

Science Committee Meeting Minutes**April 3, 2013 9:00 a.m.****San Marcos Activity 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. Poole, F. Weckerly, C. Norris, G. Longley, and J. Bush. Robert Mace and Jacquelyn Duke were unable to attend. Nathan Pence facilitated the discussion for the Committee.

2. Public Comment

None.

3. Approval of Minutes from the Science Committee meeting of November 29, 2012

Jackie Poole moved to approve the minutes of February 13, 2013. Janis Bush seconded the motion. There were no objections; thus the motion passed.

4. Receive Report from the Program Manager

Jenna Cantwell reported on the status of filling the final Science Committee vacancy and the progress being made, and process moving forward, for approving 2014 Work Plans.

5. Presentation by Dr. Caitlin Gabor on Fountain Darter Research

Dr. Caitlin Gabor (Texas State) presented on existing research relating to the fountain darter in the areas of anti-predator response and the impact of turbidity on foraging behavior. She responded to Committee questions and comments and presented possible opportunities for additional research including longer-term turbidity studies and further predation related studies utilizing assorted variables such as day vs. night.

6. Consider and take possible action on culvert design for City of New Braunfels Flow-Split Management

Sam Vaughn, HDR Engineering, presented conceptual design options associated with the Flow Split Management task. Discussion followed. Glenn Longley moved to make the following recommendations to the City of New Braunfels:

- a. Restore the 48" culvert and abandon the 24" culverts in the most cost effective and efficient way possible. Methodology for abandonment of the 24" culverts was discussed as plugging and stabilizing;
- b. Designers should utilize a 1/2 inch mesh screen in the opening between the spring-fed pool gates to filter the water passing through the 12" culvert;

- c. The Spring-fed pool will continue to be maintained consistent with the Comal Springs Ecosystem Management Plan (2003) included as appendix N in the EAHCP;
- d. Impact blocks should be used below the 48" culvert outlet; and,
- e. A one-two week window with reduced flows (15-20cfs) for the work associated with the 48" culvert is permissible assuming there are healthy habitat conditions prior to the project being initiated. Habitat determination should be made at the time of construction; if poor habitat conditions exist, then a pump or siphon should be utilized to supplement Old Channel flows.

Janis Bush seconded the motion. There were no objections; thus the motion passed.

7. Presentation by Chad Norris, Pete Diaz, and Randy Gibson on riffle beetle research

Pete Diaz and Randy Gibson (USFWS) presented on existing riffle beetle research and Chad Norris (TPWD) presented on the Comal Springs Mapping project. They identified several opportunities for additional research for the riffle beetle species within the Comal system including studies to identify tolerances, preference trials, test responses, and acquire more information about baseline distribution and movement in the field.

8. Presentation by Ken Ostrand on proposed research associated with the refugia facility

Ken Ostrand (USFWS) presented on the proposed facilities and research for the refugia facility to be constructed as part of the HCP process.

9. Consider and take possible action on a recommendation of the Implementing Committee regarding the 2014 Refugia Work Plan

Following the presentation of Agenda Item 8, the Science Committee unanimously approved the Refugia Work Plan, requesting that the Science Committee be involved in the development of design plans for scientific research occurring in the facility.

10. Consider and take possible action on a recommendation of the Implementing Committee regarding the 2014 Applied Research Work Plan

Nathan Pence presented the 2014 Applied Research Work Plan. Following discussion, Tom Arsuffi moved to accept the Work Plan with the following changes:

- a. Remove duration on all projects;
- b. In methodology section, edit sentence to read – “however in 2014, the approach will be to state the goals to be accomplished and then allow the proposers to submit proposals to reach the goals.”;

c. In research Project #5: Build on Dr. Gabor's work by validation and quantification in the field, consider the utilization of mesocosm , and include a temporal aspect of turbidity based on duration of turbidity caused by flood events and recreation – turbidity durations to be established by referencing turbidity data collected by the Meadows Center for Water and the Environment and the Water Quality Work Plan data; and,

d. In research Project #8, change title to, "What is the effect of reduced habitat caused by low-flows on predation of the fountain darter.", and must include the interaction of prey and predator in determining the net effect to the fountain darter.

Doyle Mosier seconded the motion. There were no objections; thus the motion passed.

11. Consider and take possible action on a recommendation of the Implementing Committee regarding the 2014 Water Quality Work Plan

The Science Committee unanimously supported the 2014 Water Quality Work Plan, but requested that the EAA evaluate the benefits of utilizing field vs. lab methodology for testing alkalinity, consider utilizing automated samplers for storm-water events, and consider the feasibility of Gore Samplers.

The Science Committee additionally requested that the EAA bring together the various contractors involved in Water Quality and Biological Monitoring to discuss the synergy between the programs.

The Science Committee also expressed that they would like to discuss the Golf Course Management Plans for the Spring Cities at a later meeting including the use of herbicides and pesticides on their properties.

Additional Public Comment

Colette Barron-Bradsby (TPWD) disclosed potential conflicts of interest with TPWD staff as relates to the Science Committee. She additionally discussed the importance of transparency within the Science Committee to avoid any potential conflicts of interest.

12. Consider future meeting dates, locations, and agendas

The next meeting of the Science Committee will be held May 09, 2013 in San Marcos, Texas. At this meeting, Work Plans for the Cities of New Braunfels and San Marcos will be presented for review.