



01-31-2018 Science Committee Meeting Minutes

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1. Call to order.

Chair, Dr. Weckerly called the meeting to order at 9:05 a.m. Members present include: Janis Bush, Jacquelyn Duke, Conrad Lamon, Glenn Longley, Robert Mace, Doyle Mosier, Chad Norris, Floyd Weckerly, Tom Arsuffi, and Charles Kreitler; Jackie Poole was unable to attend.

2. Public comment.

No comments from the public.

3. Approval of the Science Committee meeting minutes (Attachment 1).

Dr. Mace motioned to approve the minutes as written; Dr. Longley seconded. No opposition.

4. Receive report from the Program Manager.

- Spring systems and index well update
- The National Academy of Sciences EAHCP Science Review Panel's *Report 3*, meeting 2 overview
- Contractor selection for the Sessom Creek 2018 Applied Research project
- 2017 Incidental take assessment (Attachment 2)

Dr. Kreitler inquired why the Comal Spring riffle beetle had the highest total percent take compared to the other species. Mr. Pence and Mr. Oborny explained that in 2014 the Comal system reached a low flow of 65 cfs, exposing CSR habitat.

5. Presentation, discussion, and possible recommendation of the Nonroutine Adaptive Management proposal related to the Aquifer Storage and Recovery program (Attachments 3 and 4).

Dr. Lamon asked why there was no difference between the J-17 index well trigger level of 636 ft and the 637 ft scenarios. Mr. Friberg replied that during the drought of record scenario runs, modeled conditions did not stay below 641 ft long enough to trigger the ASR forbearance package.

Dr. Lamon asked about whether the 10-year rolling recharge average was protective enough of springflow. He also asked for an explanation of the calculation of the 10-year rolling average. Mr. Friberg stated that the EARIP stakeholders agreed to using the 10-year rolling average in the EAHCP. Mr. Pence, EAHCP Program Manager, that during the EARIP process, the Science subcommittee looked at all types of triggers and learned that using a J-17 index well trigger level did not provide the same long-term protection as using the 10-year rolling recharge average.

Dr. Duke asked for a further explanation as to not using a J-17 index well trigger level. Mr. Friberg said that springflow is volatile and that the ASR program is intended to provide protection to springflow during the long-term drought of record conditions – explaining the use of the 10-year rolling recharge average.

Dr. Arsuffi asked that the proposal should identify more clearly the benefits of the proposed changes. He had thought the goal was to achieve the 30 cfs in the Comal Springs, but now understands that the goal of this proposal is to change how the 50,000 AF/year requirement is achieved. Mr. Pence stated that the 30 cfs goal will be addressed in the second phase of the EAHCP.

Dr. Kreidler and Dr. Mace both discussed with the Committee their understanding of the benefit of the proposed changes per their one on one meeting with Mr. Pence. They said that after this meeting, they had a better understanding of forbearance of all springflow protection measures such as the VISPO and Critical Period Management programs. Mr. Friberg further added, that 2014 was similar to the drought of record conditions. Mr. Pence responded that a new drought of record conditions will be addressed in the roll-over of the Incidental Take Permit.

Mr. Friberg also told the Committee that another benefit of the program is that it would be attractive to many of the permit holders that have omitted to the one-year ASR lease agreements. He also stated that under EAA's rules, restricted irrigated water permit-holders are not eligible to participate in the ASR program. However, with these proposed changes – to add a forbearance tier- the restricted irrigated water would be able to participate

Dr Weckerly and Dr. Arsuffi recommended that the ASR AMP proposal include a glossary of terms as well as a description for each of the tables.

Dr. Mace motioned to endorse the Nonroutine Adaptive Management proposal with the added glossary of terms and table legends; Dr. Bush seconded. No opposition.

6. Presentation and possible endorsement of an expedited process to prepare and to submit the Nonroutine Adaptive Management Scientific Evaluation Report to the Stakeholder Committee.

Dr. Arsuffi motioned to endorse the expedited process to prepare and submit the Scientific Evaluation Report to the Stakeholder Committee; Dr. Longley seconded. No opposition.

7. Presentation of the 2017 Biological Monitoring Reports (Attachments 5 and 6).

Mr. Oborny presented a comprehensive overview of the 2017 biological monitoring results for each of the EAHCP biological monitoring datasets.

2017 was the first year of the rapid bioassessment which adhered to standard rapid bioassessment practices. Dr. Arsuffi proposed that someone analyze the RBP and IBI to see how the two indices line-up. Mr. Norris noted that at least 3 years of this dataset are needed to analyze the existing conditions which will help assess conditions for the invertebrate species.

In regard to the fountain darter dropnet data, Dr. Lamon emphasized that the biological goals are based on the median and not the average, therefore, the data could be improved by taking the log of the data and untransforming it back into the median. The confidence level will not be symmetric, but it would be a better indicator to compare with the EAHCP fountain darter goals. Mr. Oborny agreed and will incorporate it into their analysis.

Mr. Oborny then presented the findings of the first year of the fish tissue sampling which use samples from the headwaters and the lower reaches of the river. Dr. Mace asked if the emerging contaminants found within the fish tissue have also been found within the artesian springs or wells. Mr. Pence replied that yes, sampling has found that the contaminants are not just from runoff, but also found within wells in the artesian zone of the aquifer. Other members agreed that studies conducted throughout the US are finding these contaminants within other aquifers; they are everywhere.

Dr. Weckerly requested that the annual Biomonitoring report include descriptions about the sampling methodologies employed. Dr. Furl replied that there is a standard operating procedures document for the biomonitoring program that can be attached to the report.

8. Presentation and discussion of the proposed 2018 Work Plan Amendments for the Refugia, Biomonitoring, and the Applied Research Programs (Attachments 7, 8 and 9).

Dr. Furl presented the proposed amendments to the 2018 Work Plans for the Refugia, Biological Monitoring, and Applied Research Programs.

Dr. Kreidler requested the number for the Sessom Creek Proposal that was selected. EAHCP Staff will follow-up and provide.

Mr. Mosier motioned to approve the 2018 Work Plan Amendments; Dr. Duke seconded. No opposition.

9. Presentation and discussion of the formation and goals of the Research Work Group to discuss the Comal Springs riffle beetle biomonitoring program.

Dr. Furl facilitated the discussion of the formation and need for a Comal Springs riffle beetle Biomonitoring Work Group. Based on input from the Science Committee, National Academy

of Sciences, and the 2017 CSRB biomonitoring findings, the EAHCP goals for the CSRB are not being met. 2017 biomonitoring data have shown a decline in CSRB which may be attributed to many factors such as, but not limited to, over-sampling, ineffective cotton lures, or movement into unsampled reaches. If additional reaches are added to the CSRB sampling, it may result in cutting funds for sampling of other biomonitoring datasets.

Dr. Lamon requested that the CSRB data be analyzed before additional CSRB reaches are added at the cost of ending another biomonitoring dataset.

Dr. Weckerly suggested a 2-4 year study to compare our existing information and practices to other studies on similar species. He emphasized the need for a controlled study of the cotton lure within a laboratory setting, but also countered that the conditions would not resemble that of the wild so it may need to be more of an in-situ study. There are many unknowns about the cotton lure that need to be analyzed.

All members agree that a CSRB biomonitoring Work Group is needed. Dr. Furl will put together a charge for the group that will define its goals related to the Refugia and Biological Monitoring programs.

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

Science Committee Meeting, Thursday, March 8th at 9 a.m. at the San Marcos Activity Center (Multipurpose Room).

11. Questions and comments from the public.

12. Adjourn: 12:02 pm