Biology Committee Conference Call
March 3, 2006, 8:00 a.m.

Participants: Melissa Trammell, Dave Speas, Tom Chart, Bill Davis, John Hawkins, Krissy Wilson, Kevin Christopherson, Gary Burton, Tom Pitts, Pat Nelson, Angela Kantola, Kirk LaGory, Tim Modde, Dan Alonso, John Haynes, Tom Czapla, Dave Irving, George Smith, Kevin Bestgen, and Bob Muth

Assignments indicated by a ">" and at the end of the document.

1. SOW for razorback sucker larvae in L10 at Ouray NWR - Tim Modde introduced the no-cost scope of work sent to the Biology Committee on Feb. 24. The source of larvae will be overflow of larvae produced for stocking (hopefully at least 200,000-300,000, up to 500,000 or more). Ouray NWR will provide the water. Dan Alonso said the 150-acre L10 affords the greatest flexibility in terms of water sources (river, Pelican Lake, or pumping from the river). Tim said this fall, they will assess how many fish are in L10, provide an annual report, and then the Biology Committee can decide what to do with the fish at that point. They could be released to the river by removing the coffer dam and letting the fish return through the kettle structures (~95% of the water drains), or by fyke-netting. John Hawkins expressed concern about not knowing the source of the fish if they are not marked (Dave Speas and Tom Czapla agreed). Tim Modde said he thinks we first need to determine if we can rear fish successfully in L10. Melissa said she supported the project, but asked that a paragraph be added regarding what we'll do if L10 is successful in rearing large numbers of fish. The Committee agreed. Tom Czapla said he'd like the larvae to be tetracycline marked. The Committee gave the go-ahead for this work. >Angela Kantola will assign a project number and Tom Czapla will distribute the scope of work (also to the Management Committee). Dan Alonso said in preparation for this work, they're burning vegetation out of L10 and they're also elevating the levee between L9 and L10 to hold more water in L10.

2. Review of recommended RIPRAP items (posted to list server on 2/22 and 2/23, 2006).

   a. RIPRAP assessment

      24, IVB&C — Add (from tables in latter part of RIPRAP assessment) "Until stocked Colorado pikeminnow distributions in unoccupied habitat are investigated by CDOW, stocking Colorado pikeminnow is on hold."

      25, VA1&B2 — Delete the exclamation points, as these are works in progress, not completed items.

      27, IC2 — Price River report anticipated 9/06, not 4/06.

      27, IE — >Krissy Wilson will forward Utah's report from the three species plan to George Smith.

28, IIA4 In last sentence of first paragraph add "and floodplain connectivity as a function of flow was evaluated (Tetra Tech 2005) and aerial photos taken to quantify area of inundation as a function of flow."

31, IIIA1a2 The Committee debated at great length whether an "X" (significant shortcoming) indicator should be placed in front of the Elkhead screen failure and reluctantly concluded by leaving it with no indicator. The last sentence of the first paragraph will be made into it's own paragraph and the exclamation point will be removed from the second paragraph (conservation pool and tower outlet screens).

38, IIA6 Add parenthetical identifying floodplain sites to be assessed.

b. RIPRAP tables

23, IIIA1c&1 We are beginning to evaluate hybridization with other native suckers (e.g., flannelmouth), esp. in Lodore. Add text to table to indicate that Program will monitor for evidence of hybridization as razorbacks increase in the system.

27, ID1 (New item): Develop study plan to evaluate flow recommendations.

28, IIA4a (New item): Add item to validate and refine as needed (floodplain management plan).

38, IIA6a (New item): Add item to validate and refine as needed (floodplain management plan).

c. RIPRAP text

2.1 Leave "or are being" in the text because the Price River flow recommendations are not yet complete.

2.2 "Studies are underway to determine how this interaction..." implies we're conducting studies on the reset theory. Pat will clarify and clear with Bill Davis.

Clarify that the floodplain management plans are subject to revision as new information is gathered.

Clarify "additional" improvements to GVIC.

2.3 For fisheries management plan for the Yampa River basin, note that revision is pending.

3.1.2 Note that White River flow recommendations are interim.

3.2.2 Note expansion of nonnative fish removal in Yampa River (add "In 2006, the 12-mile treatment reach will be expanded to 24 miles and the 11-mile South Beach reach will be added to better evaluate effectiveness of removal and response of native and endangered fishes."

3.7.2 add "by Utah" to "Use of the Dolores River by endangered fish, particularly stocked bonytail, will be evaluated."

3. 2006 Green River flow request update - Dave Speas emphasized the need to develop the flow request immediately. Kevin Christopherson said 14,000 cfs did not entrain larvae/beads and he can provide the data to show that. Thus, he's recommended 16,000, 18,000, and 20,000 cfs test flows. Gary Burton countered that connectivity was seen at 14,000 cfs. Kevin Christopherson said that 1" of water indicates connectivity on aerial photos at 14,000 cfs, but 14,000 cfs did not entrain beads. Krissy has the data on Thunder Ranch and should have additional data by next Tuesday or Wednesday. Kevin said the raw numbers of beads entrained have already been provided in the annual report, but they are still working on the expanded numbers (rates of entrainment related to volume of water), and >will provide that to the Committee on Tuesday Mar 7th (evening). The Committee will have a conference call on Thurs, March 9 on the Program conference call line (888-842-7194, passcode 209309) at 3 p.m. Gary said that if the data show 14,000 cfs is not effective, then Western might suggest the next step to test would be 15,000 cfs. Kevin said he would look at their data with regard to that.

ADJOURN: 10:55 a.m.

ASSIGNMENTS

1. Angela Kantola will assign a project number and Tom Czapla will distribute the scope of work (also to the Management Committee).

2. Krissy Wilson will forward Utah's report from the three species plan to George Smith.

3. Utah will provide extrapolated data on numbers of larvae entrained to the Biology Committee on Tuesday evening. The Committee will have a conference call on Thurs, March 9 on the Program conference call line (888-842-7194, passcode 209309) at 3 p.m.

Biology Committee Conference Call
March 9, 2006, 3:00 p.m.

Participants: Dave Speas, Tom Chart, Melissa Trammell, Bill Davis, John Hawkins, Gary Burton, Tom Pitts, Kevin Gelwicks, Angela Kantola, Trina Hedrick, Kevin Bestgen, Kirk LaGory, and John Hayse.

Assignments indicated by a ">" and at the end of the document.

1. 2006 Green River flow request discussion - Kevin Bestgen said he and Kevin Christopherson have agreed it would be good repeat sampling at the same flows as last year flows to help answer remaining questions on entrainment (either by selecting flows out of a naturally rising hydrograph or by requesting specific flows). They also will recommend focusing more tightly on individual sites believed to be important, sampling more in the breach and less in the main channel (perhaps at 14,000 cfs 16,000 cfs and 18,000 cfs and perhaps another sample at 16,000 cfs on the descending limb of the hydrograph). This would require less manpower, but they would sample more intensively with more people on each site. This approach will allow us to really nail down the entrainment rate. Likely candidate sites are Thunder Ranch, Stewart Lake, and perhaps one or two others. >Kevin Bestgen and Kevin Christopherson will revise the larval entrainment scope of work and then the Committee can discuss it in April. Trina Hedrick said it might make it easier to analyze the data if we could request specific flows, but they wouldn't need to be held at each requested level more than 1-2 days. Kevin Bestgen suggested that since flows at Flaming Gorge are two days removed from Jensen and given the vagaries of Yampa flows, it doesn't make much sense to try to request specific flows (better to simply try to anticipate the flows). The sampling duration should be short enough to make this work. The Committee agreed they have no specific flow request for the entrainment study.

   With regards to the flow recommendations in general, Tom Chart and Melissa Trammell suggested said this would be a good year to try to reach two weeks at 18,600 cfs, if possible, whether it's a moderately-wet or average year (if average, it will be a wet-average year and so a good year to be the one out of four years to reach 18,600 cfs). It's also a good year because we have resources in place to evaluate larval entrainment. The Committee supported this. Gary Burton suggested that if it is a wet-average year, we not try to use bypass flows to reach a peak beyond 18,600 cfs so we will have enough capacity to maintain 18,600 for two weeks. The Committee agreed. The Biology Committee basically is just supporting the flow recommendations, so >Dave Speas will send out a summary of this recommendation tomorrow afternoon for Committee review; if the Committee agrees (members should discuss with their Management Committee members), it will be forwarded to the Management Committee (and also to the technical work group in draft at the same time, as their first conference call is Wednesday).

   Dave Speas added that we also need to be mindful of effects of these flows at the razorback bar just upstream of Thunder Ranch. Tom Chart said the Program will need to look at all the different effects the flows may have for the fish, including geomorphic

changes; and they are considering this as they develop the study plan.

The Committee continued discussing the entrainment study. Gary Burton asked if there's a need for aerial photos this year, but the group seemed to think not. Tom Chart suggested that Reclamation will likely operate near 18,600 cfs for an extended period of time, which would allow for some extended study of flows at this duration. Gary asked where the near-shore sampling sites were and Trina said she thinks they were mostly downstream of the breaches; Dave Speas and Melissa agreed. Gary asked if the beads counted near-shore were included in entrainment total and Trina said no. Dave Speas said Kevin Bestgen said that Kirk LaGory's beads per minute information (e-mailed by Speas earlier this afternoon) is probably the most helpful. Sites with more than one breach seemed to entrain more larvae. Dave recommended that the PI's make sure that they have working flow meters with the right props, and suggested they also pull the nets at more frequent intervals (write into budget, if needed). Kirk LaGory noted that Stewart Lake appeared to have closed the outlet before the flows came up, so it wasn't a flow-through situation. Old Charlie Wash was similar (but inlet closed and outlet open, because they were worried about sedimentation). >The Biology Committee will discuss this with Dan Alonso at the April meeting, and also identify Stewart Lake managers who need to be kept in the loop to make sure the sites are operated for optimum results. Gary Burton asked when we'll get the larval data; Dave said Kevin Christopherson believes some of the samples were lost through degradation (beads have to be separated from larvae before the larval samples can be preserved in alcohol), but the more focused study design in 2006 should help with this. Melissa asked if we could deploy additional nets – some for larvae and some for beads. John Hawkins suggested we let the PI's determine if this is feasible. Apparently we haven't yet fully shown that beads are an adequate enough surrogate for larvae such that we don't need to use larvae to test entrainment. This discussion can be continued when the SOW is reviewed.

ADJOURN: 4:00 p.m.

ASSIGNMENTS

1. Kevin Bestgen and Kevin Christopherson will revise the larval entrainment scope of work and then the Committee can discuss it in April.

2. Dave Speas will send out a summary of this recommendation tomorrow afternoon for Committee review; if the Committee agrees (members should discuss with their Management Committee members), can it will be forwarded to the Management Committee (and can also go to the technical work group in draft at the same time, as their first conference call is on Wednesday).

3. The Biology Committee will discuss spring operation of Old Charlie Wash with Dan Alonso at the April meeting, and also identify Stewart Lake managers who need to be kept in the loop to make sure the sites are operated for optimum results.