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# Springflow Habitat Protection Work Group

Meeting 13 Minutes  
Friday, February 5, 2021  
9:00am-11:00am

- 1. Confirm attendance**  
Nine of eleven Work Group members were present; Melani Howard and Ryan Kelso did not attend. A replacement has not been appointed for Cindy Loeffler following her resignation from the Texas Parks and Wildlife Department.
- 2. Meeting logistics**  
Jamie Childers provided an overview of virtual meeting logistics and meeting points of contact.
- 3. Public comment**  
There was no public comment.
- 4. Approve Meeting Minutes**  
Tom Arsuffi made a motion, seconded by Myron Hess, to approve the meeting minutes from Meeting 13 (January 14, 2021). In the absence of objection, the minutes were approved by consensus.
- 5. *Continue the discussion of and potential decision on comments and revisions to Draft Work Group Part 1 Report and Proposed Part 2 Charge***  
Work Group members continued to discuss comments received on, and potential revisions to, questions under Issues 2, 3 and 4 of the *December draft Work Group Part 1 Report and Proposed Part 2 Charge* and to explore their understanding of the intent of the topic areas carried forward by the Work Group.

The Issue 2 discussion opened with an examination of the comment asking if we *know enough about the Comal Springs riffle beetle (CSR) to initiate additional studies that are specifically related to the low-flow conditions*. A number of members ultimately agreed that more specific knowledge of the CSR was not needed to do the kinds of studies suggested by Question 2-1. Charlie Kreidler indicated that a review of previously collected data to compare the elevation of springs with water levels could be a starting point to understand which springs would be flowing during low-flow conditions. Several members noted that such an understanding would also provide useful information for other species. Doris Cooksey indicated that these studies would address questions related to all the Covered Species and that just because we list it here does not mean it will be

prioritized. This recognition, that having questions included in the Proposed Part 2 charge does not mean that related studies will be prioritized and implemented, was reiterated at several points in the meeting.

Patrick Shriver pointed members back to the charge which is specific to the CSRB. He referenced the presentations to the work group and the results of the National Academy of Sciences (NAS) review. He recalled that NAS questioned how we were accounting for and sampling CSRB, topics being covered by the CSRB Work Group. He later indicated that (1) there are provisions in the HCP (Habitat Conservation Plan) that address monitoring through the least invasive approach, recalling the effort to be cautious about interventions to reduce danger of being overly involved or having a detrimental outcome during the development of the HCP and that these were the reasons why the focus was on the overall ecosystem rather than a single orifice; and (2) that there is a lot we need to know from the CSRB Work Group.

Myron Hess, and other members, agreed with the importance of being cautious in avoiding invasive, or potentially damaging, approaches. Charlie's suggestion of starting with a compilation and analysis of existing data was acknowledged again as a potential first step.

Tom Arsuffi indicated that understanding where the springs are flowing at different flow rates is critical to being able to address secondary questions about whether CSRB are there or not and what makes them thrive when springs are flowing. Charlie and Kimberly Meitzen agreed. Kimberly also noted that the group is creating a list of studies and that needs to be inclusive for topics to be examined and evaluated, as decisions are made later about prioritization.

Patrick wanted to clarify that the group is working to manage the Incidental Take Permit not the individual spring orifices. Myron clarified that Question 2-1 is focused on understanding of where the flow is going to emerge and asked what the concern would be about gathering that information. Patrick indicated he's not concerned with gathering the information but wanted to be transparent that the HCP was developed knowing that the springs would go dry and that approaches to augment flow could be very invasive. Myron acknowledged that it is understood some springs would go dry but that this question is designed to collect information to understand what springs are going to continue to flow to help inform future management decisions. He also noted that looking at, for example, ways to augment flow in specific areas would be, in his opinion, beyond the scope of this work group. Although there was continuing discussion, there was no specific objection stated to retaining Question 2-1 in the charge and the group moved to discussion of Question 2-2.

In the discussion of Question 2-2, Myron Hess gave his understanding of the intended focus as involving waiting to evaluate results of ongoing genetic studies that may provide insight about what, if any, genetic bottlenecks

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occurred in the past and how low flows might have contributed. And if those results cannot help provide useful insights, focus would be on whether some variation on the analyses or studies could provide those insights. Tom Arsuffi noted his support for use of genetics as a new tool for helping to understand population viability and reiterating the value it could bring to understand bottlenecks. Kimberly Meitzen and Jacquelyn Duke supported Tom's statements. There was general agreement to defer to the biologists in the group and leave the question in the document and decide later about prioritization.

Myron introduced the comments and questions of Issue 3. There was no discussion or objection stated regarding Questions 3-1 or 3-2. Charlie Kreidler indicated that the Question 3-3 was a high priority, particularly after hearing of the study Kimberly Meitzen is working on regarding the impacts of recreation in the San Marcos River. There were no concerns raised about Question 3-3 or Question 3-4. Kimberly Meitzen communicated her support of Question 3-4. The discussion of Question 3-5 led to a minor language revision, including reference to the State Scientific Area, and acknowledgment of the need to get further input from Melani Howard on the intent of the question for the group's consideration. Patrick asked work group members to begin thinking about what range of flows these questions should be focused on.

There was extensive discussion of Questions 4-1 and 4-2 regarding the mechanism to meet 80 cfs and its inclusion in the HCP flow objectives as a three-month average flow. Myron stated his thinking on Question 4-1 is that there may be some flow between 30-80 cfs that could be achieved for three-months, or some similar period, even if not 80 cfs, and what would that flow do to benefit the species. Patrick Shriver reminded the group of discussions during the development of the HCP that were not able to identify engineered solutions to meet the 80 cfs and instead other management strategies were identified. Chad Furl asked for further clarification because the current MODFLOW includes the bottom up package of the drought of record along with an ecological model that describes the response of the fountain darter to those perturbations. Chad indicated that if the group wanted to know the impacts to the species the group would have to specifically define the species, flow rate, and impacts they were looking to better understand.

Patrick asked Myron if he was seeking to understand if there would be less "take" if the flow regime was different. Myron went on to clarify his understanding that the take was calculated with the flow in the HCP and that that take was calculated assuming the 80 cfs would be met but the current modeling indicates that the 80 cfs would not be met. He is not suggesting that the take analysis be redone or that we focus on level of take. This question is intended to apply the work that has been done to better understand what flows are needed, based on improved understanding of species impacts, to benefit the Covered Species consistent with what was intended to be achieved by the 80 cfs component. Patrick reiterated that during development of the HCP many of the

ecosystem measures, like removing floating vegetation, were established because engineered solutions were not an option. Charlie Kreitler indicated that he had been unclear of the purpose of Question 4-1 and continues to be.

Myron also indicated that information obtained pursuant to questions identified under other issues could clarify aspects of the flow needs of the Covered Species. Charlie asked Myron to further clarify Question 4-1 to better communicate why we are doing this and what it is we want to be doing. Doris also asked that we be very specific about what a “pulse flow” is because moving forward this could be very confusing, especially as people who were involved early in the process may no longer be participating. Patrick also asked that we consider the management implications that may impact species and not just achieving a specific flow number.

The discussion of Question 4-2 sought to further define what model results would be validated in addressing this question. Patrick asked what we would want the models to be validated against: field observations or something else? Chad Furl indicated that the ecological modeling report included a chapter on validation and, therefore, no additional studies were performed to validate the ecological model. There was acknowledgment that the ecological model consists of four sub-models. Charlie Kreitler indicated that this question needs to be more fleshed out if it is carried forward. Chad Furl noted that an initial step may be to review the validation done as part of development of the ecological model. Charlie added it ties back to Issue 1 and may be appropriate to revisit all the models to bring them up to date with the most recent data. Chad indicated that the sub-models vary in the degree to which they are up to date.

Having reached the end of the planned meeting duration, the group decided to continue discussion of Question 4-2 at the next meeting. Myron indicated he would develop, and circulate, a draft parenthetical statement for each question for the work group members to review as a possible starting point for adding explanation of the intended inquiry.

6. ***If unresolved issues remain regarding Draft Work Group Part 1 Report and Proposed Part 2 Charge, discussion and decision on next steps for approving final version for presentation to Implementing Committee***

The Work Group did not address this agenda item but agreed to meet again.

7. **Public comment**

There was no public comment.

8. **Future meetings**

The next meeting of the work group will be Friday, February 26 at 9am.