Science Committee Meeting Minutes

February 13, 2013 9:00 a.m.

Dunbar Center, San Marcos, Texas

1. **Call to Order--establish that all Science Committee members are present or represented**
   A quorum was present for all purposes.
   Members of the Committee present: T. Arsuffi, D. Mosier, C. Kreitler, J. Duke, J. Poole, F. Weckerly, C. Norris, G. Longley, and J. Bush. Robert Mace did not attend. Robert Gulley facilitated the discussion for the Committee.

2. **Public Comment**
   None.

3. **Approval of Minutes from the Science Committee meeting of November 29, 2012**
   Glenn Longley made a motion to approve the minutes of November 29, 2012. Floyd Weckerly seconded the motion. There were no objections; thus the motion passed.

4. **Receive Report from the Program Manager**
   Robert Gulley reported on the status of the Incidental Take Permit issuance from Fish and Wildlife Service. An overview was provided in regards to the Work Plan development process and the Adaptive Management Process. It was reported that members of the Science Committee would now receive $200 per meeting as well as their travel reimbursement in compensation.

5. **Consider and take possible action on the methodology proposed for 2013 Applied Research Activities**
   Robert Doyle with Ed Oborny presented on finalized updated methodologies for the Applied Research activities scheduled for 2013. The Science Committee discussed the methodologies at length. By consensus, the Science Committee recommended that additional literature review and documentation be collected for each research project. The Science Committee also requested more details regarding the RFP process for each project in the future.

   Doyle Mosier made a motion to support the proposed methodologies for the Laboratory vs. Field Study with the following changes: a) the title be changed to reflect the specific condition; b) the evaluation be changed to first look at site x location x condition in a 3 factoral set up; and c) a randomized block design for placement of plants in MUPPTs and raceways be used. Jacquelyn Duke seconded the motion, there were no objections; thus the motion passed.

   Charlie Kreitler made a motion to support the proposed methodologies for the Vegetation Tolerance Study with the following changes: a) a clarification be made to show that two temperature treatments are being evaluated at one flow and one CO2 condition--this requires some editing and clarification in the objective; and b) the future two tiers will need to be

presented again to the Science Committee with supporting rationale, literature, etc. once the study designs have been developed.
Floyd Weckerly seconded the motion, there were no objections; thus the motion passed.

Janis Bush made a motion to support the proposed methodologies for the pH drift study with an edit to the objective to be made for clarification purposes.
Doyle Mosier seconded the motion, there were no objections; thus the motion passed.

Ed Oborny and Robert Doyle agreed to the proposed changes and will integrate them into their methodologies.

6. Discussion regarding Applied Research projects for 2014

Nathan Pence presented a list of possible 2014 projects from Section 6 of the Habitat Conservation Plan. The Science Committee discussed these potential projects and proposed some recommendations for incorporation in the Applied Research Work Plan for 2014. This Work Plan will be presented at the April 3 meeting of the Science Committee.

A preliminary list that was discussed by the Science Committee is attached as Attachment 1 to these Minutes.

7. Consider and take possible action on the biological monitoring component of the HCP

Robert Gulley presented the draft Biological Monitoring Work Plan for 2014 to the Science Committee. After some discussion, Doyle Mosier made a motion to recommend the following changes related to the Biological Monitoring Work Plan:

a) The EAA should include an analysis of the Biological Monitoring/Variable Flow Study data from 2000 to the present as either a component of the 2014 Work Plan or as a separate action. This synthesis should be updated every 5 years after its initial completion to include new information gathered through the program;
b) The Biological Monitoring Work Plan should identify possible duplications specifically regarding, but not limited to, the flow partitioning components of the EAHCP and existing work by the EAA, and identify how these programs work together;
c) The Biological Monitoring Work Plan should include language to require coordination of biological monitoring and ongoing mitigation and restoration efforts. It should further require that the data analysis consider the effects of these and should coordinate with these efforts; and
d) The Biological Monitoring Work Plan may need to be refined, in future years (2015 and beyond), to require specific methodologies for monitoring the Texas troglobitic water slater and Edwards Aquifer Diving beetle to ensure the species is being appropriately monitored.

Tom Arsuffi seconded the motion. There were no objections; thus the motion passed.

8. Consider future meetings, dates, locations, and agendas

Future meetings will be determined by a doodle poll of Science Committee members. At the next meeting there will be a presentation on existing fountain darter and riffle beetle research, the 2014 Applied Research Work Plan will be presented, and other items discussed.

Attachment 1: List of 2014 Applied Research Projects recommended by the Science Committee at their February 13, 2013 meeting:

Comal Springs Riffle Beetle Habitat Associations and Movement

1. Establishment of riffle beetle baseline population distribution and refinement of riffle beetle collection methods.
2. Determination of limitations of riffle beetle plastron use during low-flow.
3. Extended low-flow period effects on riffle beetles.

Low-flow Effects on Fountain Darter Movement, Survival, and Reproduction

4. When and where do fountain darters move as vegetation decays and water quality deteriorates?
5. What is the relationship between turbidity and feeding success of the fountain darter?