1. Confirm attendance
All Work Group members, with the exception of Ryan Kelso, were in attendance.

2. Meeting logistics
Jamie Childers provided an overview of virtual meeting logistics and meeting points of contact.

3. Public comment
There were no comments from the public.

4. Approve Meeting Minutes
Because of the need for more time to review, the Springflow Habitat Protection Work Group will consider approval of the July 21, 2021 Meeting Minutes at the August 13, 2021 meeting.

5. Review feedback on summaries of Work Group input and on draft summary of results of prioritization exercise and, as appropriate, take action, or plan for next steps, to report results to the Edwards Aquifer Habitat Conservation Plan Implementing Committee

The discussion was led by Myron Hess, Work Group Chair. The Work Group examined the feedback summaries submitted by Work Group members and provided input on the results of the prioritization exercise.

The first summary of results that was reviewed was provided by Texas Parks and Wildlife Department (TPWD). The data from the preliminary ranking exercise was used to configure results into a bar chart (the shorter the bar, the higher the ranking). Questions 3-1, 1-1, 1-2, 3-3 and 4-1, were ranked the highest among the Work Group. Myron Hess noted that following the discussion from SHP Work Group Meeting 17, some Work Group members indicated that they may have ranked the questions differently based on a further review. Colette Barron Bradsby confirmed that the graph provided by TPWD did not take into account the changes to the preliminary responses but that, based on the previous discussion, it did not appear that the changes discussed would have any major effect on the TPWD result summary.
Jamie Childers presented a graph of responses for each criterion initially ranked, presenting responses for each question along a 100% scale to illustrate the distribution among high, medium and low rankings, with blank responses also reflected.

Patrick Shriver presented visualizations of the initially ranked questions by criterion prior to SHP Work Group Meeting 17 (July 21, 2021). Three individual graphs were presented (one for each criterion: flow objectives, biological goals and associated objectives, and new information or management for design) which represented the Work Group’s tendency for consensus or agreement on a question. The biggest difference from TPWD and Jamie’s versions was in the weighting accorded to blank responses in Patrick’s versions.

During the discussion in SHP Work Group Meeting 17, questions were systematically placed into specific categories or “buckets” and Jamie presented a visual representation of those buckets. Tom Arsuffi recommended that the buckets be ranked into a four-tiered system so that the EAHCP Implementing Committee can sufficiently review the results of the exercise. Myron suggested that the Work Group first finish working through the materials presented before considering any specific action, while planning to come back to Tom’s proposal.

Myron presented a table that sought to summarize the discussion from Meeting 17 with the questions organized into four tiers: High Priority Tier, Monitoring Tier, Medium Priority Tier, and Low Priority Tier. Based on the Meeting 17 discussion, some questions were divided into two parts (e.g., a monitoring component and an application of the data component) that were ranked separately. Highlighted items in the table represented aspects that were not discussed at length or resolved during Meeting 17. Colette noted that the monitoring aspect of this tiered system was helpful in her analysis.

WORK GROUP DISCUSSION OF ADDITIONAL SUMMARIES PROVIDED:

TPWD Results Summary:
Colette, with the help of Kevin Mayes, offered a grouping combined with the bucket system that also proposed two potential ranking approaches for questions within the monitoring tier. For the bucket system, TPWD suggested including Question 4-1 in the complex bucket and Question 4-2 in the low priority bucket, with Question 3-2 added to the monitoring bucket. For prioritizing within the monitoring tier, Questions 1-2, 3-1, 2-1, 1-3, and 3-2 could be ranked based on the initial low, medium, high scores. Alternatively, they could be ranked within that tier based on sensitivity of the parameters being monitored to reduced springflow as related to physical habitat and water quality. Jacquelyn Duke added that, comparing the two prioritization approaches, the only question within the monitoring tier that would need further analysis for prioritization is Question 3-1 because all of the others
ranked similarly under both approaches. Chad Furl reminded the Work Group that current low flow monitoring is similar to routine monitoring but with an increase in frequency and interval and with additional water quality work, species counts, habitat monitoring and mapping. He noted that the monitoring aspects discussed here are significantly different from current low flow monitoring and would greatly improve aspects of the current low flow monitoring.

Patrick observed that Question 3-3 was not included in the TPWD bucket analysis. Tom reminded the Work Group that during Meeting 17, the group decided to combine Questions 3-3 through 3-5 and rank them as one high priority. Jamie and Colette clarified that the TPWD analysis was only considering prioritizing questions within the monitoring tier and do not address the results in the other tiers or in the bucket approach. It also was noted that combined Questions 3-3 through 3-5 were included in the high priority bucket in the TPWD analysis. Kimberly Meitzen noted that creating monitoring plans might be necessary as the first step to take prior to organizing monitoring questions within the tier unless this approach is used to prioritize development of monitoring plans. Myron also noted that the suggested cost categories for questions in the monitoring tier might need to be revisited to better reflect a monitoring-focused approach.

**Patrick Shriver Results Summary for What to Include in any Report:**
Patrick recommended that any report to the Implementing Committee include a degree of ranking to illustrate a greater propensity of agreement on items such as recreation and implementation of the State Scientific Area. Although there was not 100% consensus on any item, there was a similar prioritization reflected in the Work Group results. Additionally, discussion of SAWS position on certain questions might be included in a separate section. He indicated particular concern about approaches involving new models or engineered solutions at this juncture. He indicated more support for approaches that involve new uses of existing tools, collecting new data, and reviewing existing models. In particular, he indicated a strong concern about jumping now to developing new tools prematurely and a belief that the success of the EAHCP needs to be acknowledged.

**Jacquelyn Duke Results Summary:**
Jacquelyn recommended a report to the Implementing Committee that included Patrick’s distribution graphs and the bucket approach to visualize the Work Group’s collected priority categories. She also supported the TPWD approach for prioritizing within the monitoring tier. Adam Yablonski noted that a “blank” response might be interpreted as a negative opinion on Patrick’s distribution graph and that would not be an accurate reflection of his decision not to provide a ranking, which was intended as neutral. The Work Group agreed that a “blank” response does not necessarily equate to a negative opinion on a question but rather may just indicate a question a Work Group member
preferred not to address. Jacquelyn suggested that blank responses could be presented along the zero line rather than necessarily being shown as a negative. Patrick agreed that blanks could be moved to zero line and treated as right in the middle. Colette recommended defining consensus and Patrick offered to revise his distribution graphs to better represent the “blank” responses.

**Additional Discussion of Tom Arsuffi’s Recommendation:**
Tom offered the following tiered system based on the buckets:

Tier 1: High priority (literature review and recreation analysis) (1-1 and 3-3 through 3-5)
Tier 2: Timing, affordable, feasibility (1-1, 1-2, 2-2 (current genetic studies), 3-2)
Tier 3: Opportunistic monitoring (1-2, 1-3, 2-1, 3-1, 3-2)
Tier 4: High cost, complex, new studies, low priority (1-5, 1-6, 3-1, 2-2, 1-4)

Aligning these tiers with Myron’s table would make a better visualization and textual justification for the Implementing Committee Report. Question 1-1 and a portion of 1-6 can be combined for a literature review of water quality models and added to a high priority tier with a caveat that SAWS opposed the high priority result for the full Question 1-6. Jacquelyn noted that 1-6 and 4-1 appear to be treated most differently in the two compilations. Patrick noted that his concerns about Question 1-6 are lessened if it is focused on a future permit and if any new modeling would be preceded by a showing of need.

**Alignment of Myron and Tom’s Summaries:**
Colette noted that the bucket approach is a layer in the analysis of the prioritization exercise and can be used with any graph or table that has been presented. The buckets do not represent priority but rather a system of grouping into a tier. Myron recommended using the table approach he presented as the primary tool of representation for the sake of clarity and using a bucket analysis for supporting material. The group agreed that the groupings in Tom’s system are not necessarily equal to the tiers in Myron’s proposed system.

Kevin Mayes noted there is not a lot of difference in substance between Tom’s proposals and Myron’s table. He suggested that populating the feasibility column in Myron’s table could acknowledge key aspects of Tom’s bucket visualization. He also noted that various questions appear in multiple buckets.

Myron suggested working through the table and testing consensus for the placement of each question. Jacquelyn suggested focusing on the questions that had the most varied results to come to a consensus on where it belonged on the table. She referenced Questions 1-1 and 3-3 through 3-5 as apparently being agreed upon as high priority. Patrick concurred and suggested combining the moderate priority and low priority tiers together on Myron’s table. He also indicated he is not comfortable moving to external RFP solicitation for
Questions in the moderate or low tiers as initially proposed. Jacquelyn recommended referencing the bucket approach and Patrick’s consensus distribution graph in the Implementing Committee Report to justify the priority tiers presented in Myron’s table. The group also discussed acknowledging the initial absence of 100% agreement on any one item.

Charlie Kreitler Results Summary:
Charlie Kreitler noted that the focus should be on identifying the critical issues. A solution would be to eliminate the lower tiers and decrease the priority content. Charlie recommended organizing the information into three buckets: 1) modeling efforts, 2) additional field data collection and 3) recreational management. He indicated that recreation and modeling are high on his priority list and monitoring is less expensive: three buckets addressing critical issues which is what the IC is looking for.

Discussion on the organization of Myron's Table:
The Work Group confirmed agreement on combining Questions 3-3 through 3-5. In combination, those questions would be placed into the High Priority tier, whatever we end up calling it. Additionally, Question 1-1, with a literature review of water quality models and with acknowledgment that it does not include new modeling, was agreed upon for placement in that tier. Although there was not full consensus to include Questions 1-6 and 4-1 in the High Priority items, there seemed to be potential agreement to live with including them as a Medium Priority tier, provided there was acknowledgment that SAWS had some concerns while recognizing that overall the Work Group supported those items.

Myron's table placed Questions 1-2, 1-3, 2-1, 3-1 (partial), and 3-2 into a Monitoring Priority tier. Kimberly noted concerns about Question 3-2 being treated solely as a monitoring exercise. She indicated this inquiry could be achieved through modeling rather than just monitoring. Jamie noted that monitoring plans can be developed prior to implementing a monitoring strategy. Myron added that the Monitoring Priorities would be appropriate for use in developing monitoring plans now to guide data collection during future low-flow conditions.

The remaining questions were placed into a new “Un-Prioritized” tier. Patrick added that the Un-Prioritized tier does not represent questions that were considered lacking in value but rather questions that the Work Group did not come to a consensus on. Myron added that the Un-Prioritized questions can always be reconsidered based on findings in the Monitoring Priority or High Priority tiers and Patrick noted that those questions would be appropriate for consideration as other studies are completed.

Discussion will continue at the next meeting.
6. **Public comment**
   There were no comments from the public.

7. **Future meetings**
   SHP Work Group Meeting 19 will be held on August 13, 2021 at 9:00am.