consensus before Sam revises the report again). Tom Chart said they would do this as quickly as possible, but didn't know if everything could be resolved before the workshop. Melissa asked if CDOW could provide a report on Billy Atkinson's work on pike in Catamount and the river below; >Tom Nesler will check on this.

8. Discussion of the Yampa River nonnative fish management strategy–Tom Chart said Rich has revised the document significantly. Rich noted that the Implementation Committee directed the preparation of this strategy in October 2006. In the most recent revision, Rich has tried to condense the strategy from its former 40+ pages (now ~17). Rich reviewed objectives and assumptions of the strategy. The strategy "consists of seven components including: information and education; prevention; early detection and reporting; data repository and information management; information sharing and collaboration; mechanical removal; and research and development." Melissa suggested replacing "policy" with "information and education" isn't accurate. Rich said he was trying to avoid being directive. Tim Modde said he believes it's vital to identify our nonnative fish management goals (from a policy standpoint), e.g., is the goal to crash a population, reduce it in a certain area for a certain length of time, etc. Tom Chart suggested that discussion of the Program's decision-making process may help address some of these

policy questions. Rich said we might add language (perhaps identifying options) to the “execution and coordination” section to address Tim’s concern. Dave Speas suggested possibly re-casting Table 1 as a Gantt chart at some point so that we can identify when things will happen, who (e.g., what committee) needs to act, etc. Melissa said she likes the direction of the strategy, although she’d like to have more discussion of long-term strategy and phasing. Rich agreed it would be good to do a Gantt chart / phased approach. Tom Chart suggested an ad hoc group work with Rich to further refine the document. Tom Nesler, Tom Chart, Melissa Trammell, Dave Speas and Rich Valdez will form the group. >Group members will send their comments and insights to Rich and the other group members and then will have a conference call on Monday, November 19 at 9:00 a.m. using the Program’s conference line (Tom Chart will send out a reminder).

9. Schedule next meeting–January 17 in Moab, from 8 a.m. to 4 p.m.

ADJOURN 5:15 p.m.

Thursday, November 1

CONVENE 8:00 a.m.

10. Recap of the nonnative fish management public meeting held in Grand Junction on 14 August 2007–Angela Kantola referred to the summary e-mailed by Debbie Felker on August 21. Roughly four members of the public and ~40 Program participants attended the meeting. Steve Yamashita introduced and emceed the evening, then John Shields, Carol Taylor, Tom Iseman, Rita Crumpton, Sherm Hebein, and Pat Nelson spoke briefly. Extensive comments were made by Tyler Peck and Dee Ranzenberger (Palisade resident). Eric Younts (angler, co-owner WesternSlopeAnglers.com) and an unidentified angler added brief comments. Tom Nesler observed that the small group of outspoken anglers in the area likely will never approve of the Program’s nonnative fish management activities, but we can communicate with them via the angler’s roundtables. Tom Pitts agreed this kind of public meeting is not an effective use of time and resources and doesn’t engage the public at large. The I&E Committee may wish to explore ways to reach the broader public.
11. Recommendations from the *ad hoc* steering committee on this year’s nonnative fish management workshop and the proposed pre-meeting of PTs for discussion and approval by the Biology Committee–Tom Chart reviewed the workshop agenda developed by the *ad hoc* steering committee. Dave Speas recommended that the synthesis report presentations include 2007 results. Tom Nesler emphasized that this is a *workshop*. Participants should have read all materials in advance of the workshop (annual reports, synthesis reports, and one-page summaries). He advised that the synthesis presenters should work together in advance of the workshop (perhaps a conference call of the PTs with Rich and/or Tom Chart participating) so that they can provide a true panel perspective, not just individual presentations. The goal is to bring to the workshop a coherent discussion of the overall strategy and control approach for each species. Tom Chart agreed (but also emphasized that the PTs first priority is to get their synthesis

reports done). With regard to second-level synthesis, Dave Speas advised that this should also include quantitative analysis. Tom Chart said he would like the workshop to provide specific direction or framework as to what the second-level synthesis should look like and then the Program can determine the best way of getting that done. With regard to consistent database(s), Melissa reminded the group that a number of the northern pike recaptures, for example, are made in the course of other studies (e.g. population monitoring, smallmouth bass control, etc.), and we need to compile this information in one database (Chuck McAda's database is not a nonnative database). Dave Speas expressed concern about the lack of time available each year to fully analyze nonnative results. Rich Valdez said that other programs have worked to resolve this dilemma by hiring outside analytical help or hiring an additional person within the program. Dave Irving suggested that we free up some of the biologist's field time by hiring more biotechs to help do the field work. This would allow the biologists to spend some of their "over-booked" field work time in the office analyzing data and writing reports. Krissy Wilson asked if we should replace the researchers meeting (or a portion thereof) with a second round of nonnative workshops. Melissa suggested that perhaps the Committee could meet or have a conference call right after the December nonnative workshop to discuss what follow-up might be needed during the researchers meeting. The Committee discussed having one day of the researchers meeting focusing on nonnatives (second day) and the first day focusing on other Program elements (perhaps specific areas with focused discussion, e.g., flow recommendation evaluation, floodplains, population monitoring). Tom Pitts emphasized that our Congressional representatives are very interested in how we're measuring success, and that would be a good topic for the first day. Recovery goals might be another topic. >Tom Chart and Rich Valdez will revise the nonnative fish workshop agenda to include the team approach to the synthesis reports presentations and allow more time to develop a framework for the second-level synthesis. Review of recommendations should probably be moved up to right after the break. Discussion of new invasives might be deferred to the researchers meeting.

The Committee discussed the pre-workshop meeting for principal investigators. Rich Valdez suggested the third item on John Hawkins's draft agenda ('Discuss removal efforts in 2007 to include techniques used, effort [number of passes] and whether there are better ways to focus our efforts based on known biology?') would be the most important thing to achieve. John agreed that items 1 and 2 can probably be accomplished before the pre-meeting. Tom Chart suggested that the collaborative presentations at the workshop should describe the populations and what we know about them and what we're doing in terms of control in light of what that population looks like. Rich said he thinks the Program should provide overall objectives, goals, and purpose and a list of items that the researchers should address (and will provide that with the revised nonnative workshop agenda), and then the researchers would go from there to determine what to present. Rich also suggested starting from a big-picture perspective (considering 2007 as the 3rd or 4th point in the data may be helpful). >The ad hoc group (with Tom Nesler, if he can participate) will have a conference call at noon tomorrow (Friday, November 2) to develop guidance for the PIs team presentations (*done*).

12. Summary description and results of this fall's Maybell Ditch sampling for endangered fish. John Hawkins provided the following update via e-mail:

'CSU researchers sampled the Maybell Ditch on Oct 3 and 4, 2007 as planned in the SOW. We coordinated sampling with Maybell Ditch Association personnel who were very helpful in identifying BLM boundaries and also reduced ditch flows by 50% to allow safe and efficient sampling. We covered the entire portion of the ditch within public lands (BLM) which included approximately 1.25 miles of ditch immediately downstream of the head gate. We sampled by wading upstream with a bank-shocker electrofishing unit mounted in a canoe, two electrofishing anode poles to draw fish, and three people netting. We covered the entire section in two days. Depth averaged 1.5 feet and velocities were about 1 ft/second.

We captured 702 fish of 10 species (see list below). We did not capture any endangered fish. Most of the fish captured were nonnative species such as smallmouth bass (88%), white sucker (8%), and common carp (2%). We captured only two native fish, both bluehead suckers. This composition of fish dominated by smallmouth bass is probably very similar to what we would find living in the river just upstream of the head gate. Most of the fish were between 50-125 mm (2-5 inches) long and all were less than 250 mm (10 inches) except one 350 mm (14-inch) channel catfish. The bluehead suckers were 146 and 160 mm.

Please consider all results and conclusions preliminary until the approved final report. The final report will also examine how the life history and movements of Colorado pikeminnow that live upstream of the head gate may or may not contribute to their possible entrainment by the ditch. Hopefully, information in the final report will provide a good basis for further decisions regarding ditch operations and endangered fish recovery.

List of fish captured in Maybell Ditch, 2007

Native species captured:

Bluehead sucker

Nonnative species captured:

Smallmouth bass

White sucker

Common carp

Creek chub

Black bullhead

Black crappie

Channel catfish

Iowa darter

Sand shiner'

John Hawkins said the Ditch Company was very helpful with this work. John will

prepare a report on the sampling that will be used by FWS to assess “next steps” in collaboration with the Maybell Irrigation Company. (John will first send the report to Patty Gelatt, Tom Nesler, and Tom Pitts for an initial review.) Tom Nesler asked if John believes fish may be reproducing in the ditch; John replied that there’s very little diversity of habitat (likely little to no spawning habitat) in the ditch itself; however all but one of the fish were < 250mm in length. Tom Nesler suggested larger fish may be less susceptible to entrainment. John said that what little structure exists in the ditch probably would provide refuge only for smaller fish. Although they didn’t find pikeminnow in the ditch, they did not sample at times when we would expect pikeminnow to be in that area. Patty Gelatt said that the biological opinion puts the onus on the Recovery Program to determine if entrainment is a problem and if so, to determine a solution. With regard to velocity concerns, Rich noted that the sustained and burst speed work done for the endangered fish in the 1980s may be useful. John recognized the importance of referencing that information, but the limited flow data he collected in the canal would preclude an evaluation from that perspective at this time.

13. Update on status of review of selected upper basin reservoirs (e.g., Rifle Gap) regarding their nonnative fisheries, outlet works and operations, and potential for fish escapement—Pat Martinez outlined their reservoir review and the information they’ve compiled so far. George said we need to discuss where to go from here. It might be good to get a graduate student (perhaps under Dr. Brett Johnson) to follow up on this (determine how often reservoirs might spill, etc.) Tom Nesler asked about species composition data (in and below reservoirs), and Pat replied that we have that for some reservoirs. George said he did prepare a table of species composition in each reservoir. Pat said he’d also suggested comparing the lake management plans with current species composition. >The Program Director’s office will review the information gathered to date and perhaps call for a scope of work to follow up. Pat noted that new introductions of nonnative fishes into reservoirs are an ongoing problem.

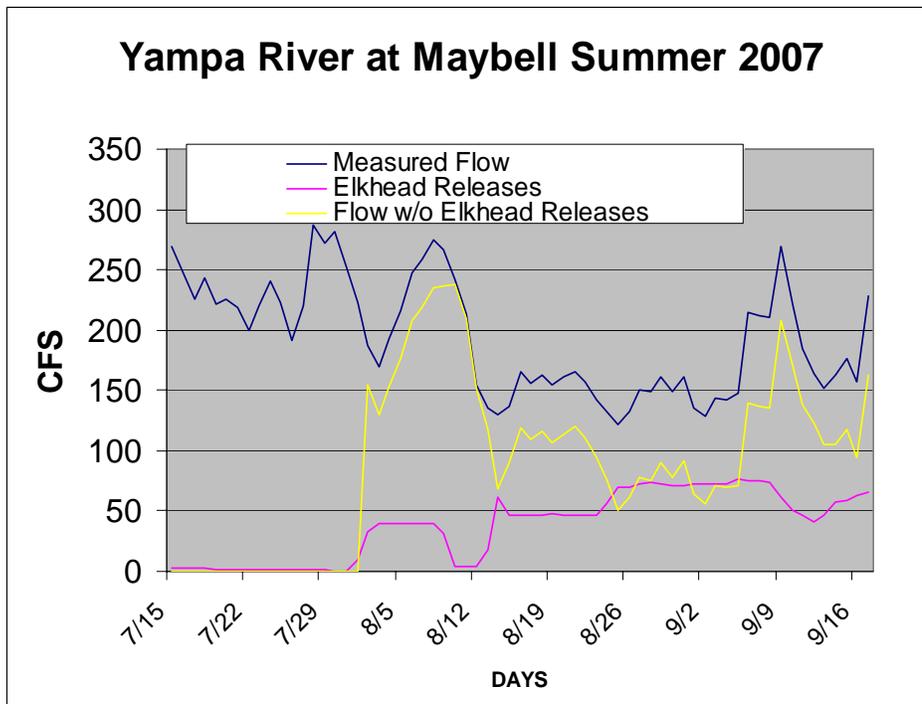
Lori Martin said she’s been working with DOW engineers (and Silt Water Conservancy District) on a possible screen in Rifle Creek below Rifle Gap Reservoir. Sampling in the creek below the reservoir was difficult, but they did find yellow perch, and landowners below Rifle Gap have reported walleye in their irrigation ditches. Given the potential for escapement, they began to look at the option of a screen within the creek. Anglers do use the creek, so that would need to be considered. They’re still looking into the type of screen that might be needed, so it’s too early to make cost estimates, but they would look to their capital construction program (which plans 2 years out) along with some help from the Recovery Program. Lori said she thought they would have a better idea of costs in early December.

14. Update on status of umbrella floodplain management plan SOW—Tim Modde said the EA on BLM lands is nearing completion. Tim recommended beginning to work now on a larger EA to cover the Ouray floodplains and perhaps Thunder Ranch. The Program Director’s office will work with Tim and Ouray NWR to determine what would be needed on Ouray NWR and Thunder Ranch. Ouray NWR will fill the Baeser Bend breach later this year. Tim distributed a revised scope of work to rear razorback in Baeser (\$45K for

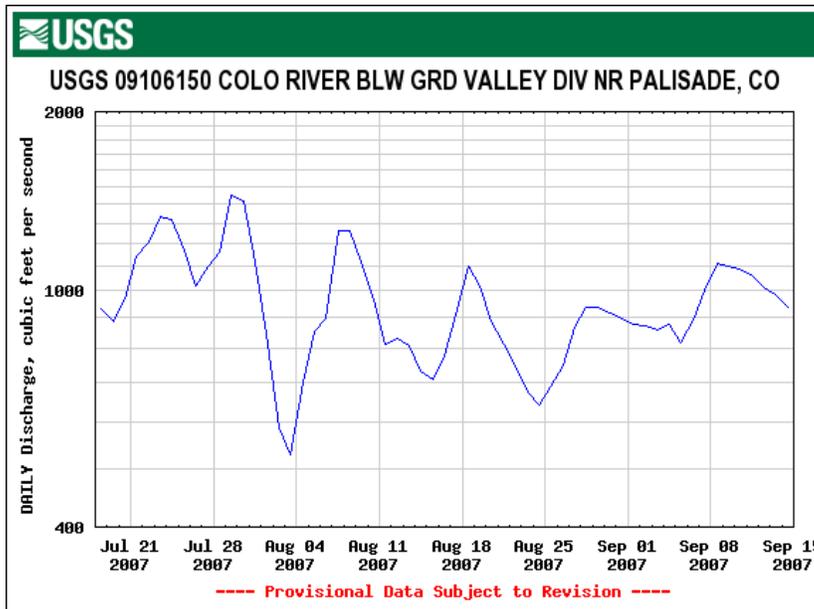
FY 08; primarily pumping costs). Tim added that they captured 80+ razorbacks in the Stirrup and Trina reported catching bonytail in Above Brennan. The Committee will consider this at their next meeting. >The Program Director's office will provide a recommendation regarding this scope of work in advance of that meeting (it is not in the current FY 08 scope of work and remaining FY 08 funds are quite limited).

15. Update on proposed whitewater park on the Colorado River near Grand Junction—Patty Gelatt gave an overview of the whitewater park that the town of Palisade is proposing to build just below GVIC at the head of the 15-Mile Reach, explaining where the drop structures would be placed (one on either side of the island, and one below), as well as the fish passages (the southern fish “channel” and small passages in each drop structure). The Service will require that passage be maintained above 600 cfs (below which the GVIC passage does not operate). The final drop structure would be in the main channel where the fish outlet pipe from the GVIC screen exits, so it is important that this outlet not be compromised in any way. Palisade’s contractor is working on providing more detailed information. They need to demonstrate that their conceptual ideas will, in fact, provide passage. To date they’ve used a Hec-RAS model, but the Service wants to see 2-D model. Palisade has applied for a 404 permit from COE (public comment deadline is Monday, November 5); COE is in informal consultation with the Service. Rich Valdez commented that some years ago Chuck McAda identified a potential spawning bar just below this area, perhaps up to the end of the island. Dave Speas asked about reach-wide geomorphic impacts. Kevin Gelwicks commented that the town of Green River, Wyoming has had considerable maintenance expenses on their whitewater park (constructed by the same contractor).

16. Review this year’s base-flow augmentation efforts—George Smith reviewed this year’s late summer/fall flow conditions. We used 4,300 af of our 5,000 af pool from Elkhead to augment Yampa River flows:



The Committee discussed release temperatures as they might relate to creating disadvantages for nonnative fishes in the Yampa River. >George Smith will find out the temperature range of the Elkhead releases. The 15-Mile Reach of the Colorado River was kept above 850 cfs most of the time (often above 1,000 cfs):



Augmentation water came from the following sources:

Ruedi Reservoir:	14,273af
Williams Fork Reservoir:	2,523af
Wolford Reservoir:	4,339af
Green Mountain Reservoir:	~23,000af
Total:	~45,000af
Shoshone make-up water:	8,500af
Grand Total:	~53,000af

(Flow target 850 to 1,240 cfs)

- Update on plans for annual researchers meeting: date, location, and agenda–The meeting will be at the Moab Valley Inn January 15 and 16, with a Biology Committee meeting the day after. (A block of rooms will be available January 14-17.) The first day of the meeting will be geared toward specific Program elements (e.g., evaluation of flow recommendations, stocked fish evaluation, how we’re measuring success, recovery goals, etc.), the second day will be geared toward nonnative fish (e.g., Yampa nonnative fish strategy, second-level synthesis, etc.). >Krissy and the Program Director’s office will have a conference call next week to outline the agenda. If Biology Committee members have additional ideas, please contact the PD’s office or Krissy.

ADJOURN 12:30 p.m.

Attachment 1

Assignments from April 2007 meeting and May 2007 conference call

Update on assignments completed or underway:

1. The Service will discuss Program activities with BLM and other agencies (e.g. NPS, BOR) to develop guidelines for the type of activities (e.g., major construction versus operational) requiring NEPA compliance. *1/18: Pat Nelson and Bob Muth spoke with Dan Alonso who's agreed to talk with BLM; Dan doesn't believe NEPA will be required. Pat will know more next week. 3/1: Dave Irving and Pat Nelson have been in contact with BLM. At present it appears that BLM is supportive of Recovery Program actions to assist in recovery of the endangered fishes. They requested that we submit proposals to them (in NEPA format; for their files) prior to proceeding with certain types of recovery activities (such as rotenoning, pumping, etc.). The need to develop such proposals would be determined on a case-by-case basis after making contact with BLM. 3/7: Pat said a programmatic NEPA will require more effort and he will begin to work on that as soon as he can. 4/23: Pat said this is on hold right now; we'll clarify roles and responsibilities for this during the 4/24 floodplain discussion. Site-specific NEPA, landowner permission, permits, water rights, Section 7, etc., will be the responsibility of the principal investigator. 7/16: Pat Nelson said it appears NEPA will be required on all our proposed work on BLM properties (just finished on the Stirrup; Tim Modde is working on NEPA for Baeser). A programmatic NEPA could take 1-2 years, unfortunately. Tom Chart endorsed the idea of a programmatic if possible. Tom said that if Tim Modde is willing to draft a list of all the possible floodplain activities we may want to do in the Green River, that would be helpful. (Currently working on an EA for Above Brennan, Stewart, and Baeser). 10/31: The programmatic-approach EA passed Vernal BLM ~ a month ago and should have approval in ~3 weeks.*
2. Tom Czapla will develop a no-cost FY 07 scope of work to track getting YOY Colorado pikeminnow from the Green River for Dexter NFH. *In last year's Annual Report, over 300 YOY Colorado pikeminnow were captured in the lower Green River reach. Over 75% of those were collected on the last day. Tom Czapla recommends putting a live well on the boat the last day of the trip to collect up to 100 YOY, then transporting them to the nearest location to meet a hatchery truck from Dexter. Patrick Goddard and Paul Badame will determine the best location to meet the hatchery truck (see email text, below). Normally from the confluence the sampling party heads up the Colorado River to Moab, but with a live well on board that may take some doing. They are also considering going back up the Green River to Mineral Springs. Dexter NFH is willing to make the trip with no cost to the program. The scope of work for project #138 should be modified to reflect this work with no additional costs. Patrick Goddard's 4/17 email said he and Paul had considered the options and believe it would be best to have a hatchery truck meet the boats at Mineral Bottom (mile 52) and they will bring whatever fish they catch upstream that day down to the truck (they also do a gear/people exchange here). They know of some good backwaters where they can capture YOY pikeminnow. They also could run downstream the next day and then run whatever fish we encounter in the next stretch back upstream. Both of these stretches are fairly productive, but Patrick doubts they will get more than a couple dozen of the juvenile*

CPM. They will conduct 3 trips this summer (September - October). They have live wells on the boats with recirculation water, but would be wary of holding fish >6-8 hours (and running up the Colorado from the confluence might be difficult with a full live well). The only difficulty they anticipate is that the road to Mineral Bottom washes out occasionally, but this usually can be anticipated. 7/16: Tom Czaplá said he's working to get some folks with experience sampling YOY fish in the field to help sample these fish. 10/31: 70 fish were captured just downstream from Moab and transported to Dexter on October 12. There were some early mortalities, but as of October 19 none since October 15 and the remaining 50 fish were feeding aggressively. The fish will receive a formalin treatment weekly for three weeks to insure removal of any external parasites and then kept separate until large enough to PIT tag and future incorporation into the captive broodstock & propagation program. Dexter appreciates the effort to collect these fish and asks that if any additional opportunities present themselves to let them know and they will provide someone to assist and haul the fish back to Dexter. Ideally, they would like to have a minimum of 100 individuals to cross back to the captive stock in the future.

Assignments carried over or modified from previous meetings:

1. Tom Pitts will ask the WAC to adopt a report review procedure similar to the Biology Committee's. Tom Pitts will recommend changes to the Program Director's office for discussion at the next Biology Committee meeting. *Pending.*
2. The Program Director's office will send a memo to the Service's Ecological Services offices asking for annual reports on all contaminants-related RIPRAP actions. *Pending. 6/28: The Utah SLC office has been discussing report requirements and format. 10/31: The ES offices are aware of and will comply with this requirement.*
3. The Program Director's office will provide the Biology Committee with a summary of what the White River flow recommendations report said and what the shortcomings were 4/23: *This will be provided to the Biology Committee in advance of the July 16 meeting. 7/16: Deferred to next meeting. 10/31: Tom Chart said the PD's office will be working on this and the Price River items in the coming months.*
4. Craig Walker will provide a copy of the report on UDWR's June 2006 Dolores River fish community survey to the Program Director's office. *Tom Czaplá received an e-mail from Craig on April 5th indicated he was in the process of revamping the report for delivery to the Biology Committee by the end of April (and to Czaplá prior to that). Not yet received. 4/24: Craig is amending the report to include Valdez' data and will send a revised report to Tom Czaplá by the end of May. 7/16: Czaplá received report; no endangered fish were found. >Tom Czaplá will post it to the Program website. 10/31: Done.*
5. Bob Muth will talk to Dave Campbell about funding from the SJRIP for the cyprinid key. 4/24: *Pending (Chuck McAda and Darrel Snyder have been discussing this). 7/16: San Juan Program funding doesn't look promising, although San Juan funding is reflected in the scope of work. 10/31: >The PD's office will follow up with Sharon Whitmore on this.*

6. Dave Irving will run Dave Speas' peer review request of the stock assessment by Bruce Haines and he and Dave Speas will discuss this with Tim Modde, also. 4/24: Bruce and Tim will complete this by June 8. 7/16: Tim said they will try to have draft documentation of the stock assessment completed by the end of July. 10/31: *Tim said he submitted a first draft to the ad hoc group last week. Tim will send the BC an electronic copy (done); comments will be due back to Tim and Bruce by November 16.*
7. Craig Walker will provide Tom Czapla a copy of UDWR's agency review of the Westwater humpback chub report. Craig sent Tom the review comments from three agency reviewers (3-15-07), but no new draft addressing those comments. 4/24: *Craig will find out when the next draft will be provided. 7/16: Still pending. The Cataract report was sent out to the BC on July 12 (under a misleading subject title), but Tom Czapla needs to review it to be sure the requested information was provided. 10/31: Czapla reviewing.*
8. Brian Beckley will test whether or using two types of PIT tags in a fish would cause interference. 7/16: *>Dave Speas will follow up on this, although Bobby Compton did address this in his summary. 10/31: Done.*
9. John Hawkins will change "procedures" to "guidance" and delete "U.S. Fish and Wildlife Service" from the fish handling procedures cover page. Comments on the draft should be submitted to Tom Czapla and John Hawkins by May 31. Tom Czapla will do a first-cut revision, and then send it out for broader review. The Program Director's office will take the lead to incorporate comments, make revisions and get this document formalized. 7/16: *Tom Czapla will have a draft to Bob Muth by the end of this week, then it will be sent back to the Biology Committee for review before it is finalized. 10/31: Pending.*
10. Chuck will revise and finalize the Black Rocks humpback chub population estimate report. 7/16: *Pending distribution.*
11. Jana will check on water rights for pumping water into Baeser Bend (it may be possible to get a temporary permit or transfer some water rights from Ouray NWR). 7/16: *Jana has checked on this and it is doable, but we're not pumping water into Baeser this year. 10/31: Done.*
12. Craig Walker and George Smith will work together to finalize the Price River report using the table of exceedances that George provided. Craig will provide a report to George that discusses using surrogate streams, and if it seems appropriate, George will add that analysis. 7/16: *George said he didn't receive anything other than reference material on this and Craig has now taken another job within UDWR. George said he believes the work he did looking at the San Rafael is the most appropriate approach; >George will add his San Rafael analysis into the Price Report. 10/31: George has been working on this, putting technical information in appendices, and adding San Rafael hydrology. The PD's office will complete this in conjunction with White River report follow-up).*
13. Bob Muth will call Dave Campbell regarding options for compatibility between databases since the SJRIP is moving their database to FWS. 7/16: *Bob Muth said Dave agrees this is a*

good idea and will be getting back to Bob on how to proceed. 10/31: Pending.

14. Angela Kantola will revise the May 9 conference call summary to reflect Tom Chart's suggested changes (posted to the fws-colorriver listserver on May 15). *Done.*
15. Tom Nesler will ask if Lori Martin can complete her synthesis report by the end of August. *CDOW plans to combine the 2007 Annual Report with previous years (2005 and 2006) of CDOW data collection, so the 07 Annual Report will also serve as the CDOW's Synthesis Report. The plan is to provide a final draft to the Recovery Program by November 30th.*
16. George Smith will send out a summary of questions from this meeting and the URL of the website (<http://65.15.243.91/fishdata/main.html>, username fishdata, password razorback) so people can try it out. Biology Committee members may send George examples of queries they'd like to be able to make and encouraged PIs to check out this internet map server and submit comments, as well. *10/31: No feedback received; George working with Karen Holt and Don Meyer on FY 08 contract using new technology that would display PIT tag information on the map. The Tamarisk Coalition is also interested in the aerial photo coverage.*
17. Shane Capron will get a firm commitment from Clayton Palmer and Kirk LaGory re: Western's contribution for additional report costs for this project 85f (sediment monitoring) in FY 2009. *10/31: PD's office has verbal commitment; will seek firm commitment.*
18. George Smith will get an estimate on the Duchesne sediment monitoring report cost for FY 09. *10/31: \$2,000 already built in. Annual report may recommend continued riffle monitoring.*
19. Dave Speas will talk with Melynda to see if an RFP is required for the Green River new start on backwater/sediment availability/peak flows and let Bob Muth know so that he can make a recommendation to the Program as to how to best accomplish this work. *10/31: RFP pending. Dave Speas will talk with Bob Muth and Tom Chart about this.*
20. Pat Nelson will add the existing C-6 Hyd scope of work to the FY 08-09 work plan. *Done.*
21. Pat Nelson and Dave Speas will discuss the draft floodplain vs. flow synthesis RFP. *10/31: RFP pending.*
22. Bob Muth and John Hawkins will discuss how to revise the Yampa entrainment scope of work. *Done.*
23. By August 10, Krissy Wilson will let Dave Speas and Angela Kantola know approximately the FY 07 funds truly needed for the Wahweap Hatchery. (Krissy estimates they'll need ~\$80K instead of the full \$224K they requested for FY 07 [not including the \$31K for flood repairs, which Krissy will append to the FY 07 scope].). *Done.*

24. Tom Czaplá will work to get the questions regarding what hatchery repairs are needed at Grand Valley resolved as soon as possible. *10/31: Grand Junction working to get cost estimates.*
25. Tim Modde will follow-up on the cost for bringing young *Gila* into captivity. *10/31: Dave Irving said they were able to get drive-in access through Mantle Ranch (the new landowner was very helpful). 400 Gila were captured over 4 days. Of the 200 fish at Ouray, they've only had ~5 mortalities. >The PD's office will outline the process (and permits) for returning roundtails to the river (as well as the fate of any humpbacks). Rich noted that Arizona Game and Fish just set up a special native fish unit and have taken some roundtail into captivity (thus, it's possible they might be interested in the roundtail).*
26. Tom Czaplá will check on FY 08-09 costs for #132 (Westwater humpback chub population estimate). *10/31: Pending.*
27. The Program Director's office will make a recommendation to the Committee as to the meaning of "periodic monitoring" in Cataract Canyon. *10/31: Based on recovery goals: generation time (every 3 years). Melissa noted that the next scheduled monitoring would be calendar year 2008. >The PD's office will convene a conversation regarding methods for monitoring small chub populations.*
28. With Tim Modde's help, George Smith (and others who can join him) will take some rough measurements of the elevation of the levee breach required at Baeser to flood it every 5-6 years (at ~20,000 cfs). *Done (information was already available).*

New Assignments (October 31-November 1 meeting):

1. Tom Nesler will follow up on the status of the Yampa pike sources report.
2. Tom Chart will work with Trina Hedrick and Kevin Bestgen to establish new due dates for the larval razorback sucker drift report by mid-November.
3. Paul Badame will send out the comments received from Lew Coggins and Chuck McAda on the Cataract report (*done*); BC comments will be due two weeks later.
4. The Park Service will send copies of Tim Modde's Yampa Canyon smallmouth bass report to the Biology Committee and the PD's office when it is finalized.
5. Angela Kantola will distribute a revised reports due list based on the Committee's review.
6. Tom Chart will send PIs a request for short handouts on their projects for the nonnative fish workshop in the next week or two.
7. Tom Nesler will review his comments on the synthesis report for 98b and Sam Finney's responses and provide rebuttals to Sam and the Committee. Dave Speas and Melissa

Trammell will do likewise. Tom Chart will work with Sam Finney and Dave Irving to reach resolution and provide responses to the Committee on remaining issues (as an interim step to seek consensus before Sam revises the report again).

8. Tom Nesler will see if CDOW can provide a report on Billy Atkinson's work on pike in Catamount and the river below.
9. Nonnative fish strategy ad hoc group members will send their comments and insights on the draft strategy to Rich Valdez and the other group members and have a conference call on Monday, November 19 at 9:00 a.m. using the Program's conference line (Tom Chart will send out a reminder).
10. Tom Chart and Rich Valdez will revise the nonnative fish workshop agenda to include the team approach to the synthesis reports presentations and allow more time to develop a framework for the second-level synthesis.
11. The nonnative fish workshop ad hoc group (with Tom Nesler, if available) will have a conference call at noon Friday, November 2 to discuss the workshop agenda. *Done*.
12. The Program Director's office will review the information gathered to date on reservoir operations and potential nonnative fish escapement and perhaps call for a scope of work to follow up.
13. The Program Director's office will provide a recommendation regarding the scope of work to raise razorback sucker in Baeser Bend in advance of the next Biology Committee meeting (it is not in the current FY 08 scope of work and remaining FY 08 funds are quite limited).
14. George Smith will find out the temperature range of the Elkhead releases.
15. Krissy Wilson and the Program Director's office will have a conference call the week of November 5 to outline the researcher's meeting agenda. If Biology Committee members have additional ideas, please contact the PD's office or Krissy.