Science and Adaptive Management Committee Meeting

March 12, 2024

Meeting Materials:

Agenda
Minutes
2024 SAMC Membership [read-ahead]
Draft Funding Pathways Ad Hoc Group Charge [read-ahead, draft]
Draft Funding Approach Schematic [read-ahead, draft]
Draft Multi-Year Plan [read-ahead, draft]
Long-Term Plan for Science and Adaptive Management Project List [read-ahead, not included]
Draft Status Update Memo to the EC on the Information & Data Quality Standards Ad Hoc Group [follow-up, draft]
Draft Status Update Memo to the EC on the RGSM Hypotheses Development Ad Hoc Group [follow-up, draft]
Draft Status Update Memo to the EC on the RGSM CEM/Genetics Ad Hoc Group [follow-up, draft]
Draft Status Update Memo to the EC on the Restoration Compendium Ad Hoc Group [follow-up, draft]
Draft Status Update Memo to the EC on the SER Recovery Wheel Ad Hoc Group [follow-up, draft]
Draft Status Update Memo to the EC on Vegetated Islands and Bank-Attached Bars [follow-up, draft]
Draft Status Update Memo to the EC on Conceptual Ecological Models [follow-up, draft]

Link to full Meeting Materials List

Science and Adaptive Management Committee Meeting
March 12, 2024

See the following meeting material on the page below:

Agenda

Middle Rio Grande Endangered Species Collaborative Program

Est. 2000

Science and Adaptive Management Committee (SAMC)
Meeting Agenda

March 12, 2024; 2:00 PM – 4:00 PM

Location: Western EcoSystems Technology, Inc. Office
8500 Menaul NE, Suite A-110

Microsoft Teams Log-In:
Click here to join the meeting
Meeting ID: 255 742 831 599
Passcode: KN46Zu

Meeting Objectives:

- *Hear a contract and staffing update as it pertains to the SAMC*
- *Discuss SAMC areas of expertise for 2024*
- *Discuss SAMC memos to the Executive Committee (EC)*
- *Hear an update on the collaborative Funding Pathways and discuss next steps*
- *Discuss priority topics for the SAMC*

2:00 – 2:10	**Welcome, Introductions, Agenda Review** ✓ **Decision**: Approval of March 12, 2024 meeting agenda	*Program Support Team (PST)*
2:10 – 2:15	**November Meeting Minutes and Action Item Review** ✓ **Decision**: Approval of November 30, 2023 meeting minutes Read-Ahead: ☐ Draft November 30, 2023 SAMC Meeting Minutes	*PST*
2:15 – 2:20	**Contract and Staffing Update** ● Hear a contract and staffing update as it pertains to the SAMC	*PST*
2:20 – 2:30	**SAMC Memo to the EC: Areas of Expertise** ● SAMC membership update ● Discuss areas of expertise needed for flexible SAMC positions ● Memo to the EC re: SAMC areas of expertise recommendations ➢ **Action Item**: PST will capture comments and draft SAMC areas of expertise recommendations memo to the EC	*PST; Group Discussion*

- ➢ **Action Item**: SAMC members will review draft SAMC areas of expertise recommendations memo to the EC

Read-Ahead:

- ☐ 2024 SAMC Membership

2:30 – 2:40	**SAMC Memo to the EC: Sunsetting the Information & Data Quality Standards Ad Hoc Group** ● Group deliverables ● Memo to the EC re: deliverables and sunsetting the group ➢ **Action Item**: SAMC members will review SAMC memo to the EC on the Information & Data Quality Standards Ad Hoc Group deliverables	*SAMC Lead*
2:40 – 3:10	**Status Update Memos** ● Status Update Memos for: o RGSM Hypotheses Development S&T Ad Hoc Group o RGSM CEM/Genetics S&T Ad Hoc Group o Restoration Compendium S&T Ad Hoc Group o SER Recovery Wheel S&T Ad Hoc Group o Vegetated Islands and Bank-Attached Bars o Conceptual Ecological Models ➢ **Action Item** SAMC members will review status update memos	*PST, SAMC Leads*
3:10 – 3:40	**Funding Pathways** ● Background & overview ● EC approval & FPC input ● SAMC roles ● Hybrid ad hoc group charge ● Combining Multi-Year Plan and Long-Term Plan ➢ **Action Item**: SAMC members will provide feedback on draft Funding Pathways Ad Hoc Group charge ➢ **Action Item**: SAMC lead will incorporate SAMC feedback into draft charge Read-Aheads: ☐ Draft Funding Pathways Ad Hoc Group Charge ☐ Draft Funding Approach Schematic ☐ Draft Multi-Year Plan (*for reference only*) ☐ Long-Term Plan for Science and Adaptive Management Project List (*for reference only*)	*SAMC Lead, PST, Group Discussion*
3:40 – 3:55	**Open Discussion** ● SAMC discussion on priorities moving forward	*Group Discussion*
3:55 – 4:00	**Action Items, Next Steps, and Announcements** ➢ **Upcoming Events:**	*PST*

- MAT Meeting: March 14; 1-3 PM
- EC Meeting: March 28; 1-4 PM

4:00 **Adjourn**

Link to full Meeting Materials List

Science and Adaptive Management Committee Meeting
March 12, 2024

See the following meeting material on the page below:

Minutes

Middle Rio Grande Endangered Species Collaborative Program

Est. 2000

Science and Adaptive Management Committee (SAMC)
Meeting Minutes *[not approved by the SAMC]*

March 12, 2024; 2:00 PM – 4:00 PM

Location: Western EcoSystems Technology, Inc. Office
8500 Menaul NE, Suite A-110

Decisions:

- ✓ Approval of the March 12, 2024 SAMC meeting agenda
- ✓ Approval of the November 30, 2023 SAMC meeting minutes

Announcements:

- ❖ U.S. Bureau of Reclamation (Reclamation) made the decision not to offer the next option year of the PASS contract to Western EcoSystems Technology, Inc. The current Program Support Team (PST) will end work on the Middle Rio Grande Endangered Species Collaborative Program (MRGESCP) at the end of March 2024. Zoë Rossman will serve as the interim Program Coordinator with support from Michelle Tuineau as the Program Assistant through March 2024.
- ❖ While Reclamation seeks a new contractor for the PASS contract, Hira Walker, U.S. Army Corps of Engineers (USACE), will step in to coordinate the SAMC.

Action Items:

WHO	ACTION ITEM	BY WHEN
Program Support Team (PST)	Provide contact information for the SAMC and ad hoc group members to the SAMC	3/14/2024
PST	Provide all status update memos to the SAMC	3/14/2024
SAMC	Review the status update memo to the Executive Committee (EC) on the Information & Data Quality Standards Ad Hoc Group	3/18/2024
SAMC	Review the status update memo to the EC on the Rio Grande Silvery Minnow (RGSM) Hypotheses Development Ad Hoc Group	3/18/2024
SAMC	Review the status update memo to the EC on the RGSM Conceptual Ecological Model/Genetics Ad Hoc Group	3/18/2024
Megan Friggens, Meaghan Conway, Ari Posner, Ara Winter, and Dave Moore	Notify the PST of your interest in continuing SAMC membership past the end of your 4-year term in 2024	3/21/2024
SAMC	Review the Funding Pathways Ad Hoc Group Charge	3/22/2024

PST	Include the notes from the RGSM Hypotheses Development Ad Hoc Group meetings in the materials provide to U.S. Bureau of Reclamation	3/31/2024
PST	Document the discussion on suggested areas of expertise for new SAMC members in the meeting minutes	3/31/2024
SAMC	Reach out to Hira Walker to discuss the SAMC as needed	Ongoing
Hira Walker	Schedule a meeting with SAMC members	TBD

Next Meeting: TBD

Meeting Minutes

Welcome, Guest Introductions, Agenda Review

The March 12, 2024 SAMC Meeting Agenda was approved by attending SAMC members.

- ✓ **Decision**: Approval of the March 12, 2024 SAMC meeting agenda

November Meeting Minutes and Action Item Review

The draft November 30, 2023 SAMC Meeting Minutes were approved by attending SAMC members. Summary updates for action items are below:

- The PST sent the final draft of River Drying in the MRG report to Lynette Giesen, U.S. Bureau of Reclamation, for review.
- The PST provided the WEST presentation slides and PST resumes to the SAMC.
- The PST coordinated with Aubrey Harris to get further input on the Multi-Year Plan prior to the January EC meeting.
- The PST revised the 2024 Work Plan with input from Ari Posner and provided it to the SAMC for review.
- The PST were unable to get into touch with Mick Porter and Megan Friggens regarding serving as SAMC leads for the RGSM Conceptual Ecological Model/Genetics Ad Hoc Group.
- Mick Porter drafted a memo to the EC requesting floodplain monitoring data. The draft memo received comments from Ari Posner but has not been reviewed and approved by the RGSM Hypotheses Development Ad Hoc Group or SAMC.
- Ara provided the 2023 SAMC Summary Report at the January EC meeting.
- PST coordinated an EC discussion on integrating the Multi-Year Plan into the Long-Term Plan.
- The PST was unable to coordinate a meeting with Ara Winter, Ari Posner, and Dave Moore, but met with Ari Posner to discuss organizing an ad hoc group to review and develop vegetated islands and bars work products. Ari Posner volunteered to develop a draft ad hoc group charge.
- Aubrey H. reported on the meeting held between an Engineer Research and Development Center (ERDC) student interested in completing a research project on population models and leads of the RGSM Hypotheses Development Ad Hoc Group. The student will move forward with their project.
- The Climate Futures Planning workshop was cancelled.
- PST coordination with SAMC leads is ongoing.

- ✓ **Decision**: Approval of the November 30, 2023 SAMC meeting minutes

Contract and Staffing Update

Reclamation made the decision not to offer the next option year of the PASS contract to WEST. The current PST will end work on the MRGESCP at the end of March 2024. Zoë Rossman will serve as the interim Program Coordinator with support from Michelle Tuineau as the Program Assistant through March 2024. The PST has been working closely with Reclamation to put together a transition plan, which will be a combination of making progress on important efforts as well as documenting all efforts that are in progress. A proposed path forward is for Hira Walker, USACE, to take over coordination of the SAMC in the interim before a new contractor starts.

SAMC Memo to the EC: Areas of Expertise

SAMC membership terms will be up in 2024 for Megan Friggens, Meaghan Conway, Ari Posner, Ara Winter, and Dave Moore. Their areas of expertise are Ecosystem Function (standing), Terrestrial Ecology (standing), Climate Science (flexible), Geomorphology (flexible), and Statistics/Modeling (flexible). The By-Laws were recently changed so 8-10 members can serve on the SAMC instead of only 8. Membership includes 6 standing positions and 2-4 flexible positions. The SAMC can make recommendations to the EC for up to 4 flexible areas of expertise. The SAMC can recommend the existing flexible areas of expertise be maintained or propose different or additional flexible areas of expertise based on the SAMC's priorities moving forward. Final determination on areas of expertise to seek in new SAMC members positions is made by the EC.

Ari Posner suggested hydrologic engineering/geomorphology in addition to hydrology (standing) as a flexible area of expertise. There was group interest in a restoration ecologist position focusing on species recovery. There was a strong interest in keeping climate science as a flexible area of expertise. Mick Porter suggested the statistics/modeling position (flexible) could be replaced with a position focused on data mining. Other members suggested positions focusing on systems analysis/modeling or ecosystem modeling/decision support models.

Ryan Gronewold has a background in water management and several members have access to water management experts; it was agreed that the existing expertise on the SAMC would suffice in lieu of adding a water management specialist as a flexible position.

A SAMC member suggested changing the SAMC application process, to first have folks express interest in joining the SAMC and state their areas of expertise. The SAMC would then assess the available applicants and determine the best fit for the SAMC. It was also proposed that the EC be asked to extend terms for SAMC members interested in continuing on the SAMC. SAMC members interested in extending their terms were asked to notify the PST.

The draft list of areas of expertise to recommend to the EC is as follows: Geomorphology, restoration ecology, species recovery, climate science, systems analysis/modeling, decision support modeling, water management.

The SAMC opted to table the list and discuss it further to determine priorities for flexible positions as well as the potential for altering the SAMC application process. The PST stated it would document the discussion on suggested areas of expertise for new SAMC members in the meeting minutes.

- **Action Item**: PST will document the discussion on suggested areas of expertise for new SAMC members in the meeting minutes
- **Action Item**: Megan Friggens, Meaghan Conway, Ari Posner, Ara Winter, and Dave Moore will notify the PST of interest in continuing SAMC membership past the end of your 4-year term in 2024

SAMC Memo to the EC: Sunsetting the Information & Data Quality Standards Ad Hoc Group

This Information & Data Quality Standards Ad Hoc Group was formed to assess the feasibility of creating data quality standards for the MRGESCP. After several meetings, it was determined this was not an appropriate task given that MRGESCP Signatory organizations are beholden to the standards of their own organizations or their funding agencies. The charge was revised to task the group with creating a template for entry of project-specific information about data collection and management practices and developing a data disclaimer for the Program Portal. The revised charge was approved by the SAMC and EC.

The ad hoc group created a template that collects basic information on data management and QA/QC practices for Signatory projects. The document is intended to act as a snapshot of what was done to data prior to being uploaded to the Program Portal and when an associated project is entered into the Science and Adaptive Management Information System (SAMIS). The ad hoc group opted to adopt an existing U.S. Geological Survey (USGS) Data Liability Disclaimer for the Program Portal, though a decision has not been made on how or whether to modify this for the MRGESCP. The ad hoc group leads approved of sunsetting the group as its charge was considered complete.

The PST reviewed a draft memo to the EC for approving the group deliverables and sunsetting the group. SAMC members expressed concern over the lack of a process for implementing the data disclaimer and template, and the SAMC did not approve the draft memo sunsetting the group. The PST suggested revising the memo to the format of a status update memo rather than pushing to sunset the group. The SAMC will have the chance to review the status update memo before it is sent to the EC. A decision on whether to sunset the group or extend its tasks will be made at a later date.

- **Action Item**: SAMC will review the status update memo to the EC on the Information & Data Quality Standards Ad Hoc Group

Status Update Memos

As part of the PST's transition plan, it is working to provide status updates on many ongoing efforts within the MRGESCP, including those that involve the SAMC. The PST reviewed the draft status update memos from the SAMC to the EC. The memos cover the existing ad hoc groups and other science efforts. The draft memos are based on available information and should be straightforward. SAMC leads have seen and, in some cases, provided edits to these status update memos. All associated documents (e.g., group charges) will be compiled and provided to Reclamation by March 31, 2024. Summary points for each memo are below:

RGSM Hypotheses Development Ad Hoc Group

The charge was revised after discussion between proposed ad hoc group leads and the PST. The revised charge needs to be reviewed and approved by the full ad hoc group and SAMC. Mick Porter drafted a memo to the EC requesting floodplain monitoring data. The draft memo received comments from Ari Posner but has not been reviewed and approved by the RGSM Hypotheses Development Ad Hoc Group

or SAMC. Mick Porter asked that all notes from meetings be provided in the materials delivered to Reclamation.

The SAMC requested additional time to review the status update memo before it is provided to the EC.

RGSM Conceptual Ecological Model (CEM)/Genetics Ad Hoc Group
No tasks for the ad hoc group have been completed since 2022. There is a need for a SAMC lead to re-engage with the ad hoc group and help determine next steps. Alison Hutson volunteered to serve as a co-lead with another SAMC member.

The SAMC requested additional time to review the status update memo before it is provided to the EC.

Restoration Compendium Ad Hoc Group
The ad hoc group has yet to convene. All members have previously confirmed their interest in joining the group. The SAMC lead, Meaghan Conway, will need to re-confirm their commitment given the extended interim before the group begins. The PST will provide contact information for ad hoc group members to the SAMC.

The SAMC approved the draft status update memo.

Society for Ecological Restoration (SER) Recovery Wheel Ad Hoc Group
The ad hoc group has yet to convene. All members have previously confirmed their interest in joining the group. The SAMC lead, Meaghan Conway, will need to re-confirm their commitment given the extended interim before the group begins. The PST will provide contact information for ad hoc group members to the SAMC.

The SAMC approved the draft status update memo.

Vegetated Islands and Bank-Attached Bars
Ari Posner suggested developing an ad hoc group to finalize the vegetated islands and bank-attached bars bibliography and address remaining deliverables from the 2022 workshop. Ari Posner volunteered to develop a draft ad hoc group charge.

The SAMC approved the draft status update memo.

Conceptual Ecological Models (CEMs)
RGSM and avian CEMs were developed by previous work groups. The RGSM CEM is still being processed by the RGSM CEM/Genetics Ad Hoc Group. The New Mexico meadow jumping mouse CEM and Pecos sunflower CEM have yet to be developed. The PST developed life history conceptual models for all species in preparation for the Climate Futures Planning Workshop (canceled). The SAMC has not reviewed these models.

The SAMC approved the draft status update memo.

- **Action Item**: PST will provide all status update memos to the SAMC
- **Action Item**: SAMC will review the status update memo to the EC on the RGSM Hypotheses Development Ad Hoc Group

- **Action Item**: SAMC will review the status update memo to the EC on the RGSM CEM/Genetics Ad Hoc Group
- **Action Item**: PST will include the notes from the RGSM Hypotheses Development Ad Hoc Group meetings in the materials provide to Reclamation

Funding Pathways

The discussion on funding pathways was cut short for time. Aubrey H. presented a short update. The name of this effort has been renamed a couple of times, from "RFP Approach" to 'Collaborative Prioritization and Funding Approach." The FPC decided to simplify the name to "Funding Pathways." Aubrey H. developed a hybrid ad hoc group charge that calls for FPC and SAMC members, which has been reviewed by the FPC. An FPC co-lead is needed to work with Aubrey H. as the SAMC co-lead. The SAMC will be responsible for integrating the Multi-Year Plan into the Long-Term Plan, while retaining the structure of the Multi-Year Plan that works well. The SAMC will need to determine whether a single ad hoc group should develop the funding pathways and integrate the Multi-Year Plan into the Long-Term Plan or if separate ad hoc groups should work on these tasks.

The draft ad hoc group charge documents the objectives of the group and was provided for SAMC review. The charge will need more work before it is presented to the EC for approval.

- **Action Item**: SAMC will review the Funding Pathways Ad Hoc Group Charge

Open Discussion

The PST and Hira Walker, USACE, led an open discussion on the future of the SAMC. The MRGESCP is going through a period of transition, while Reclamation seeks a new contractor for program coordination. It will be months before a new contractor starts and it is important to maintain momentum. Hira W. volunteered to coordinate the SAMC and ad hoc group through the interim period. Hira W. seeks to reinvigorate the SAMC's efforts and questioned why the SAMC thinks many efforts have stalled out. Hira. W. also stressed that the MRGESCP should place an emphasis on figure out data centralization and standardization between agencies, as there is not a vehicle for doing that currently. That can be used to inform MRGESCP discussions and processes for determining what to do next. Hira H. expressed interest in funding contracts to help move along SAMC and MRGESCP efforts.

SAMC members expressed confusion about their duties on the SAMC and the lack of time they have to take on more responsibilities. Aubrey H. developed an ad hoc group charge template that better reflects the duties of individual SAMC members. SAMC members requested that there be better communication of time commitments. Figuring out how to make processes run smoother and increase collaboration is a work in progress, and committees will need to take on some of the work WEST is doing.

Hira W. requested SAMC members reach out to her with any questions and stated she would be scheduling a meeting with the SAMC. The PST will provide contact information for the SAMC to Hira W.

- **Action Item**: PST will provide contact information for the SAMC and ad hoc group members to the SAMC
- **Action Item**: SAMC will reach out to Hira Walker to discuss the SAMC as needed
- **Action Item**: Hira Walker will schedule a meeting with SAMC members

Announcements

- **Upcoming Events:**
  - EC Meeting: March 28; 1-4 PM
  - Next SAMC Meeting: TBD

Meeting Participants

SAMC Member	Role
Alison Hutson	Aquatic Ecology Expert
Ari Posner	Geomorphology Expert
Aubrey Harris	Hydrology Expert
Michael (Mick) Porter	Aquatic Ecology Expert
Ondrea Hummel	Watershed Resource Planning/Regulatory Expert
Ryan Gronewold	EC *ex-officio*/Hydrology Expert

Program Support Team	Role
Zoë Rossman	SAMC Facilitator
Michelle Tuineau	Support
Cait Rottler	Support
Bethany Hanak	Support

Guests	Organization
Hira Walker	U.S. Army Corps of Engineers
Lynette Giesen	U.S. Bureau of Reclamation

Link to full Meeting Materials List

Science and Adaptive Management Committee Meeting
March 12, 2024

See the following meeting material on the page below:

2024 SAMC Membership [read-ahead]

2024 Science and Adaptive Management Committee Membership

SAMC Member	Area of Expertise (AOE)	AOE Type[2]	Starting Year	Retention Status[3]
Alison Hutson	Aquatic Ecology	Flexible	2023	
Michael Porter	Aquatic Ecology	Standing	2023	
Megan Friggens	**Climate Science**	**Flexible**	**2020**	**Term up in 2024**
Ryan Gronewold	EC *ex-officio*[1]	N/A	2020	
Meaghan Conway	**Ecosystem Function**	**Standing**	**2020**	**Term up in 2024**
Ari Posner	**Geomorphology**	**Flexible**	**2020**	**Term up in 2024**
Aubrey Harris	Hydrology	Standing	2023	
Ara Winter	**Statistics/Modeling**	**Flexible**	**2020**	**Term up in 2024**
S. David Moore	**Terrestrial Ecology**	**Standing**	**2020**	**Term up in 2024**
Ondrea Hummel	Watershed Resource Planning/Regulatory	Flexible	2023	

[1]The EC *ex-offico* is a member of the EC who serves to represent the EC's perspective on the SAMC. The EC fills the position of EC *ex-officio* through a vote. The position is not subject to term limits.

[2]The four (4) standing SAMC AOE are as follows: Aquatic ecology, terrestrial ecology, ecosystem function, and hydrology. Four to six (4-6) flexible subject matter experts may also be included on the SAMC, with their AOE determined by the Executive Committee.

[3]The SAMC charter states that no individuals may serve on the SAMC for more than four (4) consecutive years, except as authorized by the EC.

Link to full Meeting Materials List

Science and Adaptive Management Committee Meeting
March 12, 2024

See the following meeting material on the page below:

Draft Funding Pathways Ad Hoc Group Charge [read-ahead, draft]

Middle Rio Grande Endangered Species Collaborative Program (MRGESCP)
Hybrid Ad Hoc Group Charge
Request for Proposals Process Ad Hoc Group

Approved by members of the Ad Hoc Group Name on [date]
Approved by the Science and Adaptive Management Committee on [date]
Approved by the Executive Committee on [date]

SAMC Lead(s): Aubrey Harris
FPC Lead(s):

Keywords: Administration, collaboration, project prioritization

Parent Committee(s)
Science and Adaptive Management Committee, Executive Committee

I. Ad Hoc Group Charge

In order to foster collaboration across signatories and to support resource development for the program, this ad hoc group shall organize a process that links the FPC funding opportunities matrix, the Long-Term and Multi-Year Plans, and EC leadership objectives as a Request for Proposal process. This process will generate templates and workflows to identify funding opportunities relevant to MRGESCP program objectives, modes to solicit proposals to achieve these objectives, and review processes to maintain a level of consistency across the Collaborative Program.

II. Membership

A. Criteria for membership

We would like representative members from the FPC, SAMC, and EC to participate. Ideally folks from different backgrounds (federal, other governmental, tribal, and nonprofit) to help ensure that the proposed process works with multiple stakeholder demographics.

B. Members

Name	Organization	Role Within Group
Aubrey Harris	USACE-ERDC	Lead

III. Background and Implementation

The Collaborative Program has developed several resources that articulate scientific or physical barriers to improving ecological outcomes for species of interest (e.g., the Multi-Year Plan, the Long-Term Plan. Additionally, the Collaborative Program has identified resource opportunities that may drive down these uncertainties, as well as to support management activities regarding program objectives (e.g., the Funding Opportunities Matrix). However, the program is resource limited, and project prioritization and fiscal support is

necessary to pursue either applied or basic research regarding critical uncertainties or piloting changes in management.

Contrastingly, the Collaborative Program has strength in its diversity of individual signatory mission-goals, technical expertise, and organization types (e.g., tribal, federal/state government, nonprofit), that would position it to be very effective at pursuing a variety of competitive funding opportunities.

Therefore, the Ad Hoc Group will develop a process that synergizes the FPC, SAMC, and EC objectives to create opportunities and increase resources available for the Program mission.

IV. Objectives

1. Develop a process that incorporates Collaborative Program critical uncertainties, funding opportunities, and EC motivations.

V. Potential Resources

Existing resources are: the draft multi-year plan, the long-term plan, SAMC and FPC committees, Funding Opportunity Matrix.

VI. Tasks and Deliverables

Objective	Task	Deliverable (if applicable)
1	A. Develop a proposed RFP workflow for FPC, SAMC, and EC, and solicit feedback from EC.	Presentation to EC
1	B. Develop templates that guide participants through the RFP workflow	Template RFP, proposals, rating rubrics, EC letter of support
1	C. Pilot the workflow with advertisement of real funding opportunities.	Advertisement of a couple grants, and if applicable, proposal review and EC acceptance.

VII. Application of Deliverables

The deliverables would be applicable at different scales in the Program:

1. On a regular basis (quarterly, or however the process finds appropriate), motivates committees to keep up to date on innovations to keep the Program moving forward. These would be published in the MRGESCP newsletter.
    a. Directs SAMC to identify the most pressing and important uncertainties for EC to prioritize.
    b. Directs FPC to select compelling funding opportunities to bring to the Program's attention.
2. Provides resources if any signatory is interested in pursuing a funding source that values collaboration. These resources would be made available on the Program Portal.
    a. Templates for Requests for Proposals, to solicit pertinent information for project selection within those proposals, rubrics that allow for fair selection of proposals, and support letters to strengthen proposals.
    b. Has mechanisms for facilitator to advertise these opportunities to the broader Program audience, perhaps collating resources and expertise that otherwise would not be realized.

VIII. Timeline and Reporting Schedule

Deliverable	Prerequisites	Start Date	End Date	Notes
1A	None	Jan 2024	EC Meeting (April 2024?)	Start date contingent on ad hoc formation
1B	1A	April 2024	Aug 2024	
1C	1B	Aug 2024	Dec 2024	Duration of task depends on how frequently RFPs would be advertised, piloting the process.

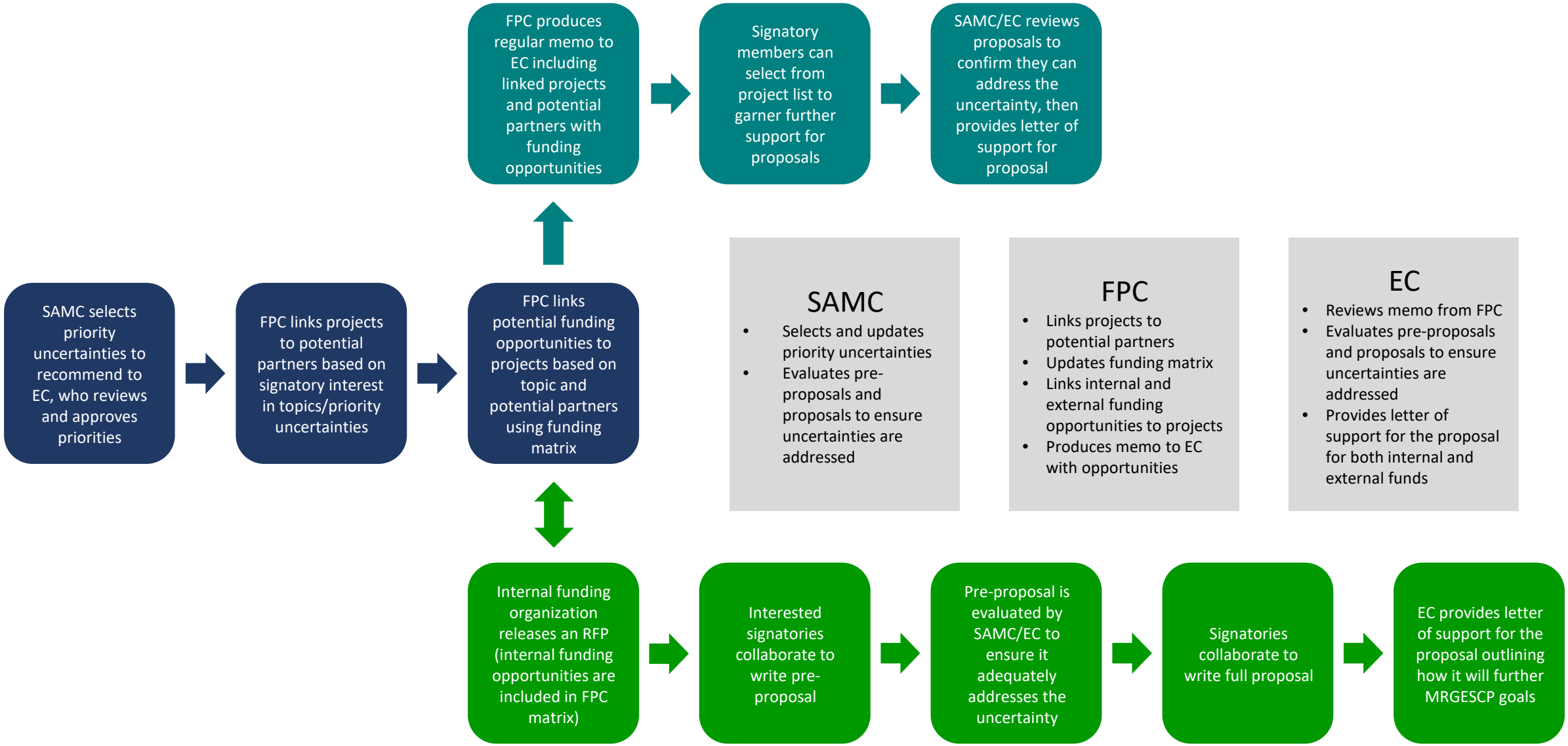
Link to full Meeting Materials List

Science and Adaptive Management Committee Meeting
March 12, 2024

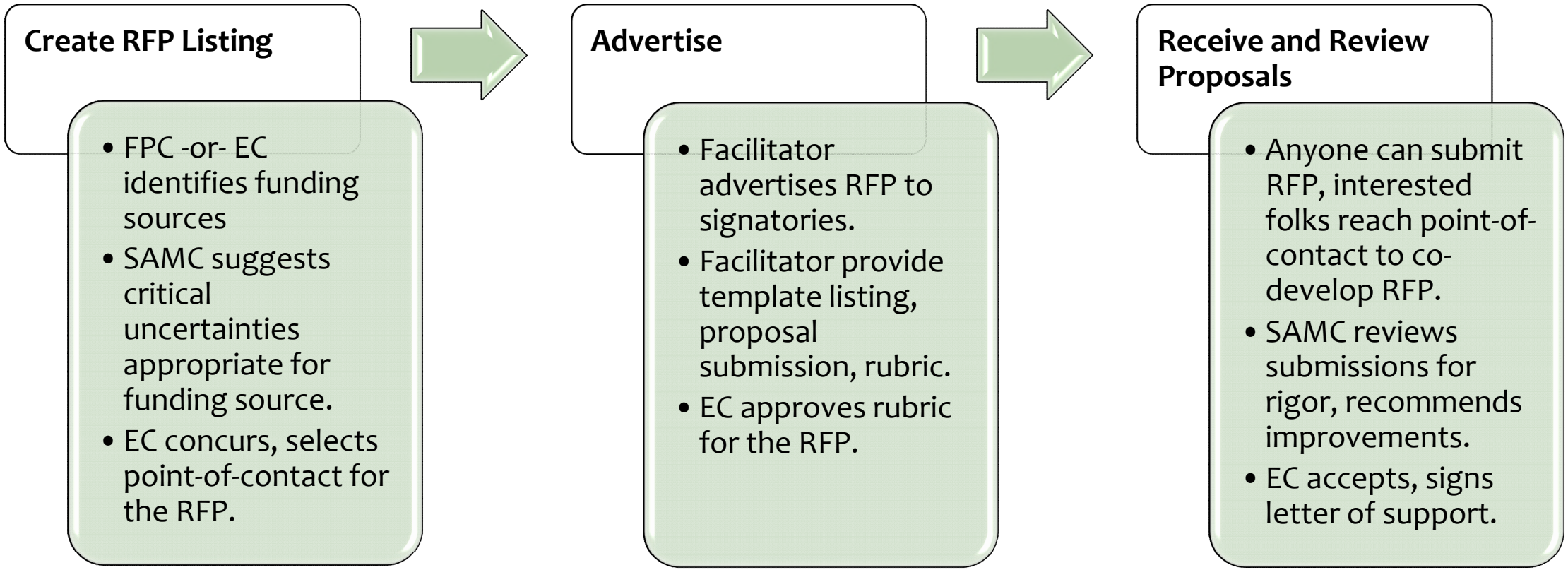
See the following meeting material on the page below:

Draft Funding Approach Schematic [read-ahead, draft]

External funding opportunities



Internal funding opportunities/RFP approach


Create RFP Listing
• FPC -or- EC identifies funding sources
• SAMC suggests critical uncertainties appropriate for funding source.
• EC concurs, selects point-of-contact for the RFP.
Advertise
• Facilitator advertises RFP to signatories.
• Facilitator provide template listing, proposal submission, rubric.
• EC approves rubric for the RFP.
Receive and Review Proposals
• Anyone can submit RFP, interested folks reach point-of-contact to co-develop RFP.
• SAMC reviews submissions for rigor, recommends improvements.
• EC accepts, signs letter of support.

Link to full Meeting Materials List

Science and Adaptive Management Committee Meeting
March 12, 2024

See the following meeting material on the page below:

Draft Multi-Year Plan [read-ahead, draft]

MRGESCP Multi-Year Plan (2023-2027)

On December 6-7, 2022, the Collaborative Program hosted its first biennial Collaboratory. Over the course of the two days, participants identified priority issues to inform a multi-year planning effort in service of the Collaborative Program's mission. Two overarching themes emerged from these priority issues:

1. A need for climate scenario planning to manage adaptively in the face of increasing uncertainty; and
2. A need to organize endangered species management under an ecosystem approach within the Middle Rio Grande (MRG) Basin.

These two themes provide a framework for all of the topical areas that are included in the multi-year plan. Careful consideration of both themes will ensure the continued relevance of Collaborative Program initiatives and activities to the management priorities of its signatories.

Five critical focus areas identified from Collaboratory conversations were:

- Habitat restoration planning and assessment
- Management of vegetated islands and bank-attached bars
- Rio Grande silvery minnow (RGSM) management and science
- Water operations and flexibility
- Strategic planning for river drying in the MRG

These focus areas, in addition to climate scenario planning, organized and pursued under the ecosystem approach, inform the Collaborative Program's planned direction for the next five years and beyond. Climate scenario planning, while an overarching theme that addresses each of the critical focus areas, will require significant effort from the Collaborative Program to undertake. The multi-year planning approach seeks to forecast the priority management issues and critical scientific questions that have the potential to support future management decisions.

The multi-year plan is organized into: 1) immediate priorities (to be addressed in 2023), 2) short-term priorities (to be addressed over the next 2-4 years), and 3) long-term priorities (to be addressed over five or more years). The levels of certainty and detail for the immediate and short-term priorities are greater than those for the long-term priorities. The end goal(s) of each focus area are stated in the sections below. Details for each focus area, as well as priorities regarding climate scenario planning, are organized in the tables below.

Each item in the tables is assigned an identification code. The first part of the code indicates to which focus area the item belongs. The second part of the code indicates whether the priority is immediate (I), short-term (ST), or long-term (LT). The codes are as follows:

- Focus area
    - CS: Climate Scenario Planning
    - HR: Habitat Restoration Planning, Design, and Assessment
    - SM: Rio Grande Silvery Minnow Management and Science
    - WO: Water Operations and Flexibility
    - RD: Strategic Planning for River Drying in the Middle Rio Grande
- Timing
    - I: Immediate (2023)
    - ST: Short-Term (2024-2026)
    - LT: Long-Term (2027 and beyond)

The multi-year plan is a means to organize complex initiatives that require longer implementation times and are interrelated. The multi-year plan will be supplemented by the Biennial Administrative Schedule and each year's Annual Work Plan. The multi-year plan will be revisited after each biennial Collaboratory and revised, as needed, to ensure the Collaborative Program remains responsive to the signatories' evolving needs and management priorities. The multi-year plan items will be linked to existing guiding principles (i.e., mission, goals, objectives, and strategies) and subsequently incorporated in the SAMIS following a scientific review. This review will assess the feasibility of each item and the linkages to existing Program efforts in order to inform new project development.

Climate Scenario Planning

As the climate continues to change in New Mexico, impacts to the ecosystems in which listed species exist are apparent and likely to cascade and intensify over time. To that end, the Collaborative Program, in order to recommend management actions that will protect listed species and their habitats under this new paradigm, must cope with the uncertainty of climate change by exploring potential future conditions in the MRG Basin. The main 2023 effort related to this focus area will be a Climate Scenario Planning Workshop, which will inform many of the other activities in the multi-year work plan.

End Goal: Enable the Collaborative Program signatories and other resource managers to deal collectively with uncertainty of future conditions within the basin.
Program Goals Addressed: *A-G*

ID	Priority	Informed By	Informs	Related Objectives
Immediate (2023):				
CS-I-1	Develop likely future scenarios by applying current climate data and models to the MRG • Harness the expertise of regional climate scientists with experience in developing appropriate scenarios		CS-I-2 CS-ST-2 HR-ST-2 HR-LT-3 WO-I-2	A-4, A-5.1, B-2, B-3.1, B-3.2, B-3.3, C-1.1, D-1.2, E-1.2, F-1
CS-I-2	Host a Climate Scenario Planning Workshop designed to: • Determine which key ecosystem functions are threatened by climate change • Identify scientific uncertainties that influence management decisions • Begin developing strategies to mitigate impacts of future changes in the system by targeting key ecosystem functions	CS-I-1	CS-ST-2 HR-ST-2 HR-ST-4 HR-LT-3 WO-I-2 RD-ST-1	A-4, A-5.1, B-2, B-3.1, B-3.2, B-3.3, C-1.1, D-1.2, E-1.2, F-1
Short-Term (2024-2026):				
CS-ST-1	Continue developing strategies to maintain ecosystem functions under different climate scenarios	CS-I-1 CS-I-2		F-1
CS-ST-2	Consider potential changes in hydrology and geomorphology, and associated impacts to the ecosystem and listed species	CS-I-1 CS-I-2	RD-ST-1	A-3, A-4, A-5.1, B-2, C-1.1, D-1.2, E-1.2
CS-ST-3	Investigate the cultural and socio-economic impacts of the changing ecosystem		CS-ST-4 WO-ST-5	
CS-ST-4	Engage the public through outreach and education regarding climate trends and changes in the bosque	CS-I-2 CS-ST-3 RD-I-3	WO-ST-5	

	• Identify actions that can be carried out by members of the public to help mitigate impacts			
Long-Term (2027 and beyond):				
CS-LT-1	Continue to update ecological forecasts with latest climate models and data	CS-I-1 CS-ST-2		F-1, A-5.1
CS-LT-2	Refresh recommendations for management strategies to protect and maintain important ecosystem functions	CS-I-I CS-I-2 CS-ST-1 CS-ST-2	HR-LT-1 VI-LT-2	F-1, A-5.1
CS-LT-3	Develop water conservation strategies		CS-LT-4	G-1
CS-LT-4	Carry out public outreach and education around water conservation strategies	CS-ST-4 CS-LT-3 RD-I-3	RD-I-3	G-1
CS-LT-4	Explore the role of agricultural practices and irrigation returns in implementing strategies to protect MRG ecosystem functions	DR-ST-4		Unsure

Habitat Restoration Planning and Assessment

Habitat restoration is an important conservation action for many Collaborative Program signatories, and will likely increase in importance in the future. Given the forecasted changes to the ecosystem, habitat restoration practices that were effective in the past need to be tested and refined, or replaced in order to preserve key ecosystem functions necessary to support the listed species. The priorities listed below relate to on-going habitat restoration efforts, including outcomes from the 2021 Habitat Restoration Workshop, and also items that address additional Collaborative Program planning and management requests.

End Goals:

- Develop restoration strategies that can provide habitat for listed species, maintain vital ecosystem functions, and contribute to ecosystem recovery.
- Recommend best practices for successful restoration planning, implementation, and monitoring (e.g., proper response metrics, maintenance thresholds, and assessment tools) for the MRG.

Program Goals Addressed: *A-F*

ID	Priority	Informed By	Informs	Related Objectives
Immediate (2023):				
HR-I-1	Develop a standardized framework to guide restoration planning that includes identification of response metrics to measure and track progress/success	HR-I-3	HR-ST-5 HR-ST-7	A-5.2, B-3.1, B-3.3, C-1.1, D-1.2, E-1.2
HR-I-2	Recommend updates to the habitat restoration geospatial database, “RioRestore”		HR-ST-1	A-5.2, B-3.1, B-3.3, C-1.1, D-1.2, E-1.2
HR-I-3	Organize habitat restoration monitoring plans and protocols into a compendium for MRG restoration practitioners		HR-ST-5 HR-ST-7 HR-I-1	F-1, E-1.1, D-1.1, C-1.3, B-1, A-1
HR-I-4	Investigate potential funding opportunities (especially long-term) and partnerships in support of habitat restoration projects			A-5.2, B-3.1, B-3.3, C-1.1, D-1.2, E-1.2
Short-Term (2024-2026):				

HR-ST-1	Update RioRestore	HR-I-2		A-5.2, B-3.1, B-3.3, C-1.1, D-1.2, E-1.2
HR-ST-2	Forecast expected changes to vegetative communities based on the climate scenarios	CS-I-1 CS-I-2	HR-ST-3	F-1, F-2
HR-ST-3	Develop restoration strategies to maintain ecosystem functions, exploring the roles of both native and non-native species	HR-ST-2	HR-ST-7 VI-LT-2	F-2
HR-ST-4	Recommend modifications to habitat restoration practices to incorporate climate scenarios, targeting vital ecosystem functions	CS-I-2 HR-ST-3 VI-ST-3	HR-ST-7	F-1
HR-ST-5	Integrate signatories' wildfire prevention, mitigation and restoration best practices		HR-LT-1	Unsure
HR-ST-6	Investigate feasibility and value of disposing or repurposing of post-construction materials, such as vegetation and sediment		HR-LT-1	New obj?
HR-ST-7	Develop strategies to adaptively manage habitat restoration	HR-I-1 HR-I-3 HR-ST-3 HR-ST-4 VI-LT-2		B-3.1, B-3.3, C-1.1, D-1.2, E-1.2
Long-Term (2027 and beyond):				
HR-LT-1	Continue to update recommendations for habitat restoration best practices based on learning from project implementation and refined future scenario predictions	HR-ST-4 HR-ST-5 HR-ST-6 HR-ST-7 CS-LT-2		A-5.2, B-3.1, B-3.3, C-1.1, D-1.2, E-1.2
HR-LT-2	Explore the value of applying an "integrated vegetation management plan" for the MRG	HR-ST-3 HR-ST-4		F-2, B-3.2, B-3.3, C-1.2, D-1.2, E-1.2
HR-LT-3	Apply the ecosystem approach to habitat restoration projects throughout the MRG	CS-I-2 CS-ST-1 HR-ST-2 HR-ST-3		F-1

Management of Vegetated Islands and Bank-Attached Bars

In 2022, the Collaborative Program hosted the Workshop on Management of Vegetated Islands and Bank-Attached Bars. While vegetated islands have always been a feature of the MRG ecosystem, changes in hydrology and geomorphology are contributing to changes in their number and permanence. Workshop participants raised questions about the effects these vegetated islands and bars are having on water conveyance and sediment transport processes, as well as the tradeoffs to consider regarding their value to species habitat. At the workshop, participants identified the need for better understanding of where vegetated islands and bars are (or are likely to occur) in the MRG. They also articulated a need for more clarity regarding the relationships between hydrology, ecological functions, and species' responses in order to support management decisions related to island and bar management.

End Goal: Balance the primary management priorities within the MRG (e.g., water delivery, flood control, and ecosystem management) while managing vegetated islands and bank-attached bars in a dynamic river system.

Program Goals Addressed: *A-G*

ID	Priority	Informed By	Informs	Related Objectives
Immediate (2023):				
VI-I-1	Develop a glossary for terminology related to vegetated islands and bars, to improve communication and collaboration among stakeholders		VI-I-3	A-3, A-5.1, A-5.2, B-2, B-3.3, C-1.1, C-1.2
VI-I-2	Clarify authorities and management roles related to vegetated islands and bank-attached bars		VI-LT-3	A-3, A-5.1, A-5.2, B-2, B-3.3, C-1.1, C-1.2
VI-I-3	Begin developing a conceptual model representing ecosystem functions and physical river conditions related to vegetated islands/bars in order to: • Account for spatial and temporal successional changes • Explore trade-offs regarding habitat formation/loss for different species • Characterize trends and conditions • Assess management alternatives	VI-I-1		A-3, A-5.1, A-5.2, B-2, B-3.3, C-1.1, C-1.2
VI-I-4	Determine feasibility of developing a map of locations of vegetated islands and bank-attached bars in the MRG, with a plan for regular updates		VI-ST-2	A-3, A-5.1, A-5.2, B-2, B-3.3, C-1.1, C-1.2
Short-Term (2024-2026):				
VI-ST-1	Fill in critical data gaps for maps and models, where possible			A-3, A-5.1, A-5.2, B-2, B-3.3, C-1.1, C-1.2
VI-ST-2	Update map of locations of vegetated islands and bank-attached bars in the MRG	VI-I-4	SM-ST-3	A-3, A-5.1, A-5.2, B-2, B-3.3, C-1.1, C-1.2
VI-ST-3	Refine conceptual model of ecosystem functions and physical river conditions related to vegetated islands/bars in the MRG to: • Inform further scientific research • Recommend adaptive management strategies	HR-ST-9 VI-ST-2	HR-ST-4 VI-ST-4 VI-LT-1 SM-ST-4 SM-LT-2	A-3, A-5.1, A-5.2, B-2, B-3.3, C-1.1, C-1.2
VI-ST-4	Investigate the effects of vegetated islands and bank-attached bars on water conveyance and sediment transport processes	VI-ST-3		A-3, A-5.1, A-5.2, B-2, B-3.3, C-1.1, C-1.2
Long-Term (2027 and beyond):				
VI-LT-1	Regularly update and revise the ecosystem-level conceptual model	VI-ST-3	VI-LT-2	A-3, A-5.1, A-5.2, B-2, B-3.3, C-1.1, C-1.2

VI-LT-2	Revise and update recommendations for management strategies related to vegetated islands and bank-attached bars	CS-LT-2 HR-ST-4 HR-ST-7 VI-LT-1		A-3, A-5.1, A-5.2, B-2, B-3.3, C-1.1, C-1.2
VI-LT-3	Develop recommendations for potential changes to authorities regarding wetlands within the MRG	VI-I-2		A-3, A-5.1, A-5.2, B-2, B-3.3, C-1.1, C-1.2

RGSM Management and Science

RGSM science and management has always been a focus of the Collaborative Program, and will continue to be a priority in the multi-year plan. With climate change creating more variability in the system and uncertainty in the future, the Collaborative Program's work will focus on tracking RGSM population trends under different climate scenarios, and evaluating and improving the efficacy of management actions into the future.

End Goal: Develop collaborative, multi-year adaptive management strategies for RGSM.
Program Goals Addressed: *A-G*

ID	Priority	Informed By	Informs	Related Objectives
Immediate (2023):				
SM-I-1	Finalize the revisions to the RGSM conceptual ecological model to include the genetics and propagation/augmentation programs, and undertake a peer review of the revised model		SM-ST-1 SM-ST-3	A-1, A-2, A-3, A-4, A-5.1, A-5.2, A-6.1, A-6.2
SM-I-2	Provide guidance on recently published RGSM population models, including data inputs, model assumptions, and appropriate application of each model		SM-I-3 SM-ST-1	A-1, A-2, A-3, A-4, A-5.1, A-5.2, A-6.1, A-6.2
SM-I-3	Develop a plan to update and refine the RGSM integrated population model based on new data	SM-I-2	SM-ST-1	A-1, A-2, A-3, A-4, A-5.1, A-5.2, A-6.1, A-6.2
SM-I-4	Incorporate the following questions into the climate scenario planning effort: • How will RGSM habitat availability be affected by climate change? • How will forecasted shifts in the hydrograph impact RGSM population trends?		CS-I-1	A-3, A-4, A-5.1, A-5.2, G-1
Short-Term (2024-2026):				
SM-ST-1	Use the RGSM population models to evaluate RGSM management actions under different conditions projected for climate scenarios, if feasible	SM-I-1 SM-I-2 SM-I-3	SM-LT-1 SM-ST-4	A-6.1, A-6.2, A-2 s

SM-ST-2	Consider RGSM management in the development of the ecosystem-level conceptual model for the MRG		SM-ST-4	A-1, A-3, A-4, A-6.1, A-6.2
SM-ST-3	Identify the sites in the MRG to target with habitat restoration for RGSM	VI-ST-2 SM-I-1		A-5.2
SM-ST-4	Identify vital ecosystem functions related to RGSM life history and management strategies	SM-ST-1 SM-ST-2 VI-ST-3		A-3, A-4, A-5.1, A-5.2
SM-ST-5	Investigate the feasibility of a 10(j) population outside the current RGSM range		SM-LT-4	A-6.1, A-6.2
Long-Term (2027 and beyond):				
SM-LT-1	Continue to evaluate RGSM management actions as future scenarios and models are updated	SM-ST-1		A-2, A-6.1, A-6.2
SM-LT-2	Recommend adaptive management actions for RGSM, taking into consideration effects of climate change and maintenance of ecosystem functions important to RGSM survival and recovery	VI-ST-3		A-2, A-6.1, A-6.2
SM-LT-3	Investigate the need for a new RGSM propagation facility and, if supported, provide recommendations for design and construction			A-6.1, A-6.2
SM-LT-4	Provide recommendations for implementing a potential 10(j) RGSM population, if determined to be feasible	SM-ST-5		A-6.1, A-6.2

Water Operations and Flexibility

Given that the Collaborative Program focuses on listed species that utilize the riparian zone, adjacent wetlands, floodplain and mainstem of the Rio Grande, water operations are integral to management of the species and their habitats. With changes in the hydrograph due to increasing variability and uncertainty in snowpack runoff and monsoon precipitation, water operations are already impacted by climate change. The Collaborative Program's focus will be to assess the effects of climate change on water operations and identify opportunities for flexibility.

End Goal: Plan for a water future that balances the needs of all users, including humans and listed species, and maintains ecosystem functions. [Addresses Program Goal G]
Program Goals Addressed: *A-G*

ID	Priority	Informed By	Informs	Related Objectives
Immediate (2023):				
WO-I-1	Using the responses from the survey of water managers on their roles in managing drying in Angostura Reach and additional signatory input, document the roles, responsibility, and available flexibility in water operations in the MRG	RD-I-1	WO-ST-1	G-1
WO-I-2	Based on likely climate scenarios, project potential effects on water operations related to changes in the hydrograph	CS-I-1 CS-I-2		G-1
Short-Term (2024-2026):				
WO-ST-1	Identify opportunities for coordination and flexibility regarding water operations	WO-I-1 RD-I-1	WO-ST-2 WO-ST-3	G-1

WO-ST-2	Identify flexibilities and multiple-use benefits of any changes to water operations	WO-ST-1		G-1
WO-ST-3	Identify research needs regarding conservation improvement to water operations	WO-ST-1	WO-LT-1	G-1
WO-ST-4	Tie Collaborative Program planning efforts into external planning efforts (e.g., 50-Year Water Plan, Rio Grande Basin Study, ABCWUA's 100-Year Plan, NM Water Resources Research Institute)		WO-ST-5 WO-LT-1	G-1
WO-ST-5	Stakeholder and public outreach and education on conservation strategies and benefits of changes to water operations	CS-ST-3 CS-ST-4 WO-ST-4		
Long-Term (2027 and beyond):				
WO-LT-1	Revise and update recommendations for changes to water operations regarding conservation needs	WO-ST-3 WO-ST-4 RD-ST-3 RD-ST-4 RD-ST-5		G-1

Strategic Planning for River Drying in the Middle Rio Grande

This focus first emerged in response to drying in the Angostura Reach, which occurred for the first time in nearly 40 years in 2022. Drying has been a regular and common occurrence south of Angostura and the Collaborative Program is working to develop a strategic plan for management of drying in the Angostura, Isleta, and San Acacia Reaches.

End Goal: Develop a multi-reach decision support tool to inform adaptive management related to drying in the MRG.
Program Goals Addressed: *A-G*

ID	Priority	Informed By	Informs	Related Objectives
Immediate (2023):				
RD-I-1	Describe the decision environment for management of drying in the MRG using the ad hoc group's survey and summary report		WO-I-1 WO-ST-1	G-1
RD-I-2	Identify research questions related to drying in the MRG			Unsure
RD-I-3	Develop public messaging strategies related to conservation actions and monitoring during river drying		CS-ST-4 CS-LT-4	
Short-Term (2024-2026):				
RD-ST-1	Where appropriate, include and update river drying considerations in ecosystem-level and species-level conceptual models	CS-I-2 CS-ST-2	RD-ST-5	A-2, A-3, A-4, A-5.1, G-1
RD-ST-2	Create a decision tool to assess management alternatives regarding drying in the MRG	RD-ST-3	RD-ST-5	A-2, A-3, A-4, A-5.1, G-1
RD-ST-3	Document lessons learned regarding management response to drying, in years when the opportunity arises		RD-ST-2 WO-LT-1	A-2, A-3, A-4, A-5.1, G-1

RD-ST-4	Incorporate findings from studies of the use of outfalls and irrigation infrastructure to affect the rate, duration and extent of drying, into recommendations		WO-LT-1	A-2, A-3, A-4, A-5.1, G-1
RD-ST-5	Continue to refine the strategic plan for management of drying	RD-ST-1 RD-ST-2	RD-LT-1 WO-LT-1	A-2, A-3, A-4, A-5.1, G-1
Long-Term (2027 and beyond):				
RD-LT-1	Continue to refine the strategic plan for management of drying	RD-ST-5		A-2, A-3, A-4, A-5.1, G-1

Link to full Meeting Materials List

Science and Adaptive Management Committee Meeting
March 12, 2024

See the following meeting material on the page below:

Long-Term Plan for Science and Adaptive Management Project List [read-ahead, not included]

Link to full Meeting Materials List

Science and Adaptive Management Committee Meeting

March 12, 2024

See the following meeting material on the page below:

Draft Status Update Memo to the EC on the Information & Data Quality Standards Ad Hoc Group [follow-up, draft]

Middle Rio Grande Endangered Species Collaborative Program

Est. 2000

DATE: March 12, 2024

TO: The Middle Rio Grande Endangered Species Collaborative Program (MRGESCP) Executive Committee (EC)

FROM: The MRGESCP Science and Adaptive Management Committee (SAMC)

RE: Information and Data Quality Standards Hybrid Ad Hoc Group Status Update

On August 26 and September 8, 2022, the SAMC and EC, respectively, tasked a Hybrid Ad Hoc Group with "*investigating the feasibility, utility, and necessity of applying Information Quality Act standards to the MRGESCP*." On March 27, 2023, the Ad Hoc Group determined that developing these standards for the MRGESCP was not a feasible task since standards vary by organization and signatories must comply with their own agency standards or the standards of relevant funding agencies.

However, the Ad Hoc Group saw value in documenting data management practices for each project uploaded to the SAMIS to give users additional information about how data are collected, stored, and managed for individual projects. The charge was revised and approved on June 15, 2023 by the SAMC and June 29, 2023 by the EC. The revised charge is as follows:

The Information and Data Quality Standards Hybrid Ad Hoc Group will develop a form template that summarizes data QA/QC and management practices for each signatory project entered into the SAMIS, and will develop language for a data disclaimer for the Program Portal.

In the latter half of 2023 and early 2024, the Ad Hoc Group worked to address the revised charge, which included developing a form template. After discussion, the group also recommended that the USGS data disclaimer should be used on the Program Portal since this disclaimer already complies with existing federal and state guidelines. As of February 9, 2024, the Ad Hoc Group has completed the following tasks:

- Developed a form template that summarizes data QA/QC and management practices
- Recommended that the USGS data disclaimer should be adopted as the language on the Program Portal.

On March 12, 2024, SAMC members discussed whether this group fulfilled their charge and was ready to be sunset. SAMC members had some concerns about the lack of a process to implement

these recommendations and suggested that developing this process was an important part of the charge and may yet need to be completed.

Link to full Meeting Materials List

Science and Adaptive Management Committee Meeting

March 12, 2024

See the following meeting material on the page below:

Draft Status Update Memo to the EC on the RGSM Hypotheses Development Ad Hoc Group [follow-up, draft]

Middle Rio Grande Endangered Species Collaborative Program

Est. 2000

DATE: March 12, 2024

TO: The Middle Rio Grande Endangered Species Collaborative Program (MRGESCP) Executive Committee (EC)

FROM: The MRGESCP Science and Adaptive Management Committee (SAMC)

RE: RGSM Hypotheses Development Ad Hoc Group Status Update

This memo provides a status update on the RGSM Hypotheses Development S&T Ad Hoc Group.

The Ad Hoc Group was formed to address the following charge:

Review, translate and refine recommendations from the RGSM Population Monitoring Work Group (PMWG) status report (Valdez 2021) into specific questions with clear and testable hypotheses. If a hypothesis cannot be generated, provide an explanation and cite relevant literature.

Additional background and details are summarized in the attached charge document, which was approved by the SAMC on August 26, 2021, and approved by Ad Hoc Group members on August 16, 2022.

The Ad Hoc Group has not convened since November 28, 2022. On September 29, 2023, the Program Support Team met with Mick Porter, Alison Hutson, and Ara Winter to discuss next steps for the group. At that time, the charge was revised to list Mick Porter, Alison Hutson, and Ara Winter as SAMC leads for the Ad Hoc Group, as well as to adjust the order of tasks and deliverables. To date, the revised charge has not been reviewed or approved by the Ad Hoc Group members or by the SAMC.

On January 3, 2024, Mick Porter drafted a memo to be reviewed by Ad Hoc Group members and the SAMC to request additional information regarding floodplain monitoring data. On January 5, 2024, Ari Posner responded to the draft memo and noted the following with regards to the Population Monitoring Working Group's (PMWG) original recommendations:

"*It would be prudent to review and consider these responses again as we help guide future efforts. I would propose that some of the recommendations are removed and/or reworded based on the feedback from the other PMWG members. The focus on those recommendations in which*

there is higher level of agreement also helps constrain the scope of the effort."

Further review of these items has not been completed by the Ad Hoc Group members or by the SAMC.

All materials associated with this Ad Hoc Group will be provided to Reclamation by March 31, 2024.

The SAMC recommends the following next steps for the Ad Hoc Group:

- Coordinate Ad Hoc Group and SAMC review of the draft revised charge
- Coordinate Ad Hoc Group and SAMC review of the draft memo requesting floodplain monitoring data

Link to full Meeting Materials List

Science and Adaptive Management Committee Meeting

March 12, 2024

See the following meeting material on the page below:

Draft Status Update Memo to the EC on the RGSM CEM/Genetics Ad Hoc Group [follow-up, draft]

Middle Rio Grande Endangered Species Collaborative Program

Est. 2000

DATE: March 12, 2024

TO: The Middle Rio Grande Endangered Species Collaborative Program (MRGESCP) Executive Committee (EC)

FROM: The MRGESCP Science and Adaptive Management Committee (SAMC)

RE: RGSM CEM/Genetics Ad Hoc Group Status Update

This memo provides a status update on the RGSM CEM/Genetics S&T Ad Hoc Group.

The Ad Hoc Group was formed to address the following charge:

Identify a series of genetics-related components that inform, and are informed by, the life history characteristics of the Rio Grande silvery minnow (RGSM), propagation and augmentation of the species, and environmental influences in the Middle Rio Grande (MRG). Incorporate these components into the conceptual ecological model (CEM) for the RGSM, found in Appendix B of the MRGESCP 2020 Science and Adaptive Management Plan (WEST 2020).

Additional background and details are summarized in the attached charge document, which was approved by the SAMC on April 22, 2021.

The group's efforts led to the creation of a draft RGSM CEM with genetics components added (to be provided to U.S. Bureau of Reclamation [Reclamation]).

In July 2022, the PST created the following list of remaining tasks for the Ad Hoc Group:

- Update original transition schematics to reflect new components
- Incorporate all relationships from transition schematics into RGSM_CEM_relationships table in spreadsheet
- Clean up relationship rows from original CEM (update to reflect new version)
- Finalize relationships and flag any questionable items
- Clean up tables B2 (categories) and B3 (components)
- Link relationships to main schematic (one-to-one correspondence)

- OPTIONAL: Modularize main schematic (clickable component categories expand to show relationship arrows) in PowerPoint
- Characterize uncertainties (importance, understanding, management)
- Summarize new CEM in report to SAMC and work on messaging to MRGESCP
- Review summary report and generate questions/considerations for peer review group

None of these tasks have progressed or been completed since July 2022.

All materials associated with this Ad Hoc Group will be provided to Reclamation by March 31, 2024.

The SAMC recommends the following next steps for the Ad Hoc Group:

- Identify a SAMC co-lead to support the group along with Alison Hutson

Link to full Meeting Materials List

Science and Adaptive Management Committee Meeting

March 12, 2024

See the following meeting material on the page below:

Draft Status Update Memo to the EC on the Restoration Compendium Ad Hoc Group [follow-up, draft]

Middle Rio Grande Endangered Species Collaborative Program

Est. 2000

DATE: March 12, 2024

TO: The Middle Rio Grande Endangered Species Collaborative Program (MRGESCP) Executive Committee (EC)

FROM: The MRGESCP Science and Adaptive Management Committee (SAMC)

RE: Restoration Compendium Ad Hoc Group Status Update

This memo provides a status update on the Restoration Compendium S&T Ad Hoc Group.

The Ad Hoc Group was formed to address the following charge:

Create a compendium of habitat/ecosystem restoration projects and resources within the Middle Rio Grande (MRG) Basin. The compendium should include project metadata (e.g., project location, lead agency, date range), as well as objectives, target species, and links to monitoring plans, adaptive management plans, and reports associated with each project, when available. In addition, the compendium should also contain a list of resources that can inform restoration planning, adaptive management, and monitoring in the MRG.

Additional background and details are summarized in the attached charge document, which was approved on August 21, 2023. The Program Support Team developed an initial draft version of the Compendium for the Ad Hoc Group to review and build from.

On August 31, 2023, a call went out for volunteers for the Ad Hoc Group. The following individuals have volunteered as group members or reviewers:

- Meaghan Conway, USFWS (SAMC Lead)
- Ondrea Hummel, Tetra Tech
- Ashlee Rudolph, Reclamation
- Betsy Bainbridge, USFWS
- Dana Price, USACE
- Hira Walker, USACE (Reviewer)

This group has yet to convene.

All materials associated with this Ad Hoc Group will be provided to Reclamation by March 31, 2024.

The SAMC recommends the following next steps for the Ad Hoc Group:

- SAMC lead should confirm that listed volunteers are still able to participate
- Convene the Ad Hoc Group

Link to full Meeting Materials List

Science and Adaptive Management Committee Meeting

March 12, 2024

See the following meeting material on the page below:

Draft Status Update Memo to the EC on the SER Recovery Wheel Ad Hoc Group [follow-up, draft]

Middle Rio Grande Endangered Species Collaborative Program

Est. 2000

DATE: March 12, 2024

TO: The Middle Rio Grande Endangered Species Collaborative Program (MRGESCP) Executive Committee (EC)

FROM: The MRGESCP Science and Adaptive Management Committee (SAMC)

RE: SER Recovery Wheel Ad Hoc Group Status Update

This memo provides a status update on the SER Recovery Wheel S&T Ad Hoc Group.

The Ad Hoc Group was formed to address the following charge:

Develop an ecosystem-level restoration assessment tool based on the Society for Ecological Restoration's (SER) Ecological Recovery Wheel, which visually represents recovery of a target ecosystem compared to a selected reference ecosystem using a 5-star rating scale across a set of attributes. The Recovery Wheel should be customized to the Middle Rio Grande (MRG) river-floodplain ecosystem. The process used to develop this tool should be fully documented to facilitate use and future updates to the wheel.

Additional background and details are summarized in the attached charge document, which was approved on August 21, 2023. Ondrea Hummel is the SAMC lead for this group.

On August 31, 2023, a call went out for volunteers for the Ad Hoc Group. The following individuals have volunteered as group members or reviewers:

- Ondrea Hummel, Tetra Tech (SAMC Lead)
- Meaghan Conway, USFWS
- Cetan Christensen, ABCWUA
- Chris Lippitt, UNM
- Jack Marchetti, NMDGF
- Stephanie Jentsch, USACE
- Jenny Davis, USFWS
- Shannon Weld, NM ISC

- Hira Walker, USACE (Reviewer)

This group has yet to convene.

All materials associated with this Ad Hoc Group will be provided to Reclamation by March 31, 2024.

The SAMC recommends the following next steps for the Ad Hoc Group:

- SAMC lead should confirm that listed volunteers are still able to participate
- Convene the Ad Hoc Group

Link to full Meeting Materials List

Science and Adaptive Management Committee Meeting

March 12, 2024

See the following meeting material on the page below:

Draft Status Update Memo to the EC on Vegetated Islands and Bank-Attached Bars [follow-up, draft]

Middle Rio Grande Endangered Species Collaborative Program

Est. 2000

DATE: March 12, 2024

TO: The Middle Rio Grande Endangered Species Collaborative Program (MRGESCP) Executive Committee (EC)

FROM: The MRGESCP Science and Adaptive Management Committee (SAMC)

RE: Vegetated Islands and Bank-Attached Bars Status Memo

This memo provides a status update on SAMC efforts related to vegetated islands and bank-attached bars.

On October 4-5, 2022, the MRGESCP held a workshop focused on management of vegetated island and bank-attached bars in the MRG with the goal: *"Identify planning and research needs for managing vegetated islands and bank-attached bars."* On March 30, 2023, the SAMC recommended the four following tasks as next steps following the 2022 workshop:

- *Develop common definitions for relevant technical terms relating to vegetated islands and bars*
- *Identify currently available, relevant data sets and data gaps*
- *Summarize in a report the research, planning and management efforts and needs regarding management of vegetated islands and bank-attached bars.*
- *Develop a conceptual model representing the ecosystem functions and physical river conditions of interest and develop management goals around these (e.g., ideal conceptual river cross sections and profiles, functional wetlands).*

In mid-2023, the Program Support Team worked with Ari Posner and Dave Moore to develop a draft glossary of terms relevant to vegetated islands and bank-attached bars. After further discussion, it was determined that the best way to finalize this glossary and address the other three recommendations would be to create an S&T Ad Hoc Group. Ari Posner is currently developing a draft charge for the proposed Ad Hoc Group.

All materials associated with this effort will be provided to Reclamation by March 31, 2024.

The SAMC recommends the following next steps in support of efforts related to vegetated islands and bank-attached bars:

- Develop an Ad Hoc Group to finalize the vegetated islands and bank-attached bars bibliography and address the remaining deliverables from the 2022 workshop

Link to full Meeting Materials List

Science and Adaptive Management Committee Meeting
March 12, 2024

See the following meeting material on the page below:

Draft Status Update Memo to the EC on Conceptual Ecological Models [follow-up, draft]

Middle Rio Grande Endangered Species Collaborative Program

Est. 2000

DATE: March 12, 2024

TO: The Middle Rio Grande Endangered Species Collaborative Program (MRGESCP) Executive Committee (EC)

FROM: The MRGESCP Science and Adaptive Management Committee (SAMC)

RE: Conceptual Ecological Models Status Update

This memo provides a status update on efforts related to Conceptual Ecological Models (CEMs) for Pecos sunflower (PESU), New Mexico meadow jumping mouse (NMMJM), yellow-billed cuckoo (YBCU), southwestern Willow Flycatcher (SWFL), and Rio Grande silvery minnow (RGSM).

The RGSM CEM was first finalized and added to the MRGESCP Science and Adaptive Management Plan in 2020 and last updated in July 2022 as part of the RGSM CEM/Genetics Ad Hoc Group tasks (see RGSM CEM/Genetics Ad Hoc Group Status Update Memo for further details). The group's remaining tasks must be completed before the revised RGSM CEM is approved by the SAMC.

The SWFL and YBCU CEMs were developed in tandem by the Southwestern Willow Flycatcher and Yellow-billed Cuckoo Conceptual Ecological Model Refinement Ad Hoc Group and finalized and added to the MRGESCP Science and Adaptive Management Plan in 2020. Reformatted versions of the CEMs were developed for the SAMIS in May 2022 but have yet to be incorporated.

To date, no CEMs have been developed for PESU or NMMJM.

In mid-2023, the Program Support Team (WEST, Inc.) developed life history conceptual models for all five species in preparation for the 2023 Climate Futures Planning Workshop, which has since been canceled. These conceptual models differ in that they focus on major relationships between abiotic and biotic variables and species life history traits and are less detailed than a traditional CEM. The intent of these models was to provide a snapshot of each species that would be useful for discussions about managing species and ecosystems for a changing climate. The SAMC has not reviewed these models.

All materials associated with these conceptual models will be provided to Reclamation by March 31, 2024.