

Biology Committee Conference Call
Thursday, May 2, 10:00 am to 12 noon

Biology Committee: Tom Chart, Kevin Christopherson, Mark Wieringa, Frank Pfeifer, Tom Pitts, John Wullschleger, Tom Nesler, and Bill Davis. Absent: Paul Dey, John Hawkins.

Other participants: Bob Muth, Pat Nelson, Angela Kantola.

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

1. Review of revised floodplain scopes of work:

- a. Evaluation of larval razorback suckers stocked into floodplain depressions of the middle Green River (Christopherson & Modde) - Bob Muth asked why the authors proposed a “with-predator” (fathead minnow) component to the cages. Kevin said that’s an error – there will be live cages (no predators) that will be watched for several week to assess acclimation and survival of recently stocked fish, but no other small enclosures will be used (clarification in SOW needed). The predator/non-predator portion is only in the ½-acre exclosures. More detail is needed to explain how predators will be excluded and how nonnative fishes will be stocked (species composition, densities, etc.) in the with-predator exclosures. The scope should identify the objective of determining the optimum density for larval razorback survival in the presence of nonnative fishes. The study may not need to run two years, but we won’t know until we see this year’s data. The various options (e.g., over-winter the fish or release them in late summer) should be identified in the scope of work. The Committee decided, instead, not to over-winter the fish and to consider the data before committing to continue the work next year. The scope also will clarify that these are all the larval razorbacks above and beyond those needed to meet the stocking plan. Kevin will clarify the size of the areas to be stocked. The number of larval fish available will determine where fish are stocked. The top priority is to study survivability of stocked larval razorback sucker in the face of predation. Therefore, the scope will be changed to test high and very high stocking densities (relative to past stocking densities) both in a with-predator environment. Survival in a predator free environment will be evaluated in the live cages. The coordination aspect in Objective 2 needs to be clarified (i.e., who will do what?). A statement of hypotheses to be tested will be added. Bob Muth recommended a more complete census of the ponds at the end of the growing season to make sure we’ve accounted for all the fish. >Kevin will revise the scope of work.

Expand/clarify

- Food densities, water quality, temp., etc. will be monitored inside and outside of enclosures and exclosures.
- Physical design of the study (size of the exclosures, description of materials used to the “wall off” the exclosures, dimensions and purpose for employing live cages).
- Nonnative fish composition and abundance will mimic what has been

found in the past.

- What will be done with endangered fish if conditions deteriorate (e.g., pump, put fish in river...)
- Add cover to areas that will be stocked.
- Expand coordination section.

- b. Evaluation of middle Green River floodplains for the restoration of bonytail (Modde & Christopherson) - Many of the comments above also apply to this scope of work. Tom Pitts questioned the basis for the first and third sentences of the third paragraph on page 2. (Frank Pfeifer lost his connection to the call.) Are the 5,700 adult bonytail in excess of the stocking plan? Stocking bonytail adults will be taken out of the scope of work. Bill Davis recommended monitoring ammonia as part of the water quality analyses. Clarify length of the study. Expand coordination section. Explain what will be done with fish if they are about to die (because of water quality, temperature, etc.). Committee members may submit additional specific comments to the authors. >Tim Modde will revise the scope of work.
2. Revised recommendations from levee removal evaluation report - Bill Davis asked if we're also addressing the recommendations in each of the report's chapters. Kevin said there are some recommendations in the individual chapters that aren't in the summary chapters. Kevin will make sure that the summary recommendations are correctly reflected in the individual chapters. There needs to be continuity with the results and conclusions and recommendations in the individual chapters and those in the summary chapter. Bill said he has questions regarding the recommendations in the individual chapters. Tom Pitts suggested qualifying the summary recommendations, saying that the Biology Committee has accepted the recommendations below, which reflect a synthesis of the whole study, and which may not be entirely consistent with each of the recommendations in the individual chapters. The Committee agreed. The first recommendation (in the summary chapter) needs to be re-stated to ask the question (critical density for razorback larvae survival in the presence of nonnative fish). The authors will re-state this recommendation. The chart on page 10-22 needs to be revised. These summary recommendations need to relate specifically to this study's results and conclusions, not bring in information from ongoing, parallel studies. However, a final recommendation could be added that the Program review and synthesize the results of this study and parallel studies (which the Program is doing), and recommend studies that are currently being conducted and propose future studies. The recommendations need to be stated such that they can be used for future Program guidance.

ACTION ITEMS

>Kevin Christopherson will revise the larval razorback scope of work.

>Tim Modde will revise the bonytail scope of work.

>Kevin Christopherson will revise the summary recommendations by June 1 and the Committee will discuss them at its next meeting.