July 24, 2018

Documents:

Meeting Agenda Meeting Minutes Read-Aheads and Presentations *Program Work Plan Process MRGESCP Draft Scope of Work Template for Inclusion in a Request for Proposals*



Middle Rio Grande Endangered Species Collaborative Program

Est 2000

Science/HR Workgroup Meeting Agenda

July 24, 2018 1:00 PM – 4:00 PM Location: NM Interstate Stream Commission - 5550 San Antonio Dr NE

Conference Call Information: Phone: (712) 451-0011 Passcode: 141544

| 1:00 - 1:05 | Welcome, Introductions and Agenda Review Decision: Approve meeting agenda | Ashley Tanner |
|-------------|--|---------------------------------|
| 1:05 - 1:20 | Review of June 2018 Science/HR meetingAction items update | Ashley Tanner |
| | Decision: Approval of June meeting minutes | |
| 1:20 - 1:35 | Habitat Restoration GIS Map | Ashley Tanner |
| | Action Item: Test GIS map functionality on DBMS, and provide comments to WEST/USGS via form | |
| 1:35 - 2:00 | SOW development timeline • SOW Template | Julie Dickey |
| 2:00 - 2:20 | Update on past and current SOWs | Ashley Tanner and Debbie Lee |
| 2:20 - 2:35 | Break | Debble Lee |
| 2:35 - 3:30 | Future SOWs Strawmen developed by WEST Habitat Restoration Project Compilation SOW Baselayers SOW Early Life History SOW Comparison of Environmental Conditions in Hatcheries and the MRG SOW Other ideas for SOWs | Ashley Tanner (facilitator) |
| | Decision: Choose SOWs for EC approval Action Item: Formation of small group(s) to refine and further develop SOWs | |
| 3:30 - 3:45 | Additional items, follow-ups, and next meeting dateFuture brownbag ideas | Ashley Tanner |

Decision: Approval to schedule next Science/HR meeting for August 28, 2018

3:45 Adjourn



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Science/HR Workgroup Meeting Minutes July 24, 2018 1:00 PM – 4:00 PM Location: NM Interstate Stream Commission - 5550 San Antonio Dr. NE

Decisions:

- ✓ Meeting minutes of June 19, 2018 were approved with no comment and no objection.
- ✓ Move to complete the MRG Habitat Restoration (HR) Project Compilation Scope of Work (SOW) and Temperature Degree Day (TDD) SOW for EC approval in September.

Action Items:

| WHO | NEW ACTION ITEMS | BY WHEN | |
|---|---|-----------|--|
| WEST | Provide copies of the HR GIS map as requested. | ASAP | |
| Ashley | For the SOW template, add that a clear statement of problem and statement of objective are required in the introduction. | ASAP | |
| WEST | Add Nathan Schroeder, Kate Mendoza and Mo Hobbs to the DBMS small group. | ASAP | |
| WEST (Lana) | Re-send MRG HR Project Compilation SOW meeting invite to include the full Science/HR Work Group (ScW/HR). | ASAP | |
| WEST (Lana) | Schedule a Temperature Degree Day SOW development meeting. | ASAP | |
| Vicky Ryan | Develop SOW strawman for a cuckoo genome study for the group to review. | 8/6/18 | |
| Lynette Giesen | Compile a list of SOWs from USACE for further consideration and development. | 8/6/18 | |
| Justin Reale | Develop SOW description on temperature/conditions effects on RGMS population crash after spawn. | 8/6/18 | |
| WEST | Develop SOW decision-making matrix (with help from Joel) for review by the group. | 8/16/18 | |
| Michael Porter, Justin Reale, Joel Lusk, Alison Hutson, Wade Wilson, Eric Gonzales | Form a Genetics SOW small group on to develop a SOW description on domestication of hatchery fish. | Fall 2018 | |
| ONGOING ACTION ITEMS | | | |
| All | Review 2017 literature review compilation completed by | Ongoing | |

| | WEST to brainstorm potential SOW ideas. | |
|--------|---|---------|
| Debbie | Work with the By-laws Group to construct a strawman to illustrate the process by which the ScW/HR will advance SOWs to the EC | Ongoing |
| All | Send focus questions concerning peer review to WEST. | Ongoing |

Next Meeting:

• The next ScW/HR Workgroup (ScW/HR) meeting will be August 16, 2018 from 1 to 4pm. Location is TBD.

Review of June 19, 2018 ScW/HR Meeting

- An Action Items update was given.
 - WEST will schedule a small group for discussion of SOW #13 (Comparison of Environmental Conditions). No small group discussions on SOWs took place; however, a draft SOW template has been developed and was presented to group for discussion (see below). *Complete*
 - Debbie Lee to work with the By-laws Group to construct a strawman to illustrate the process by which the SOWs will advance through the Program to the EC. Ongoing
 - WEST will develop a SOW template. *Complete*
 - Ashley Tanner to fit SOW #17 (HR Compilation) into the SOW template and prepare to move it forward to the EC in August. *Ongoing task and will be forwarded to the EC in September*
- ✓ The minutes of the June 19, 2018 ScW/HR meeting were approved with no comments and no objections.

Update on the Habitat Restoration GIS Map

- John Peterson, with others at USACE and a lot of effort, has compiled a GIS map of habitat restoration projects. In order to provide access to the most people possible, WEST is working with the USGS developers to store the files on the DBMS site. This will take some time, and requires feedback as it is only draft complete.
 - In the meantime, WEST can share this rather large geospatial dataset upon request.
 - Kate Mendoza (ABCWUA) has volunteered to summarize the number of sites and acres. Without knowing what it looks like, this is thought to be a simple summary without a high level of effort, but may need to be re-evaluated. She was encouraged to do the summary only if it proves to be straightforward.
 - It is expected that this work group will stay engaged and give input on how to handle spatial data now and in the future.
 - WEST, along with the developers and the DBMS small group, are working on a data and data protocol form(s) to standardize feedback.
 - The matter of "who" will be updating the DBMS came up and will be a matter that has yet to be determined.
- > WEST will provide copies of the HR Project GIS map as requested.
- Nathan Schroeder (Pueblo of Santa Ana), Kate Mendoza, and Mo Hobbs (ABCWUA) should be added to the DBMS small group discussing data and data protocols.

SOW Development Timeline

- A draft SOW timeline was presented to the group. This initial timeline reflects the process for which funding agencies require SOWs but will be finalized to include processes of other funding agencies within the Program.
 - The timeline shows that the group should have complete SOWs to select from in the fall for the next fiscal year. This provides time through the summer and fall to complete a new set of SOWs for future selection.
 - The intent is that by mid-April, ScW/HR will provide SOWs to the EC as placeholders for funding agencies such as Reclamation and USACE.
 - It is anticipated that the Fiscal Planning Group (FPG) will help forward SOWs to the appropriate agency/agencies with regard to Biological Opinions (BOs). They will also identify opportunities for partnerships to fund and implement an SOW and identify additional sources of funding for SOWs as needed. (The By-Laws Work Group is coming up with that FPG process now.)
 - This SOW planning process ties in with the larger science and adaptive management process in the Program. It is intended for the SOWs being developed fill in knowledge gaps, or next steps from past and current studies.
 - WEST has prepared a summary of relevant literature published in 2017 for the ScW/HR to review, in hopes that it may help the ScW/HR Work Group come up with future SOW ideas to work on.
- Some of the feedback received from the discussion includes:
 - For the MRGCD, budget items for the BO that year will need to be identified by March or April for approval by May. For NMISC, the Board of Commissioners approves budgets in August.
 - The format was difficult for some and a Gantt chart or other format might better present the timeline.
 - It may be useful to have a list delineating what specific agencies can and cannot fund.
 - The peer review process was not included in the timeline, and should be incorporated so that is explicit. Otherwise, it may potentially be lost in the AM/Science development of the process.
 - A longer term, 5-year plan that would incorporate everyone's timeline as well as legal and budget constraints would be helpful in prioritizing projects as a whole. Unfortunately, this will not happen this year.
- Ashley Tanner developed a Draft MRGESCP SOW Template, and presented it to the ScW/HR for feedback. A conversation around what might be required from contractors followed, and elements individual funding agencies would need in a SOW. Feedback was given and will be used to finalize a working template. The major points of discussion were:
 - The introduction and background should be robust. A clear statement of problem along with a clear objective statement should be added.
- Ashley will include in the Introduction description of the SOW Template that a clear statement of problem and statement of objective are required.
 - Under Tasks and Deliverables, it would be helpful to understand what the various funding agencies require in this section at a minimum. There was a little more discussion on the level of detail required in this section, and whether there should be room for methodology. It was suggested that listing questions to be answered while leaving room for estimated budget could be helpful. After some discussion, it was decided that Tasks and Deliverables should be separate sections.

- Much discussion went into the report deliverable and the review process. It should give clarification on the review process, expectations for data, and expectations to what a presentation means; which also means having a schedule. This makes every task biddable and the level of effort is more readily understood.
- It is understood that there would have to be different templates for different projects. For example, a template for data collection would be different than a template for SWFL monitoring, or even one that requires Quality Assurance/Quality Control (QA/QC).

Update on Past and Current SOWs

- The Tamarisk Habitat scope is progressing. The Economics SOW is currently on hold while WEST investigates what other programs do to study their program economics.
- An HR Project Compilation SOW was templated and presented to the group for their consideration. The premise is to compile all of the funded projects from 2002 2017 for the Program DBMS website. The idea is to ultimately be able to click on spatial data and understand what took place in that space. For some projects, that information already exists, however for others it does not. The contractor will create a database that will help users find habitat restoration project information faster and in the way you would want it (spatially or in reports/data). At a minimum, this compilation effort will include Program-supported project reports, data, etc. that we already have on file in the DBMS website. The compilation can then inform future scopes by revealing areas that need focus.
 - The current HR Project GIS file will be provided to the contractor. The contractor will use the current list as a starting point to gather more information and data about each HR Project. One participant made the point that it is also the responsibility of the ScW/HR and others in the Program to provide the contractor the information they need to perform the work. We have no idea what they will find (or won't find) or how long it might take.
 - An HR SOW small group is scheduled to meet Friday (July 27). It may be helpful to view the GIS map to get an indication of what is there. The idea is to get a full-fledged SOW developed prior to the September EC meeting, which will be scheduled for the sole purpose of presenting and approving SOWs. Before presentation to the EC, final SOW selection for approval will need to be presented to the ScW/HR in August
- > The MRG HR Compilation SOW should be completed for EC approval in September.
- WEST will include the full ScW/HR group on the invitation to the HR SOW small group meeting on Friday, July 27.
- A Baselayers SOW was also outlined and proposed to the group. It delineates vegetation types by acquiring new LIDAR or aerial imagery. It would identify coverage gaps, fill in gaps, and develop a highly-detailed map using more informative imagery.
 - It is thought to support what is already available. As a small project, it could serve as a pilot project to fill in some small coverage gaps. A larger project would be duplicative and expensive.
 - An initial conversation within the HR SOW group could take place to determine if this SOW should be further developed by a separate small group.

- The idea for the SOW on the Comparison of Environmental Conditions in Hatcheries was originally developed by the Genetics work group. This came out of a conversation about a panel review recommendation and given a priority ranking.
 - This SOW was recognized as having started as one focused on minimizing domestication selection. While investigation into domestication selection would be informed by the High-Throughput Markers SOW, the SOW proposed would not have to wait for High-Throughput Markers in order to begin.
 - It would be useful to have hatchery information to explore differences between facilities before going forward with this kind of SOW. This SOW will be tabled until the fall.
- A Genetics SOW small group should be formed and meet this fall to discuss a potential SOW to address the question of domestication of hatchery RGSM. The group should include of Michael Porter, Justin Reale, Joel Lusk, Alison Hutson, Wade Wilson, and Eric Gonzales.
- The Temperature Degree Day SOW (formerly Early Life History SOW) has been in development for a while, and has been completely rewritten to address comments that had previously been raised.
 - Ashley Tanner noted that during her literature review, she found a similar study using ultrasound that this could be modeled after.
 - The group decided to schedule a SOW meeting to pursue completing this SOW for September.
- > The TDD SOW should be completed for EC approval in September.
- > WEST will schedule the TDD meeting as soon as possible.

Future SOWs

- A rolling process is needed to keep SOWs moving forward to not lose funding. A discussion was started on ideas for scopes, and a couple of ideas emerged that would require further discussion.
 - One participant suggested a 12-month genomic study which would help delineate the geographical line between the Eastern and Western yellow-billed cuckoo.
 - Vicky Ryan will develop a SOW strawman for a cuckoo genome study for the group to review.
 - Another participant suggested looking at thermal conditions after RGSM spawn, as this tends to be a period of high mortality. Are the RGSM most affected by temperature or the water conditions that come with high temperature?
 - Justin Reale will provide a SOW description on temperature/conditions effects on RGMS after spawning.
 - Lynette Giesen is compiling a list of SOWs from USACE for further development.
 - Another participant brought up the point that it would be a good idea to have a decision-making matrix to help prioritize which SOW ideas to develop further and move forward.
 - Joel Lusk will forward to WEST, a decision-making matrix he has begun that could be further developed for this group to use.
- The group should review the 2017 literature review compilation to brainstorm potential SOW ideas.

Additional Items and Follow-Ups

- Ideas or topics for future brown bags were requested. Topics and speakers on the periphery of the Program were encouraged. Positive feedback on recent brown bags, including the latest brown bag presented by a NOAA meteorologist on the 2018 Monsoon Season, has been received. These brown bags have been consistently well-attended.
 - The next Brown Bag will be given by Carlos Bustos of Albuquerque Bernalillo County Water Utility Authority (ABCWUA), who will speak on water conservation, public engagement, and how ABCWUA measures success.

| Participant List: | |
|-------------------|---|
| Participant | Organization |
| Ann Demint | U.S. Bureau of Reclamation |
| Kim Eichorst | Bosque Ecosystem Monitoring Program |
| Lynette Giesen | U.S. Army Corps of Engineers |
| Grace Haggerty | New Mexico Interstate Stream Commission |
| Mo Hobbs | Albuquerque Bernalillo County Water Utility Authority |
| Alison Hutson | New Mexico Interstate Stream Commission |
| Kathy Lang | City of Albuquerque BioPark |
| Debbie Lee | Western Ecosystems Technology, Inc. |
| Joel Lusk | U.S. Fish & Wildlife Services |
| Kate Mendoza | Albuquerque Bernalillo County Water Utility Authority |
| Lana Mitchell | Western Ecosystems Technology, Inc. |
| Yasmeen Najmi | Middle Rio Grande Conservancy District |
| Matthew Peterson | City of Albuquerque Open Space |
| Mick Porter | U.S. Army Corps of Engineers |
| Vicky Ryan | U.S. Fish & Wildlife Services |
| Michael Scialdone | Pueblo of Sandia |
| Nathan Schroeder | Pueblo of Santa Ana |
| Ashley Tanner | Western Ecosystems Technology, Inc. |







DRAFT

Middle Rio Grande Endangered Species Collaborative Program SOW Template for Inclusion in a Request For Proposals (RFP)

1. INTRODUCTION

Insert 1-2 sentence thesis statement here.

BACKGROUND

The background section should begin by broadly introducing the topic of interest, and narrow down to the specific question(s) to be answered/task(s) to be performed. This section should include only as much detail as needed for those responding to the RFP to understand the general need for the work and context in which it matters (2-3 paragraphs). This section does not typically include literature citations unless in reference to work that will need to be replicated.

2. PROPOSAL INFORMATION, ORGANIZATION, AND CONTENT

This section details how proposals should be organized and what information they should contain. This section will likely differ depending on the funding agency, however if there are specific needs (such as an overview of the proposer(s)' qualifications or details of their facility for lab work), they may be specified here. Example:

All Proposals should be concise, well organized, and demonstrate the Proposer(s)' qualifications and experience applicable to the Project.

All proposals shall contain, at minimum, the following information:

- A. Title Page
- B. Table of Contents
- C. Cover Page
- D. Approach and Scope of Work
- E. Schedule
- F. Qualifications
- G. Budget
- H. Company/Organization Overview
- I. References
- J. Project Team Staffing

Details for information to be included in each section can then be specified.

3. TASKS AND DELIVERABLES

This section should detail the tasks to be performed, questions to be answered, deliverables, and a timeline for those deliverables. This section will contain the vast majority of the detail about the work to be done. This section should not include extensive justifications for each task (unless needed to complete the task), nor does it need to include citations, unless specific methodology is required and can be found in that publication. Example:

TASK A. Database Creation and Management

A database will be created to store all collected data, as well as inputting future data. The database control will be given over at the end of the contract for X agency and Y organization to manage.

TASK B. Data Analysis

Data analyses will be performed to answer the management questions below. In the proposal, detail how these questions will be addressed and what statistical methods will be performed. Sample data will be provided in order for contractors to gauge how they will organize, input, and analyze data. Data will be analyzed to assess year-to-year changes in *Z species* breeding efforts, reproductive success, and utilization of *A species* as a source of prey, within each study area.

i. Analyze Nesting

- 1. Preferred nesting substrates for each study area and across the entire extent
- 2. Species' preference by study area
- 3. Nesting success by study area, species, and proximity to water
- 4. etc.

ii. Analyze the effects of Z species on A species

- 1. Determine the effectiveness of removing *Z* species on *A* species
 - a. What is the effect of removing *Z* species on *A* species over time?b. etc.

The tasks can be as specific as needed, but should not be so specific as to limit the contractor from considering and proposing new/creative methods.

DELIVERABLES

Deliverables should include the desired timeline and specific deliverables for each time segment. Deliverables can be required as frequently or infrequently as needed, depending on the project. Be sure to specify how deliverables will be received (report, presentation, webinar, in person) to meet the needs of the group and help the contractor appropriately account for cost.

1. Monthly

A one page report that contains:

a. Status of project - estimate of percent progress

- b. Completed objectives
- c. Update on data results

2. Quarterly

The contractor should be prepared to organize meetings in webinars or webexes with stakeholders to present and discuss interim and final database and data analyses' results. Meetings will be scheduled quarterly to provide updates on milestones.

3. At the end of the contract

- a. A functional database that includes:
 - All input data input from *Z* species and *A* species
 - GIS layers for all data
 - An input option for future data to be added

b. Final Programmatic Report that contains:

- Methods, results, and discussion sections of *Z species* monitoring, removal, and management program data analyses
- PDF maps of:
 - Active and inactive nests (all species)
 - A species carcass (differentiate between road kill and predation)
 - o Etc.