

February 27, 2018

Documents:

Meeting Agenda

Meeting Minutes

Read-Aheads and Presentations

Proposed 2018 ScW/HR Work Plan

Scopes of Work [not included]



Middle Rio Grande Endangered Species Collaborative Program

Est. 2000

Science and Habitat Restoration Work Group Meeting Agenda

February 27, 2018 1:00 AM – 4:00 PM

Location: U.S. Fish and Wildlife Service, 2105 Osuna Rd. NE

Conference Call Information:

Phone: (712) 451-0011 Passcode: 141544

1:00-1:10	Welcome, Introductions, and Agenda Review <ul style="list-style-type: none">Do we need to accommodate anyone with time limitations?➤ Decision: Approve meeting agenda	Ashley Tanner
1:10-1:20	Review of January 16, 2018 Science and HR Work Group meeting <ul style="list-style-type: none">Action Items Update➤ Decision: Approve January 16, 2018 meeting minutes	Ashley Tanner
1:20-1:30	Updates on Implementing the Genetics and Tamarisk SOWs	Eric Gonzales Lynette Giesen
1:30-1:45	Update on “The Impact of Temperature Degree Days on Reproductive Readiness and Survival of Rio Grande Silvery Minnow” SOW (formerly “RGSM Early Life History”) <ul style="list-style-type: none">➤ Decision: Approve SOW for EC review and approval➤ Action Item: Develop one-page summary for April EC	Debbie Lee
1:45-1:55	Project planning update resulting from the February 9, 2018 Minnow Action Team meeting <ul style="list-style-type: none">SWCA RGSM monitoringPotential “jiggle” at Alameda DamMRGCD RGSM monitoring at drain outfallsEgg collection	Ashley Tanner
1:55-2:15	Annual Science Work Plan <ul style="list-style-type: none">Projects listPrioritizations➤ Decision: Approve Science Work Plan for 2018	Debbie Lee
2:15-2:30	Break	
2:30-3:00	GIS mapping effort <ul style="list-style-type: none">Identification of significant contributors to the mapWhat are useful attributes that should be included in all	Ashley Tanner

- (future) mapping/project work?
- **Action Item:** Small group to continue compiling the GIS map
 - **Action Item:** Potential projects coming out of this mapping effort

3:00-3:45	Discuss existing and potential SOWs <ul style="list-style-type: none">➤ Action Item: Prepare SOW descriptions by mid-April deadline	<i>Ashley Tanner</i>
3:45-3:55	Announcements <ul style="list-style-type: none">• Seminar series/brown bags prior to ScW/HR meetings• Permitting workshop in 2018• Egg collection call for volunteers• Others	<i>Ashley Tanner</i>
3:55-4:00	Meeting Summary and Next Steps <ul style="list-style-type: none">➤ Next meeting: March 27, 2018 (proposed)	<i>Ashley Tanner</i>
4:00	Adjourn	



Middle Rio Grande Endangered Species
Collaborative Program
Est. 2000

**Science and Habitat Restoration (ScW/HR) Work Group
Meeting Minutes
February 27, 2018 1:00 AM–4:00 PM
Location: U.S. Fish and Wildlife Service, 2105 Osuna Rd. NE**

Decisions

- ✓ The minutes of the January 16, 2018, ScW/HR meeting were approved with no objections.
- ✓ The group decided to incorporate suggestions from the meeting by:
 - Combining items 2 and 3 with 4.
 - Consolidate other items in the Work Plan such that the 3 focuses for 2018 will be activities that have been ongoing and can be completed this year, prioritizing peer review recommendations, and the DBMS.
- ✓ The group agreed that “HR Monitoring Protocol for Current and Future Projects” and “HR Assessment of Past/Existing Projects” are important activities that it would like to do in the future, and should be submitted as placeholder activities for 2019 to Reclamation.

Action Items

WHO	NEW ACTION ITEMS	BY WHEN
Joel Lusk	Send comments on the “The Impact of Temperature Degree Days on Reproductive Readiness and Survival of Rio Grande Silvery Minnow” SOW to WEST.	ASAP
WEST	Compile all comments on the “The Impact of Temperature Degree Days on Reproductive Readiness and Survival of Rio Grande Silvery Minnow” SOW and send out to the group.	ASAP
WEST	Reconvene the small group to review comments on the “The Impact of Temperature Degree Days on Reproductive Readiness and Survival of Rio Grande Silvery Minnow” SOW.	ASAP
WEST	Look at the Tetra Tech/SCWA HR study provided by Mike Marcus and determine whether it covers #5 under the draft Proposed 2018 Science/Habitat Restoration Work Plan. Send the study’s final report to the group, and determine whether it has been added to the DBMS.	ASAP
Ashley Tanner	Share list of future project ideas.	ASAP
WEST	Share the template for project placeholders/ideas to be submitted to Reclamation.	ASAP

WEST	Contact Eric Gonzalez to get an update about the Genetics SOW, and share it with the group.	ASAP
Brian Hobbs	Send update on draft 2017 SWFL Survey report to WEST.	ASAP
Debbie Lee	Convene a small group to review peer review recommendations (lists being used by the DAT, Pop Mon, and Genetics Work Groups) to develop a rough Long-Term Plan (i.e., ~5 years). Small group to include Yasmeen Najmi, Summer Scholz, Mike Marcus, and USFWS.	ASAP
Kathy Lang, Rick Billings, Joel Lusk, Grace Haggerty, Ashley Tanner, MRGCD	Discuss logistics of what will be monitored during egg collection and the numbers and kinds of volunteers that will be needed to do the monitoring.	ASAP
All	Send any map files in any format to John Peterson at USACE or to WEST for inclusion in the DBMS.	ASAP
Each Signatory	Develop up to 5 future project ideas, using the template, and submit them to WEST.	3/15/18
Michael Porter	Develop a short description of the “HR Monitoring Protocol for Current and Future Projects” activity.	Next ScW/HR meeting (3/27/18)
Lynette Giesen	Develop a short description of the “HR Assessment of Past/Existing Projects” activity.	Next ScW/HR meeting (3/27/18)
WEST	Schedule the next ScW/HR meeting to have a brownbag presentation just beforehand.	3/27/18

Next Meeting

- March 27, 2018, 1:00pm–3:00pm, location TBA.

Announcements and Deadlines

- Seminar series/brown bags prior to ScW/HR meetings
 - WEST is considering having short presentations before ScW/HR meetings or even independent of them. For example: A 30-minute presentation from John Peterson about pre- and post-Cochiti mapping he has done, or a presentation on environmental economics. These events would bring more science to the group, and extend its network. The group would like to try having these as a pre-meeting event.

- WEST will schedule the next ScW/HR meeting to have a brownbag presentation just beforehand.
- Permitting workshop in 2018
 - This was also discussed at the February EC meeting. There is some confusion on the part of multiple signatories about permitting requirements. The group is very interested in attending a permitting workshop. The format would involve looking at several hypothetical projects, and the agencies would walk through the permitting process for those projects.
- Egg collection call for volunteers
 - WEST is developing a list of volunteers for egg collection.
 - Thomas Archdeacon is also developing on-call list for fish salvage.
- The BEMP Crawford Symposium: March 6, 2018, 3:30 PM–7:30 PM at UNM. The theme is “In this Together: Collaboration along the Middle Rio Grande.” Please RSVP to Kim Eichhorst if planning to attend.

Review of January 16, 2018 ScW/HR meeting

- Action items from the January 16, 2018 meeting.
 - WEST will send out the 2017 genetics report and Megan Osborne’s presentation.
 - Michael Porter and Grace Haggerty will determine what habitat restoration GIS files are available and send to Mo Hobbs and Ashley Tanner.
 - Ashley Tanner and Mo Hobbs will work to consolidate and develop metadata for GIS map of restoration projects.
 - Debbie Lee will revise Proposed 2018 Work Plan Items for ScW/HR review. *Complete*
 - All will provide any ideas for 2018 SOW development to WEST for consideration at the next ScW/HR meeting. *Incorporated into a new action item*
 - Dave Wegner and Mike Marcus will finish peer review prioritization efforts. *In progress*
 - Mike Marcus will find existing habitat restoration SOW for next meeting. *Complete*
 - Lynette Giesen will find existing habitat restoration SOW(s) for next meeting. *Complete*
- ✓ The minutes of the January 16, 2018, ScW/HR meeting were approved with no objections.

Implementing the Genetics and Tamarisk SOWs

- The draft 2017 SWFL Survey report is not yet back to the contractor.
- Brian Hobbs will send an update on the draft 2017 SWFL Survey report to WEST.
- WEST will contact Eric Gonzalez to get an update about the Genetics SOW, and share it with the group.

“The Impact of Temperature Degree Days on Reproductive Readiness and Survival of Rio Grande Silvery Minnow” SOW

- Formerly called “RGSM Early Life History,” and provided as a read-ahead for the meeting. Once the group approves the SOW, it will go to the EC for review.
- Comments on the SOW
 - All but one reference is from the MRG. Suggest including references from outside the MRG.
 - The Study Plan Considerations (section V) do not have a lot of details because the SOW is draft.
 - The EC has requested that more science be written into the Program’s documents, so this SOW may be an opportunity to do that.
 - The idea of managing temperature should have a larger part in the SOW. One could look at the impact of Cochiti Lake upstream on the spawning window (i.e., the effect on the spawning window due to a half-degree difference due to Cochiti Lake upstream).
 - There are questions about regulatory requirements and the ability to modify the temperature of water releases. We need to check whether there is authority to manage this before it can be included in the SOW.
 - The paragraph before Objectives (section III) talks about management implications: “The data collected would support adaptive management hypothesis testing of water management options to address the conservation needs of the minnow.” This study is the first step in the process. Temperature is a complicated factor which may be addressed in a future study.
 - Year 1 is study set-up, Year 2 is the study, and Year 3+ is optional. After Year 2, there is a list of possible study parameters (Tasks, section IV), including temperature fluctuations (i.e., diurnal, seasonal).
 - There are a number of factors that may impact the ability to add elements to this study, including whether this study will be done in the field or in the laboratory. Some of the factors are not prescribed in the SOW, because it will be up to the contractor to propose methods. For example, the SOW says, “ex situ,” and does provide an exact location for the study.
 - Section IIIb (Objectives): Are we focusing on spring spawn and whether there is fractional spawning during that period, or spawning through the summer? The Objectives section uses “season.” What is the duration? We may need to clarify this.
 - It may be difficult to use pre- and post-weights of fish to determine whether they have spawned, because the weight delta may not be large enough.
 - The SOW does not fully address deaths of fish as a part of the study.
 - Everyone who has comments on the SOW should attend the next small group meeting to discuss these questions and revise the SOW.
- Joel Lusk will send his comments on the “The Impact of Temperature Degree Days on Reproductive Readiness and Survival of Rio Grande Silvery Minnow” SOW to WEST.
- WEST will compile all comments on the “The Impact of Temperature Degree Days on Reproductive Readiness and Survival of Rio Grande Silvery Minnow” SOW and send out to the group.

- WEST will reconvene the small group to review comments on the “The Impact of Temperature Degree Days on Reproductive Readiness and Survival of Rio Grande Silvery Minnow” SOW.

Project planning resulting from February 9, 2018 Minnow Action Team meeting

- A small biology group met after the MAT meeting to discuss potential additional monitoring activities in 2018.
 - SWCA has been doing RGSM monitoring in HR areas. This low-flow year is an opportunity to collect data to compare with years that had better flow. They may potentially add parameters to their monitoring to do this.
 - The other activity that was considered is a “jiggle” from Alameda Dam (i.e., storing a little bit of water behind the dam and creating a small pulse to improve egg collection). At the regular MAT meeting, MRGCD discussed doing something similar at Isleta.
 - One of the reasons this came up at the MAT is that there may not be a pulse in flow to trigger spawning. The idea is to determine whether the jiggle is enough to trigger a spawn. If we know the condition of the females (i.e., whether they are ready to spawn), we might be able to use presence/absence to determine whether the jiggle had an effect.
 - The ultimate goal of this is to get a rough understanding of whether the jiggle will benefit egg collection by comparing egg collection above and below the dam. There may be other variables affecting the number of eggs, but this would be a first look.
- ABCWUA has the ability to do this at Alameda Dam, and is inquiring whether there is a request for them to do this twice during 2018. The thought is that this could be timed with egg collection as well as monitoring that ABCWUA is doing in the Angostura Reach in order to see the impact of the “jiggle” on egg collection.
 - USFWS is working on a letter that extends the BO for ABCWUA to do this. Kathy Lang and WEST are already working to get egg collection volunteers.
 - To think about: How do we compare upstream and downstream collection? This might involve a time series that considers temperature and timing of stage increases.
- Kathy Lang, Rick Billings, Joel Lusk, Grace Haggerty, Ashley Tanner, and someone from MRGCD will meet to discuss logistics of what will be monitored during egg collection and the numbers and kinds of volunteers that will be needed to do the monitoring.

Annual Science Work Plan

- The Proposed 2018 Science/Habitat Restoration Work Plan includes 7 items.
- #3 Data Inventory and Consolidation: There needs to be objectives for inventorying data because the task of collecting this information can be overwhelming (i.e., there are a lot of data, and there are always new data). Therefore, before collecting and identifying them, we need to decide how we want the data stored, presented, etc.
 - Suggestion: Connect the inventory of data to projects (i.e., we need these data for this project), instead of doing it all at once.
- #4 DBMS Development: WEST and USACE have been working with USGS on this, and they almost have a beta site completed. Initially, it will have an improved search engine, but it will not yet have many other features.
 - USGS wants to know: What do people want to use DBMS for? What science needs can the group identify for the DBMS?

- It will have both reports and raw data.
- To ensure consistency, they will be implementing a system for document metadata (i.e, consistent naming conventions and required fields of information when a new document is added).
- 2018 Work Plan items 2 and 3 relate to 4 because the compilation of these data are being done in an intentional way to ensure consistency. This may mean going into old data sets and redoing them.
- The DBMS stewardship process needs to be documented so that it can be picked up no matter who the Program Manager is in the future.
- #5 Habitat Restoration Assessment: There is a report from Tetra Tech and SWCA of HR monitoring they did through 2013.
 - WEST will look at the Tetra Tech/SCWA HR study provided by Mike Marcus and determine whether it covers #5 under the draft Proposed 2018 Science/Habitat Restoration Work Plan. WEST will send the study's final report to the group, and determine whether it has been added to the DBMS.
- #6 RGSM Monitoring Plan: The Monitoring Plan keeps coming up as something that the group needs to do. Progress is being made, but it will not be completed this year.
- #7 Develop Scopes of Work for EC Consideration: This is something that funding agencies must do every year. This should be an ongoing process so we are not scrambling at the end of the year to develop scopes of work for the following year.
 - Until the Program is operating with a PMT and AM WG (i.e., LTP and AM Plan), it will take a long time to get projects approved and started. The 2018 Science/Habitat Restoration Work Plan is one step toward having an effective AM Program.
 - Suggestion: A small group should review the various peer review recommendations (DAT list, Population Monitoring list, and Genetics) to develop an initial LTP (~5-year period). This would probably take 1 day, and then WEST would take it up afterwards. Once the report from Caplan is available, the small group can consider those recommendations, which includes non-RGSM species.
- Debbie Lee will convene a small group to review peer review recommendations (lists being used by the DAT, Pop Mon, and Genetics Work Groups) to develop a rough Long-Term Plan (~5 years). Small group to include Yasmeen Najmi, Summer Scholz (in consultation with Dana Price), Mike Marcus, and USFWS.
 - Suggestion: The group should focus on 3 things from the Work Plan this year.
- ✓ The group decided to incorporate suggestions from the meeting by:
 - Combining items 2 and 3 with 4.
 - Consolidating other items in the Work Plan such that the 3 focuses for 2018 will be activities that have been ongoing and can be completed this year, prioritizing peer review recommendations, and the DBMS.
- Another activity to consider for 2018: A list of all of the projects that the Program has done. The 2016-2017 annual report that WEST is working on is a part of this. WEST can go through all of the annual reports and pull out all of the project lists.

GIS mapping effort

- USACE is working with WEST to come up with an “interim” map for the DBMS, based on information from multiple agencies.
- All should send any map files that they have in any format to John Peterson at USACE or to WEST.

Existing and potential SOWs

- The window has passed to get funding and permitting for 2018 projects. Therefore, we are looking at future projects. The deadline to get placeholder descriptions to Reclamation to be considered for doing work in 2019 is April 16, 2018. USACE needs information even earlier. Information submitted to Reclamation must include a title, paragraph description, and rough cost estimate.
- “Comprehensive 10-Year Monitoring Plan for Completed Habitat Restoration Projects in the Albuquerque and Isleta Reaches of the Middle Rio Grande”
 - This activity would be to develop a protocol, not just plan HR monitoring. It would ensure that everyone is collecting the same data about HR, which can go into the DBMS in a consistent way that is useful for evaluation. The protocol would be for monitoring projects that are already completed and projects that will be completed in the future.
 - Possible elements of the study:
 - Begin with a single-year coordinated pilot as a basis for implementing the protocol in future years.
 - Lessons Learned about what protocols are doable and necessary.
 - Development of a Rapid Assessment Protocol.
 - Suggestion: Call this activity “HR Monitoring Protocol for Current and Future Projects.”
- The group considered a second potential activity to assess past HR projects to determine whether they are meeting their intended objectives. This would help us determine whether they need to be monitored at all (i.e., if they are no longer functioning they do not need to be monitored), and at what intervals. This might precede establishing the protocol. This activity could be conducted on subsets of past HR projects rather than all at once (i.e., by year constructed, by projects with similar objectives).
 - Suggestion: Call this activity, “HR Assessment of Past/Existing Projects.”
- ✓ The group agreed that “HR Monitoring Protocol for Current and Future Projects” and “HR Assessment of Past/Existing Projects” are important activities that it would like to do in the future, and they should be submitted as placeholder activities for 2019 to Reclamation.
- WEST will share the template for project placeholders/ideas to be submitted to Reclamation.
- Michael Porter will develop a short description of the “HR Monitoring Protocol for Current and Future Projects” activity by the next ScW/HR meeting.
- Lynette Giesen will develop a short description of the “HR Assessment of Past/Existing Projects” activity by the next ScW/HR meeting.

- There are already efforts related to RGSM-focused panel recommendations, and those do not need to be our only priorities. We can look at broader projects (i.e., not just fish habitat) as we plan for future years. If we do not develop anything by April 2018, we will not have any projects for 2019, and waiting means that we will not have projects contracted for 2 years.
 - Further, the USACE will lose dollars in its budget if there are fewer activities. However, we also do not want to develop projects just to do projects.
 - We are operating at two levels: Long term objectives (i.e., how we operate) and recommended SOWs. Some of these SOWs can be contracted out, so they do not require resources that are being used for the first level.
 - The deliverable to Reclamation is merely a placeholder, so what we are looking for are initial ideas for SOWs. Reclamation's cycle is to have placeholders for 2019 by April 2018, and then full SOWs in September 2018. By the March ScW/HR meeting, we need titles and descriptions for project ideas so that the group can review them, prioritize them, and finalize them for review by the EC and delivery to Reclamation.
 - The best scopes of work are projects where the data has already been collected. The real limitation is the time left to develop them. Having project ideas developed allows us to plan ahead for future year funding, as well as makes the Program more attractive for new funding.
 - One of the reasons that agencies have so many SOWs that can be considered is that the funding has not materialized for those projects.
- Ashley Tanner will share her list of future project ideas.
- Each signatory will develop up to 5 future project ideas, using the template, and submit them to WEST by March 15, 2018.

Meeting Participants

Participant		Organization
Rick	Billings	Albuquerque-Bernalillo County Water Utility Authority
Lynette	Giesen	U.S. Army Corps of Engineers
Grace	Haggerty	New Mexico Interstate Stream Commission
Brian	Hobbs	U.S. Bureau of Reclamation
Alison	Hutson	New Mexico Interstate Stream Commission
Kathy	Lang	City of Albuquerque BioPark
Debbie	Lee	Western Ecosystems Technology, Inc.
Joel	Lusk	U.S. Fish and Wildlife Service
Ed	McCorkindale	Western Ecosystems Technology, Inc.
Mike	Marcus	Assessment Payers' Association
Kate	Mendoza	Albuquerque-Bernalillo County Water Utility Authority
Yasmeen	Najmi	Middle Rio Grande Conservancy District
Matthew	Peterson	City of Albuquerque Open Space
Michael	Porter	U.S. Army Corps of Engineers
Dana	Price	U.S. Army Corps of Engineers
Ken	Richard	U.S. Bureau of Reclamation
Vicky	Ryan	U.S. Fish and Wildlife Service
Summer	Scholz	U.S. Army Corps of Engineers
Michael	Scialdone	Pueblo of Sandia
Clint	Smith	U.S. Fish and Wildlife Service
Ashley	Tanner	Western Ecosystems Technology, Inc.
Malia	Volke	New Mexico Department of Game & Fish

Proposed 2018 Science/Habitat Restoration Work Plan

1. Finish Prioritizing Peer Reviews Recommendations

In recent years, the Collaborative Program has sponsored three independent science panels/peer review panels:

- RGSM Life History (February 2017)
- RGSM Genetics Project Peer Review (February 2016)
- RGSM Population Monitoring (December 2015)

The Collaborative Program has undertaken some prioritization of the recommendations from the panel reports, but has not completed these efforts, or looked at prioritizing the recommendations from all three panels as a whole.

Continuing the prioritization effort will help inform the development of a long-term science work plan, as well as an interim work plan for the next year.

2. GIS Map of Projects

In 2017, the ScW/HR had begun developing a GIS map of all projects in the MRG. Due to staffing changes at NMISC, that effort had stalled. Completing the map development will inform ongoing and future projects, and help with coordination efforts for on-the-ground activities.

3. Data Inventory and Consolidation

Since its inception, the Collaborative Program and its signatories have collected a large amount of data, including (but not limited to) endangered species population numbers, hydrology, water quality, and habitat restoration.

There is a need to inventory what data are available where, and if possible, to consolidate datasets. This will inform science and adaptive management activities in the Program, and minimize duplicate monitoring efforts.

4. DBMS Development

In 2018, the Collaborative Program will be developing a new DBMS through an Army Corps contract with USGS. This new DBMS needs to be responsive to the needs of the Program, including its scientists and technical experts. The ScW/HR as a group can work with USGS to develop a list of requirements for the database and data management portion of the DBMS.

5. Habitat Restoration Assessment

The ScW/HR raised the need to go back and evaluate past habitat restoration projects, whether they met projected objectives (why/why not?), and to document any additional benefits from a project. There is an existing SOW from 2007 which the group can update to address this project.

Note: Project #2, GIS Map of Projects, needs to be completed first.

6. RGSM Monitoring Plan

As part of the original charge to the Population Monitoring Work Group, the EC had tasked the group with evaluating and refining the MRG Fish Population Monitoring Plan following the completion of the CPUE Workshop. This has yet to be completed.

Note: Project #1, Finish Prioritizing Peer Reviews Recommendations, has to be completed first. The current data analysis effort will also inform this effort.

7. Develop Scopes of Work for EC Consideration

The funding agencies have requested SOWs from the Collaborative Program for inclusion in FY2019 and beyond. Deadlines for the initial list of SOWs (including a short description and cost estimate) are due by the end of April in order to meet Reclamation's deadline. The ScW/HR will use the results of Project #1, old work plans, and individual participant ideas to help identify projects to put forward.