



SCIENCE COMMITTEE MEETING MINUTES
May 6, 2015

1. Call to Order: 9:02 am

Members of this committee include: Tom Arsuffi, Janis Bush, Jacquelyn Duke, Charles Kreidler, Conrad Lamon, Glenn Longley, Robert Mace, Doyle Mosier, Chad Norris, Jackie Poole, and Floyd Weckerly. Robert Mace and Doyle Mosier were not present. Dr. Arsuffi chaired the meeting in Mr. Mosier's absence.

2. Public Comment.

No Comment

3. Approval of minutes from the April 7th Science Committee meetings.

Conrad Lamon requested a quote by him recorded on page 3 to be removed. There were no objections to the edit.

Glen Longley motioned to approve. Janis Bush seconded. There was no objection.

4. Receive Report from the EAHCP Program Manager.

- Springflow and Index Well update
Shaun Payne, EAHCP Coordinator, gave a presentation on current Springflow and Index Well levels.
- City of New Braunfels Spring-fed Pool update
Mark Enders provided the committee an update on the work done in New Braunfels regarding removal of invasive plant species from the Spring-fed Pool.
- Update on the evaluation of National Academy of Sciences (NAS) Report 1 Recommendations
Mrs. Reinmund-Martinez presented the timeline of the NAS Report to remind the committee of the development of an implementation plan.

5. Presentation and possible action to provide input on the proposed methods for the Refugia Captive Propagation Research study.

Dr. Weston Nowlin, Texas State University, presented the methods to the Science Committee for overall comment and feedback.

Some questions and comments were made on various aspects of the methodology. Presentation, Literature Review, and Methods are available at eahcp.org.

6. Presentation of the proposed 2016 Applied Research Program Scopes of Work (SOW).

Bob Hall, EAHCP Project Coordinator, presented the draft Scopes of Work for five proposed studies. Discussion and comments provided are as follows:

- a. Comal Springs Riffle Beetle (CSRB) Trophic Level Status and Food Source Study- There was a conversation regarding the importance of understanding CSRB food source in

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protection of the species. Further discussion on cost vs. benefit and level of information potentially obtainable. A decision was made to separate the food source study and trophic level study. A literature review should be expanded to include possible literature about the genus/family rather than specifically the CSRB only. Regarding Sub-Task 2.1, the stable isotope analysis was determined to be sufficient but not specifically stating just gut contents but also animal tissue. There was some discussion about including language specifying using experimental design and statistical analysis.

- b. Comal Springs Riffle Beetle Tolerance Study- A discussion on clarifying “long-term” and what the criteria should be in regards to previous “short-term studies. There were comments regarding the interaction between DO and Temperature using real-time data, when available. Comments were also provided that the study should also analyze the effects of DO and Temperature together.

Additionally, there was a discussion about these ranges and how they mimic what happens in the natural environment. Dr. Longley mentioned the inconsistency between CSRB habitat requirements and the importance of DO and Temperature variances in spring dwelling organisms (springs keep temperature and DO constant). Ms. Reinmund-Martinez asked the committee to propose the RFP as it is currently written (after committee edits) and determination of funding will be made as proposals are received.

- c. Comal Springs Riffle Beetle Life History- The committee asked Randy Gibson, USFWS, to comment on the Scope of Work question presented. Discussion pertaining to the appropriateness of this study followed.
- d. Comal Springs Salamander Taxonomic Status Study- Chad Norris explained that there has been an Evolutionary Biology Study published which established the Comal Springs Salamander as a more wide-spread species than previously thought. The committee thought it unnecessary to do any further study on this topic in 2016.
- e. Comal Springs Salamander Population Estimate- There was a conversation about this study still being necessary despite genetic testing. The committee discussed changing the question to reflect changes in population on seasonal variations in abundance and distribution.

The committee continued to discuss various edits and adjustment to the Scope of Works, including specific methodology development and other details.

7. Presentation on the City of New Braunfels’ (CONB) 2016 Work Plan.

Zac Martin and Mark Enders, The City of New Braunfels, presented their 2016 Work Plan with the help of various contractors. The presentation is available at eahcp.org.

The committee discussed each measure individually and provided specific pieces of feedback for each.

The committee agreed with the CONB about including an additional 14” culvert to be used as a back-up flow regulator for the Old Channel.

The riparian restoration and aquatic vegetation restoration efforts are currently done independently and the committee agreed with the CONB about integrating the effort to provide adequate light penetration to newly established aquatic vegetation. Additionally, Nathan Pence, EAHCP Program

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Manager, communicated that the continued decrease in the total coverage of *Hygrophila* would require an amendment to the HCP.

There was conversation about Dissolved Oxygen Management (DO) and the natural swings in the ecosystem. Additionally, the committee communicated with the CONB that they think the 4.0 mg/L of DO should be maintained as an instantaneous level goal not a daily or long-term average.

There was additional conversation regarding measuring success of these mitigation measures.

Glen Longley motioned to recommend the City of New Braunfels 2016 Work Plan to the Implementing Committee for final approval. Doyle Mosier seconded. There was no objection.

8. Presentation on the City of San Marcos and Texas State University's (COSM/TXSTATE) 2016 Work Plan.

Melani Howard and her contractors presented details about the 2016 Work Plan in regards to the goals established in the HCP and work done to date. The presentation is available at eahcp.org.

The committee commented on proper requirements and general necessities for Texas wild- rice in seed production and sexual reproduction. Discussion followed.

There was a request to see a map showing plantings and gardening locations throughout the system.

There was a discussion about riparian plant choices as well as propagation methods and maintenance.

9. Future agenda items.

The next Science Committee Meeting is scheduled for June 10th in New Braunfels.

- Statistical Analysis Discussion
- Re-vegetation plan for the Old Channel Bank Stabilization Project – Landa Haus

10. Questions and comments from the public.

Mr. Reinmund-Martinez forwarded an announcement from Lynn Fahlquist about the upcoming USGS Webinar.

11. Adjourn. 3:55 pm