

Executive Committee Meeting

June 29, 2020

Meeting Materials:

Agenda

Minutes

2020 Spring MAT Recommendations [presentation]

Draft April 2020 MAT Recommendations [read-ahead, draft]

MRGESCP SAMC Draft Proposal [read-ahead, draft]

USACE FY21 Unfunded Activities [read-ahead]

MRGESCP June 2020 Newsletter [read-ahead]

Report of the PMWG to the EC of the MRGESCP [read-ahead]

Revised MRGESCP PMWG 2020 Work Plan [read-ahead]

SAMC Comment Matrix [read-ahead, spreadsheet]

SAMC Proposal [presentation]



Middle Rio Grande Endangered Species Collaborative Program

Est. 2000

Executive Committee (EC) Meeting June 29, 2020 1:30 – 4:30 PM

*Location: Zoom Meeting
<https://west-inc.zoom.us/j/8983593120>
Call-In: +1-669-900-6833
Meeting ID: 898-359-3120*

Meeting Agenda

Meeting Objectives:

- *Hear updates on the adaptive management process*
- *Learn about the hydrology status for the year, and the Minnow Action Team recommendations for 2020*
- *Hear updates from the different work groups and committees*
- *Discuss the Science and Adaptive Management Committee proposed functions, composition, and formation process*

1:30 – 1:40 **Welcome, Introductions, Agenda Review** *EC Co-chairs*

- Ground rules for Zoom meeting
- **Decision:** Approval of June 29, 2020 EC meeting agenda

1:40 – 1:45 **February 2020 Meeting Summary** *EC Co-chairs*

- Action Items Review
- **Decision:** Approval of February 10, 2020 EC meeting minutes

Read-ahead:

- ☐ Draft February 10, 2020 EC Meeting Minutes

1:45 – 1:50 **Program Manager Update** *Debbie Lee, Program Support Team (PST)*

- Program Support Team Staffing Update
- Work Plan Update

Read-ahead:

- ☐ Newsletter

1:50 – 2:05 **Hydrology Update** *Jennifer Faler, U.S. Bureau of Reclamation*

*David Gensler, Middle Rio
Grande Conservancy District
(MRGCD)*

2:05 – 2:15 **Minnow Action Team (MAT) Update and
Recommendations**

Anne Marken, MRGCD

Read-ahead:

- ☐ Draft 2020 MAT Recommendations

2:15 – 2:30 **Population Monitoring Work Group (PMWG)
Update**

Rich Valdez, SWCA

- **Decision:** Approval of revised 2020 PMWG
work plan

Read-aheads:

- ☐ PMWG EC Brief
- ☐ Revised PMWG Work Plan

2:30 – 2:45 **Fiscal Planning Committee Update**

*Julie Dickey, PST
EC discussion*

- New co-chair appointments
- Discussion of signatory funding issues

Read-ahead:

- ☐ FY21 Unfunded Activities

2:45 – 3:00 **Break**

3:00 – 4:10 **Science and Adaptive Management Committee
(SAMC) Proposal**

Facilitated discussion

- Proposed SAMC function, composition, and
formation process
- Discussion

Read-aheads:

- ☐ Revised SAMC Proposal
- ☐ Comment Matrix

4:10 – 4:20 **Public Comment**

4:20 – 4:25 **Announcements**

4:25 – 4:30 **Meeting Summary and Action Items Review**

EC Co-chairs

- Next EC Meeting: August 2020

4:30 **Adjourn**



Middle Rio Grande Endangered Species Collaborative Program

Est. 2000

Executive Committee (EC) Meeting Minutes

June 29, 2020; 1:30 PM–4:30 PM

Location: Zoom Meeting

Decisions:

- ✓ Approval of the June 29, 2020 EC meeting agenda with the following amendments:
 - Move the hydrology update to just before the 15-minute break
- ✓ Approval of the February 10, 2020 EC meeting minutes with amendments to the hydrology and announcements sections
- ✓ Approval of the revised Population Monitoring Work Group (PMWG) Work Plan

Action Items:

| WHO | ACTION ITEM | BY WHEN |
|------------------------|--|--------------------------|
| Grace Haggerty and PST | Send the Program Support Team (PST) edits to the February 2020 EC minutes for changes as discussed during the EC meeting | 6/29/2020 |
| Janet Jarratt and PST | Discuss the Soil Moisture Holding Capacity Study | ASAP |
| Jennifer Faler and PST | Send the PST the hydrology notes from the U.S. Bureau of Reclamation (Reclamation) for distribution to the EC | 6/30/2020 |
| Lynette Giesen | Send Ashlee Rudolph and Jim Wilber cost estimates for different levels of maintenance for the Portal | 7/1/2020 |
| PST | Make changes to the Science and Adaptive Management Committee (SAMC) Proposal as discussed during the EC meeting | Prior to the EC workshop |
| PST | Schedule an EC workshop on the SAMC for mid-July | 7/2/2020 |

Next Meeting: Mid-July SAMC Workshop via Zoom

Meeting Summary

Welcome, Introductions, Agenda Review

Ground rules for Zoom meeting

Agenda review

The EC co-chairs, John Stomp, Albuquerque Bernalillo County Water Utility Authority (ABCWUA), and Wayne Pullan, Reclamation, called the meeting to order, covered ground rules, and initiated introductions. The agenda was reviewed and approved with the amendment that the hydrology update be delayed until just before the 15-minute break.

- **Decision:** Approval of the June 29, 2020 meeting agenda by the EC with the amendment that the hydrology update be delayed until just before the 15-minute break

February 2020 Meeting Summary

Action items review

The February 2020 meeting minutes, decisions, and action items were approved by the EC with amendments to the hydrology and announcements sections. There was an inquiry into the action item regarding the Soil Moisture Capacity Study. The PST will follow-up with the EC representative to discuss the study further.

- **Decision:** Approval of February 2020 meeting minutes by the EC with amendments to the hydrology and announcements sections.
- **Action Item:** Grace Haggerty will send the PST edits to the February 2020 EC minutes for changes as discussed during the meeting
- **Action Item:** The PST will discuss the Soil Moisture Capacity Study further with Janet Jarratt.

Program Manager Update

Program Support Team staffing update

Work plan update

Newsletter

Debbie Lee, Program Manager with the PST, provided the Program Manager update. She introduced Catherine Murphy as the Program's Science Coordinator. The PST encouraged EC members to utilize the newsletter for work group updates and reserve the EC meetings for EC-level topics.

Minnow Action Team (MAT) Update and Recommendations

Anne Marken, Middle Rio Grande Conservancy District (MRGCD), presented the 2020 spring MAT recommendations (see presentation). The MAT adopted a 'survival strategy' due to low runoff projections and focused on protecting viable Rio Grande Silvery Minnow (RGSM) populations and egg collection for

propagation facilities. There was no discernible spring pulse at Otowi, Central, or San Acacia. The following are updates on the spring hydrology recommendations:

- Targeted releases from El Vado were not implemented.
- A jiggle was performed in May at the Isleta Diversion Dam and 113,247 eggs were collected.
- River connectivity was not maintained through mid-June. Drying began by the end of May.
- Diversion structures and wasteway returns were utilized for upstream fish movement and rescue activities.
- Supplemental water was used to minimize river drying in the spring.
- Angostura Reach remained perennial through the spring.
- Low flow conveyance channel pumps were used through the spring.

Updates on the spring biology recommendations are that eggs were collected for propagation facilities after the jiggle and USFWS began fish rescue efforts in early June. See presentation for spring monitoring recommendations. The preliminary summer MAT recommendations are to minimize channel drying, continue pumping at the south boundary, manage river recessions, keep Angostura Reach wet, utilize the Atrisco pump for emergencies, conduct fish rescue, monitor MRGCD outfalls, continue River Eyes monitoring, study habitat suitability at the south boundary pumps, and hold a MAT meeting on July 23rd if more coordination is needed. The MAT also compiled operations taken in 2018, another dry year, to explore options for 2020. The following are questions and comments after the presentation:

- How much can the New Mexico Interstate Stream Commission (NMISC) pumps at Atrisco contribute and for how long?
 - Maybe 1 cubic foot per second (cfs). NMISC can create a habitat refugium by raising a Langemann gate or keep the gate down and pump. About 25 acre feet of water is available.
- Water seems to be drying up and exercises like the MAT recommendations are important for figuring out options to maintain the RGSM.

PMWG Update

Rich Valdez, SWCA Environmental Consultants, presented a progress report on the PMWG and the group's revised work plan (see report and work plan). The group was formed in 2012 and given three tasks: 1) conduct a workshop on catch per unit effort, 2) review the Middle Rio Grande population monitoring plan, and 3) update the monitoring plan. Recently, the PMWG has also transitioned to informing the Program's adaptive management (AM) strategy. Task 1 was completed with the Hubert science panel, which resulted in 24 recommendations. Task 2 is in progress; the PMWG incorporated recommendations into the population monitoring contract, coordinated the Noon panel, and consolidated recommendations. It is now coordinating development of the RGSM population model and producing executive summaries on science topics from the panels. Task 3 is in progress, the PMWG made several inferences related to the monitoring plan.

The PMWG's 2020 Work Plan is split into four fundamental elements under Task 2. Another PMWG progress report will be provided to the EC and a presentation will take place at the last EC meeting of the year. The following is a question asked after the presentation:

- Does the work plan come with a hand-off to the SAMC or will the PMWG continue?

- The work plan finishes at the end of 2020. A lot of PMWG activities tie into the Program's AM process, particularly the development of hypotheses that can be tested through AM.

➤ **Decision:** EC approval of the revised 2020 PMWG Work Plan

Fiscal Planning Committee (FPC) Update

New co-chair appointments

Discussion of signatory funding issues

Julie Dickey, PST, gave the FPC update. The FPC met in early April to elect co-chairs and discuss fiscal year 2021 unfunded activities. Grace Haggerty, NMISC, was appointed the Non-federal Co-chair and Lynette Giesen, U.S. Army Corps of Engineer (USACE), was appointed the Federal Co-chair. The unfunded list of USACE activities will impact the work of other signatories. Funding opportunities for these activities and more were listed in the Program's June newsletter. The following were questions and comments raised after the update:

- The first item on USACE's list of unfunded activities is the Program Portal. It seems important and, if it is still being developed, what happens when it loses funding?
 - The Portal is funded until September, but funding will likely continue to December. USACE may continue hosting the Portal but nothing is definite.
- Is it possible to get a breakdown of costs for different levels of maintenance and development of the Portal?
 - Basic maintenance with no more development will cost \$10,000 - \$12,000 per year. This includes annually updating dataset.
- Can USACE provide a list of what it would fund if it could and cost estimates for those activities?
 - An EC representative from USACE will confirm what can be shared.
- Should the FPC and EC consider which entities are doing similar work in other reaches and see if they are able to pick up any unfunded activities?
 - This was the effort of the last FPC meeting and will continue to be discussed in the future.

The earliest USACE may get money is February 2021. After the end of FY20, Lynette G. and the incoming USACE commander are the only USACE members who will continue attending Program meetings. NMISC is also facing funding constraints. The State has a smaller 2020 budget than expected. Funding for Endangered Species Act (ESA) projects has not been decreased yet, so money for ESA-related work has not be affected. Across the board, the State will see a 4 percent decrease in funding. The Program needs to see what money is available and prioritize activities. Reclamation is receiving the normal amount of money, but there have been no opportunities for extra funding. The 2016 Middle Rio Grande Biological Opinion (BO) is still being carried out and Reclamation is seeing the full cost of it. Reclamation is overcommitted with funding and is not in a good position to help out with unfunded activities.

➤ **Action Item:** Lynette G. will send Ashlee Rudolph and Jim Wilber cost estimates for different levels of maintenance for the Portal

Hydrology Update

Jennifer Faler, Reclamation, gave a hydrology update for Reclamation. Reclamation began releasing water for Prior & Paramount (P&P) in June, supplementing the water released by MRGCD. When MRGCD runs out, full P&P operations are expected to happen soon. 13,000 acre-feet of RGSM water has been released of the 20,000 acre-feet for the year. The rest is expected to last the summer but all reaches will not remain wet. There isn't enough RGSM water to keep the Albuquerque Reach wet this year. This will be a challenging year for farmers and species.

David Gensler, MRGCD, gave a hydrology update for MRGCD. There was lower spring runoff in May than forecasted. About 250 cfs is being produced in Northern New Mexico. 80 percent of the water upstream of Cochiti is being used. 1,000 cfs was coming out of Cochiti for weeks because 2,000 acre-feet of supplementary water was coming out of storage per day, mostly from MRGCD. This storage water will last between two to three weeks. Around July 15th, MRGCD will enter P&P operations. Any water not going to the Pueblos will go to farmers. There is not enough water in 2020 to meet agricultural demands.

The following question was raised after the update:

- What would an average monsoon do for us?
 - Monsoon activity varies widely. We will likely get monsoon activity and MRGCD will use the water to serve farmers as best they can. The Program's primary concern will be the species. There will be a reasonable array of wet spots in the river over the summer.
- **Action Item:** Jennifer F. will send the PST Reclamation's hydrology update for distribution to the EC.

SAMC Proposal

Proposed SAMC function, composition, and formation process

Discussion

Debbie L. presented a slideshow to introduce the SAMC Proposal and to guide discussion (see presentation). Key points from the presentation were:

- The SAMC is not a voting or decision-making group; it synthesizes and translates science for the EC.
- The EC is the Program's decision-making body.
- Questions arose during proposal development that must be answered by the EC.

Debbie L. opened discussion on foundational-level SAMC questions for the EC. Following are the SAMC Proposal questions and responses given during discussion:

1. Does the EC agree that the SAMC's focus is on science?
 - The Program's focus is science but the SAMC should offer an overall reality check and look at the unintended consequences of actions, so there is balance in the message to the EC.
 - Although the SAMC can offer a reality check, that reality needs to be based on scientific evidence.

- The Program's focus is on science relevant to management actions and within management constraints.
- Reclamation is unsure if there should be managers on the SAMC, as its focus should be on science. For example, it's inappropriate for water managers on the SAMC to give direction to the EC for managing water.
- The SAMC needs to be trustworthy and have the clout to elevate science up to the EC for decision-making.
- ✓ The EC agrees that the SAMC's focus is on science.
- 2. Does the EC agree that the EC provides the policy oversight component?
 - The Program is also a place to collaborate and share information.
 - Policy oversight is only one role of the EC.
 - ✓ The EC agrees that the EC provides policy oversight to the SAMC.
- 3. Does the SAMC need express EC approval to convene and task Science and Technical (S&T) Ad Hoc Groups?
 - ✓ The EC agrees that the SAMC can convene and task S&T Ad Hoc Groups without express EC approval provided that the SAMC give regular updates at EC meetings.
- 4. Are the outlined tasks appropriate for the SAMC? (see the SAMC responsibilities list on the SAMC Proposal)
 - The SAMC will need help completing its responsibilities. For example, Responsibility 1C will likely be done by the PST.
 - The sub-tasks under Responsibility 1 will be assigned to S&T Ad Hoc Groups.
 - There needs to be clarification on what the PST will do. Will they be part of S&T Ad Hoc Groups?
 - The PST's role is to provide administrative and scientific support to the Program and its groups.
 - Technical jobs should be assigned to the PST, especially document compilation.
 - The PST will be added to Responsibility 1C. Other contractors could also be completing the work and should be added to the responsibility as well.
 - Are there responsibilities missing?
 - The list is subject to change with direction from the EC.
 - ✓ The EC agrees the outlined tasks are appropriate for the SAMC with suggested additions to Responsibility 1C and the caveat that the list is subject to change with direction from the EC.
- 5. Does the EC agree that no voting or decision-making authority belongs to the SAMC?
 - The SAMC can convene and task S&T Ad Hoc Groups without EC approval, so it does have some decision-making power.
 - Suggestion to add the caveat "except as authorized by the EC."
 - The proposal states that the SAMC should operate by consensus as much as possible. If there is disagreement, the SAMC will produce differing opinion reports for the EC. This prevents the SAMC from voting on science and the EC will see all sides of any disagreements.
 - Suggestion to split the questions into two: 1) Should the SAMC operate by consensus and write differing opinion reports when there is disagreement? 2) Does the SAMC have no voting or decision-making authority except as authorized by the EC?
 - ✓ 1) The EC agrees that the SAMC should operate by consensus or provide differing opinion reports.
 - ✓ 2) The EC agrees that the SAMC should have no voting power or decision-making authority, except as authorized by the EC.

- The language might be too limiting, but if it becomes problematic, the EC can change it.
- 6. Is the proposed term limit appropriate?
 - The proposed term limit for SAMC members is one year with the ability to renew three times for a four-year total.
 - It takes a long time for Program members to get on track. Also, the area is small and term limits may eliminate the few options we have. Should we consider term limits when it actually becomes a problem?
 - There should be term limits as it prevents stagnation by enabling new voices to be heard.
 - If we actively recruit, we can get more interest in SAMC participation.
 - One-year terms are too short. Fresh ideas are important but the Program needs to be realistic about the number of people who can be involved. There could be a provision to get around the term limits, such as overriding them by vote.
 - Suggestion for two-year terms that can be extended by one-year terms three times for a five-year term total to give the Program the flexibility to keep people.
 - There could include a provision to extend terms past five years.
 - Disagreement with extending terms past five years. There should be forced turnover. Four years would be better.
 - The proposal states four years.
 - Can a SAMC member only do one four-year term or can they take a few years off and come back?
 - The proposal states that a member cannot serve more than four consecutive years. They must take a year off before coming back.
 - ✓ The EC agrees to an initial two-year term with one-year term limits thereafter that can be extended up to two times, with the provision of some flexibility as needed.
- 7. What is the appropriate size to maintain a functional science-focused group?
 - No more than 7.
 - Small groups are more productive if everyone is on the same page. If the Program wants more participation and collaboration, it needs more people. There are more than 6-7 opinions for how to do things and they need to be reflected. The SAMC can't offer a reality check as a small group.
 - The SAMC's objective discussions will be about the strength and validity of scientific evidence. There won't be a lot of room for subjectivity.
 - AM is figuring out how to be responsive and flexible. That has additional implications for the SAMC. That's where the SAMC can offer a reality check by listing out the unintended consequences of actions. If that doesn't happen at the SAMC-level, it has to happen at the EC-level. The SAMC needs to be more inclusive.
 - The SAMC is supposed to develop a "tool box" of AM measures based on scientific evidence that anyone can utilize. The SAMC is not making decisions; that is the EC's role.
 - The proposal offers the chance for the Program to hear from new voices. There are non-State and non-Federal people listed for the different member positions. There is also an outside member position.
 - The SAMC is not doing AM; it is using science hypotheses to learn about species and water uses. It's not appropriate for the Program to tell managers what to do.

- The SAMC is the Science and *Adaptive Management* Committee. One EC representative was under the impression that the S&T Ad Hoc Groups would deal with science hypotheses and the SAMC would add in AM as a reality check. Otherwise, the committee is just a science committee.
 - The Program supports AM through science.
 - No agency can be forced into utilizing the Program's work. The SAMC is not a decision-making body; decisions are made by the EC. The SAMC facilitates the application of scientific evidence into AM by the EC.
- Where is the AM taking place?
 - There are different types of AM; it could be at the project level, for example.
 - Reclamation understood that the Program would develop a science and AM process within two years, and that it would inform the RIO program.
 - The benefit of the Program is that it can be a science machine that provides an objective look at what needs to be done to answer management questions. The Program doesn't manage anything but it can give recommendations to action agencies. The Program is contributing to AM through science and management recommendations.
- A smaller SAMC opens up conversations wider.
- The SAMC needs to get going. It won't be perfect at first but it can be changed. Suggestion for four more spaces on the SAMC, two RGSM experts and two hydrologists.
 - The proposal states that one or two experts can be added to the SAMC. These experts can be in the area that the SAMC needs at the time, including RGSM and hydrology. These members allow the SAMC to stay nimble but be responsive.
 - If there is only one RGSM person on the SAMC, the group can't be scientifically rigorous. There are so many different views about RGSM biology; one person can't represent them all.
- One representative supports a group size of 9-11 members. They do not believe the SAMC will work unless the EC understands what work groups will actually do the work. They believe strong leadership by the Science Coordinator is necessary.
 - The SAMC is not conducting all the Program's scientific activities. The S&T Ad Hoc Groups will be tasked with carrying out scientific activities.
 - There are three options for when scientists cannot reach consensus on evidence presented: 1) If it doesn't affect or inform management, the differing opinions will be documented and the committee will move on; 2) if the matter is consequential but not time-sensitive, an S&T Ad Hoc Group will be proposed to address it; 3) if the matter is consequential and time-sensitive, the basis of the disagreement will be documented, to include opposing opinions and rationale, and sent to the EC for decision-making.
 - The EC will decide if there needs to be more than one technical expert in an area to encapsulate the differing opinions. The SAMC does not give the final word on scientific evidence in the Program.
- What does the EC think the SAMC member number should be?
 - Reclamation – 5-7
 - USFWS – 7

- USACE – No more than 7
- Assessment Payers Association of the MRGCD – More than 7
- University of New Mexico – 5-7
- New Mexico Department of Game and Fish – 5-7
- NMISC – 9-11
- Is there anything that bars the SAMC or the Science Coordinator from inviting additional experts to meetings?
 - No.
 - The SAMC can get opinions from other experts; it provides a synopsis of those opinions to the EC.
- The proposed SAMC composition is more fitting for the independent science panel. The external science panel should be formed first and foremost. A different composition can be proposed for the SAMC.
- The EC will meet for a SAMC workshop to address the rest of the SAMC Proposal in mid-July via Zoom, before the next EC meeting.
- **Action Item:** The PST will make changes to the SAMC proposal as discussed during the EC meeting
- **Action Item:** The PST will schedule an EC workshop on the SAMC for mid-July

Public Comment

There was no public comment.

Announcements

The following announcements were made:

- Lori Walton has left Reclamation to join USFWS in Prescott, Arizona.
- Reclamation's other bird expert is Chris Grosso.
- For the next seven weeks, Jennifer Faler will serve as Acting Regional Director in addition to her role as Albuquerque Area Manager. There may be another Reclamation member filling in for her at upcoming EC events.
- Brent Esplin, former EC Federal Co-chair, is now Reclamation's Regional Director of the Missouri Basin Region and Arkansas-Rio Grande-Texas Gulf Region based out of Billings, Montana.
- Seth Willey's term as the USFWS Ecological Services Field Office Director is coming to an end. By the next EC meeting, there will be a new USFWS EC representative.
- **Next EC meeting date:** August 2020

Meeting Participants

| Participant | Organization |
|--------------------|---|
| Alan Hatch | Pueblo of Santa Ana |
| Anne Marken | Middle Rio Grande Conservancy District |
| April Fitzner | U.S. Army Corps of Engineers |
| Ashlee Rudolph | U.S. Bureau of Reclamation |
| Catherine Murphy | Program Support Team |
| Chris Shaw | New Mexico Interstate Stream Commission |
| Dale Strickland | Program Support Team |
| Daniel Picard | U.S. Bureau of Reclamation |
| Danielle Galloway | U.S. Army Corps of Engineers |
| David Gensler | Middle Rio Grande Conservancy District |
| Debbie Lee | Program Support Team |
| Derek Jarner | Pueblo of Isleta |
| Elizabeth Anderson | Albuquerque Bernalillo County Water Utility Authority |
| Grace Haggerty | New Mexico Interstate Stream Commission |
| Jaimie Park | Pueblo of Isleta |
| Janet Jarratt | Assessment Payers Association of the Middle Rio Grande Conservancy District |
| Jennifer Faler | U.S. Bureau of Reclamation |
| Jim Wilber | U.S. Bureau of Reclamation |
| John Stomp | Albuquerque Bernalillo County Water Utility Authority |
| Julie Dickey | Program Support Team |
| Kate Mendoza | Albuquerque Bernalillo County Water Utility Authority |
| Kim Eichhorst | Bosque Ecosystem Monitoring Program |
| Kyle Harwood | Buckman Direct Diversion Board |
| Lynette Giesen | U.S. Army Corps of Engineers |
| Mary Carlson | U.S. Bureau of Reclamation |
| Matthew Wunder | New Mexico Department of Game & Fish |
| Megan Osborne | University of New Mexico |
| Melissa Mata | U.S. Fish and Wildlife Service |
| Michael Porter | U.S. Army Corps of Engineers |
| Michael Scialdone | Pueblo of Sandia |
| Michelle Tuineau | Program Support Team |
| Mike Marcus | Assessment Payers Association of the Middle Rio Grande Conservancy District |
| Paul Tashjian | Audubon New Mexico |
| Rich Valdez | SWCA Environmental Consultants |
| Ryan Gronewold | U.S. Army Corps of Engineers |
| Seth Willey | U.S. Fish and Wildlife Service |
| Trevor Stevens | U.S. Army Corps of Engineers |
| Vicky Ryan | U.S. Fish and Wildlife Service |
| Wayne Pullan | U.S. Bureau of Reclamation |



2020 SPRING MINNOW ACTION TEAM RECOMMENDATIONS

TO THE MIDDLE RIO GRANDE ENDANGERED SPECIES
COLLABORATIVE PROGRAM EXECUTIVE COMMITTEE

JUNE, 29TH 2020

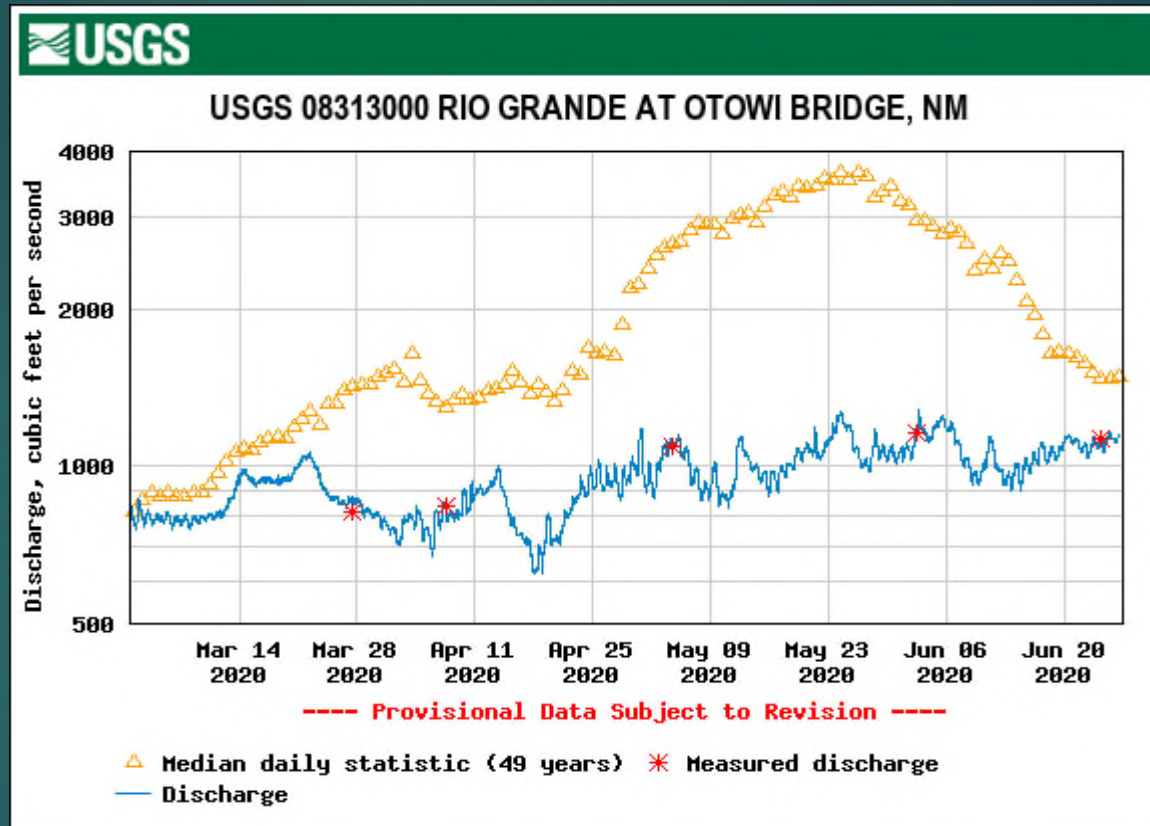
2020 SPRING MAT SUMMARY

- ▶ The MAT has held four meetings to discuss the hydrologic and biologic conditions for RGSM in 2020.
- ▶ Recommendations were developed to provide the best possible conditions for the species given the current circumstances.
- ▶ The MAT adopted a 'survival strategy' due to the projections for low runoff conditions.
 - ▶ This strategy focuses largely on protecting viable RGSM populations as possible and allow egg collection for captive propagation facilities.
 - ▶ Spring recommendations were developed based on this strategy.

SILVERY MINNOW CONDITION

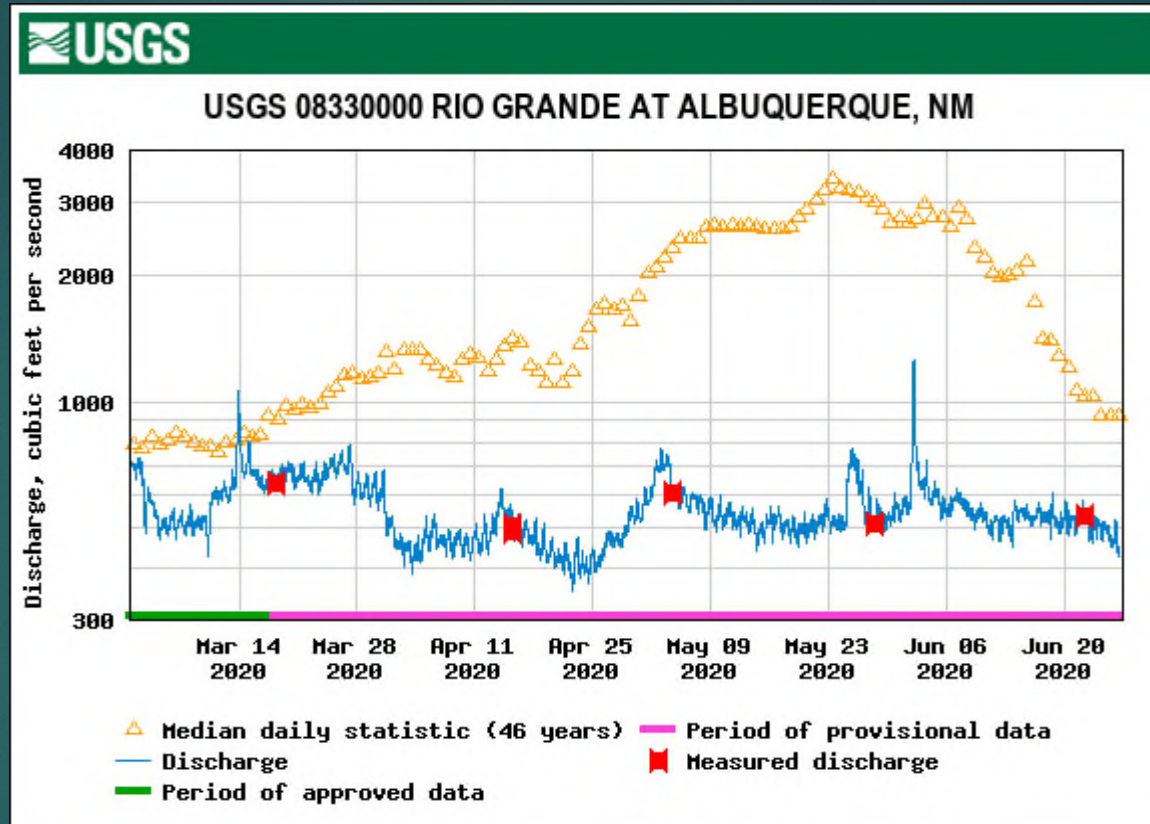
- ▶ October 2019 CPUE for Rio Grande Silvery Minnow was 2.11 (Dudley, 2020), despite record runoff in 2019.
- ▶ It has been suggested this CPUE could be a result of the low numbers of the 2018 cohort.
- ▶ The 2018 October CPUE was 0.10 (Dudley, 2019).

2020 SPRING FLOW AT OTOWI



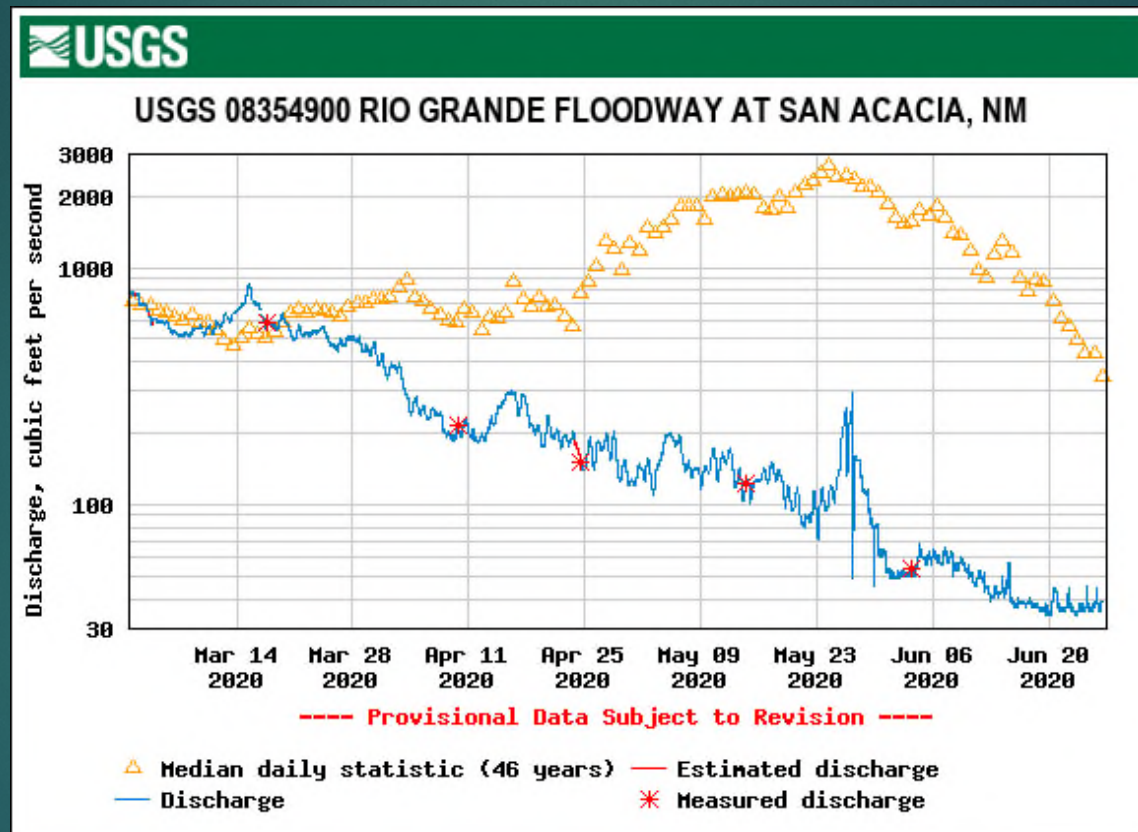
<https://nwis.waterdata.usgs.gov/nm>

2020 SPRING FLOW AT CENTRAL



<https://nwis.waterdata.usgs.gov/nm>

2020 SPRING FLOW BELOW SAN ACACIA



<https://nwis.waterdata.usgs.gov/nm>

SPRING HYDROLOGY RECOMMENDATIONS (1)

- ▶ If conditions on the Rio Chama allow, target a release(s) from El Vado to coincide with the main stem RG peak flow(s) in an attempt to create or enhance the spring floodpulse with the goal of promoting spawning and larval rearing for RGSM in the Middle Rio Grande.
 - ▶ Spring runoff timing and volume did not allow for this recommendation to be implemented.

SPRING HYDROLOGY RECOMMENDATIONS (2)

- ▶ Create a short duration instantaneous increase in flow to trigger spawning.
 - ▶ From 2 am Sunday May 24th- 3 am May 26th, MRGCD suspended non-pueblo diversions at the Isleta Diversion Dam creating a temporary spike in flows in the Isleta and San Acacia reaches of the river.
 - ▶ Volunteers from multiple agencies, coordinated by the City of Albuquerque Biopark, collected 113,247 eggs for captive propagation facilities (Lang, 2020).

SPRING HYDROLOGY RECOMMENDATIONS (3)

- ▶ Maintain river connectivity through at least mid-June to minimize mortality of YOY.
 - ▶ Drying occurred in the San Acacia Reach by the end of May and in the Isleta Reach by June 12th.
- ▶ Utilize diversion structures and wasteway returns to manage the rate of river recession to reduce fish mortality.
 - ▶ Bypasses at Isleta and San Acacia diversion dams were reduced incrementally to ensure that the rates of recession allowed for fish movement upstream, and for rescue activities to occur.

SPRING HYDROLOGY RECOMMENDATIONS(4)

- ▶ Minimize river channel drying with supplemental water and small releases at MRGCD wasteways and below diversion dams.
 - ▶ Supplemental water was used to minimize river channel drying in the spring.
- ▶ Keep Angostura Reach perennial.
 - ▶ Angostura reach has remained connected through the spring.
- ▶ Use LFCC Pumps at the Bosque Del Apache south boundary through the summer.
 - ▶ Reclamation has used the LFCC pumps through the spring. They are conducting a study to evaluate the efficacy of this pumping.

SPRING BIOLOGY RECOMMENDATIONS

- ▶ Collect RGSM eggs for captive propagation facilities.
 - ▶ 113,247 eggs were collected during the short duration increase in flow in the Isleta Reach in May.
- ▶ Conduct fish rescue where early drying is expected.
- ▶ Conduct fish rescue and incorporate distributing rescued fish to sections of the river that are not expected to dry.
 - ▶ FWS service began fish rescue efforts in Early June. Due to Covid-19 restrictions, these efforts began after drying had already occurred in the San Acacia reach.

SPRING MONITORING RECOMMENDATIONS

- ▶ Water operations coordination and “River Eyes” should begin as early as possible.
- ▶ Identify areas of inundation at low to moderate flows.
- ▶ Continue to monitor through the April 1 and May 1 forecasts and continue to adjust recommendations.

PRELIMINARY SUMMER HYDROLOGY RECOMMENDATIONS

- ▶ Minimize channel drying, provide refugia for RGSM in Isleta Reach outfalls.
- ▶ Continue pumping at south boundary of BDA while studying suitability of RGSM habitat.
- ▶ Manage river recessions to reduce mortality.
- ▶ Keep Angostura Reach wet if possible.
- ▶ Utilize ISC pump at Atrisco for emergencies.

PRELIMINARY SUMMER BIOLOGY/MONITORING RECOMMENDATIONS

- ▶ Conduct fish rescue as drying occurs.
- ▶ Monitor fish populations in some MRGCD outfalls in the Isleta Reach.
- ▶ Continue “River Eyes” monitoring.
- ▶ Study the habitat suitability of the south boundary pumps.
- ▶ Hold an additional MAT meeting on July 23rd, if further coordination is needed.

2018 OPERATIONS

- ▶ Maintain flows in MRG for as long as possible
 - ▶ Main channel drying from 4/2 to 9/12 (McKenna, 2019)
 - ▶ 47.6 unique miles of drying (McKenna, 2019)
- ▶ Short duration instantaneous increases in flow for egg collection
 - ▶ Four events with ABCWUA and MRGCD facilities coupled with rain events resulted in 159,558 RGSM eggs collected (Lusk, 2018)
- ▶ River Eyes began March 29, 2018
- ▶ Diversions were used to control the rate of river recessions
- ▶ MRGCD wasteways in Isleta reach utilized to create refugia
- ▶ ABCWUA provided Reclamation with SJC to maintain RGSM flows in Angostura Reach
- ▶ 70,797 live RGSM rescued 27 YOY and 342 hatchery reared (Archdeacon, 2019)

REFERENCES

- Archdeacon, T., Mullner, S., Grant, J. 2019. *2018 Rio Grande Silvery Minnow Fish Rescue 2018 Annual Report*. U.S. Fish and Wildlife Service, New Mexico Conservation Office. Albuquerque, NM.
- Dudley, R. Platania, S., White, G. 2019. *Rio Grande Silvery Minnow Population Monitoring during 2018*. American Southwest Ichthyological Researchers (ASIR). Albuquerque, NM.
- Dudley, R. Platania, S., White, G. 2020. *Rio Grande Silvery Minnow Population Monitoring during 2019*. American Southwest Ichthyological Researchers (ASIR). Albuquerque, NM.
- Lang, K. 2020. *2020 and Learning how to Jiggle*. Presentation to Minnow Action Team, June 10th, 2020.
- Lusk, J., Lang, K., 2018. *Summary of 2018 Jiggle operations and silvery minnow egg collections*. U.S. Fish and Wildlife Service and City of Albuquerque Biological Park ACF. Presentation.
- McKenna, C. 2019. *2019 RiverEyes Monitoring Report*. Prepared for U.S. Bureau of Reclamation, Albuquerque Area Office. Prepared by GeoSystems Analysis, Inc., under Sub-Contract with AJAC Enterprises. Albuquerque, NM.



QUESTIONS

April 2020 Minnow Action Team Recommendations

RGSM Condition

1. October 2019 CPUE for Rio Grande Silvery Minnow (RGSM) was 2.11 (Dudley et al., 2020). In 2019, high spring runoff conditions were expected to produce good recruitment of RGSM. However, the CPUE was lower than expected. It was suggested that this was most likely a result of the low numbers of 2018 cohort. In 2018, the October CPUE was 0.1 RGSM/100 m² (Dudley et al., 2019).

Hydrology Conditions

1. April 1 Forecast is for 385,000 acre-feet (AF) RG at Otowi with 125,000 AF inflow to El Vado March-July. As of the April 1 forecast flows at Otowi, March-July, shown at 53% of average.
2. More than 27,000 acre-feet of water have been stored in El Vado as of April 1, 2020. At the end of 2019, MRGCD had no native conservation water in storage in El Vado having released their remaining RG water from El Vado in late 2019 to assist with New Mexico's Rio Grande Compact (RGC) delivery obligations. The RGC Accrued Debit for 2020 is approximately 39,000 AF (accounting method 2).
3. Approximately 39,000 AF of RG water will be retained at El Vado this spring and may be released at the end of the irrigation season pursuant to Articles VI and VIII of the RGC.
4. Current P&P reserve is estimated at 20,000 AF based on April 1 forecast.
5. El Vado is currently limited to approximately 115,000 AF of total storage due to required rehab/repairs.
6. Remaining storage space in El Vado will be used by MRGCD to capture RG this spring to provide supplemental irrigation water during the 2020 season.
7. The April model runs indicate MRGCD will need all stored RG and most of its currently stored SJC to complete irrigation season.
8. MRGCD will need to maximize its storage before Article VII restrictions are in place – currently expected to be in June or July.
9. Reclamation expects to have approximately 26,000 AF SJC in storage or leased for 2020.
10. The Strategic Water Reserve and other sources have approximately 1,238 AF that could be used for ESA and Compact compliance purposes.

Recommendation: Based on April forecasts, the MAT believes it necessary to plan for low runoff conditions and adoption of a 'survival strategy'. However, because spring runoff timing

and magnitude are still uncertain and runoff could still create spawning and possibly recruitment conditions, the MAT recommends planning for those conditions.

Hydrologic

1. If spring runoff volume and timing on the Rio Chama allow, target a release(s) from El Vado to coincide with the main stem RG peak flow(s) in an attempt to create or enhance the spring floodpulse with the goal of promoting spawning and larval rearing for RGSM in the Middle Rio Grande. El Vado operations should be attempted before Article VII restrictions are in place and should avoid flood control operations on the Rio Chama.
2. If flows are insufficient to cue RGSM spawning, the MAT will recommend brief small-scale flow manipulations (jiggles) at diversion dams to trigger RGSM spawning for egg collection purposes. The MAT recommends that the coordination of these efforts should occur as soon as possible, while continuing to monitor natural runoff conditions to determine if a “jiggle” is needed. The coordination will occur through the Albuquerque Biopark, the USFWS Fish and Wildlife Conservation Office, the Middle Rio Grande Conservancy District and other RGSM conservation facilities to plan and conduct these activities.
3. Maintain river connectivity through at least mid- June to minimize mortality of any young-of-year (YOY) produced.
4. Utilize diversion structures and wasteway returns to manage the rate of river recession to reduce fish mortality.
5. Minimize river channel drying with supplemental water and small releases at MRGCD wasteways and below diversion dams.
6. Keep Angostura Reach perennial.
7. Use LFCC pumps at the Bosque del Apache south boundary through summer.

Biologic:

1. Collect RGSM eggs and larvae for captive propagation facilities. Target these efforts in areas or during runoff events that have historically produced a high number of eggs in past egg collection efforts.
2. Conduct fish rescue where early drying is expected.
3. Fish salvage operations could incorporate distribution of salvaged fish to locations other than directly upstream. Salvaged fish could be placed in locations that are not expected to dry, within the reaches they were collected.
4. *What other biology recommendations are suggested? MAT members please provide any biological suggestions.*

Monitoring:

1. Water operations coordination and “River Eyes” should begin as soon as needed. Possibly as early as April 1.
2. Identify areas of inundation at moderate/low flow.
3. Continue to monitor through April 1 and May 1 forecasts and adjust these recommendations as conditions warrant.
4. The MRGCD will continue to utilize drain outfalls as refugia for RGSM and monitoring of fish populations in these outfalls will be conducted this irrigation season.
5. ISC will conduct floodplain and in-channel research and monitoring for eggs, larvae and adults during the spawning and larvae rearing timeframe. The ISC will assist with staff and contractors on egg collection and fish rescue activities. The ISC will continue to monitor restoration projects and assess their effectiveness at the 1,000 to 3,000 cfs range.
6. USACE has planned to monitor sediment and inundation at restoration sites. Due to budgetary limitations there has not been confirmation this work will occur.
7. ABCWUA in partnership with ISC contracted SWCA to monitor RGSM at habitat restoration sites within the Angostura reach. As of April 24th, gravid fish were identified in the sites and 36 larval fish were found near the Corrales recreation site.
8. ABCWUA will begin egg monitoring above its diversion on May 1st and will continue to monitor through month of May.
9. Reclamation will continue habitat restoration monitoring in the San Acacia reach. They will continue to contract population and egg monitoring, augmentation, and genetic monitoring. Reclamation is also conducting a project with USU on fish movement using PIT-tagged fish in the Isleta and San Acacia reaches. Egg monitoring began the week of April 20th.
10. Bio park will begin egg monitoring the week of April 27th.

Literature Cited

Dudley, R.K., Platania, S.P. and White, G.C., 2019. Rio Grande Silvery Minnow population monitoring during 2018. *Submitted to the US Bureau of Reclamation, Albuquerque, New Mexico, USA.*

Dudley, R.K., Platania, S.P. and White, G.C., 2020. Rio Grande Silvery Minnow population monitoring during 2019, unpublished manuscript. *Submitted to the US Bureau of Reclamation, Albuquerque, New Mexico, USA.*

Valdez, RA, Haggerty, GM, Richard, K, Klobucar, D. Managed spring runoff to improve nursery floodplain habitat for endangered Rio Grande silvery minnow. *Ecohydrology*. 2019; 12:e2134. <https://doi.org/10.1002/eco.2134>.

Middle Rio Grande Endangered Species Collaborative Program (MRGESCP)

Science and Adaptive Management Committee (SAMC) Draft Proposal

Revised: June 23, 2020

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I. PROPOSAL INTRODUCTION

In moving towards using science and adaptive management as the MRGESCP's structured decision-making framework, the Executive Committee (EC) agreed to form a committee to coordinate the implementation of science and adaptive management activities. This document proposes how the Science and Adaptive Management Committee (SAMC) will operate, its formation, its responsibilities and functions, and its relationships with other MRGESCP committees and ad hoc groups.

The SAMC is not a voting or decision-making group. It will translate and synthesize scientific results and recommendations, including the rationale for any supported differences of opinion within the MRGESCP, to the EC. The EC holds decision-making authority for the MRGESCP.

The primary role of the SAMC is to translate the results of field studies, modeling and monitoring activities into best research and management practices. It is the EC's responsibility to appraise the science-based recommendations within the context of existing policy (i.e. MRGESCP mission and goals, and applicable laws and regulations), and communicate them to implementing entities and external stakeholders. The EC is also responsible for providing direction to the MRGESCP's committees and groups.

Topics for the EC's June 29th discussion are derived from the written and verbal comments received on the proposal. Text boxes in each section highlight topics for EC discussion with relevant comments. Some comments in this proposal have been abbreviated; please see the Comment Matrix for full comments.

Further topics have been identified for EC discussion at a future meeting (see below). The topics outlined for the EC's June 29th discussion (located within each section of the proposal) should be decided upon prior to addressing these future topics.

1. How will the External SAMC member(s) be funded?
2. If no third-party management exists, who will hold the MRGESCP Science Coordinator position?
3. How will the EC decide which topics are appropriate starting points and/or annual "themes"?
What is appropriate for year 1?
4. What is the interface between the SAMC and the EC with any kind of independent peer review?
5. Address the view that a ratio of federal to non-federal representatives should exist.

II. PURPOSE

The SAMC coordinates MRGESCP-related science initiatives and signatory efforts through identifying and assigning scientific tasks to Science and Technical Ad Hoc Groups; compiling the results of scientific studies, modeling, and monitoring efforts; and translating scientific findings into recommendations for best management practices in the Middle Rio Grande

Purpose – Note for the EC:

1. The EC will have oversight of the SAMC, including:
 - a. Providing direction to the SAMC
 - b. Reviewing science-based recommendations from the SAMC
 - c. Deciding whether or not to communicate recommendations to implementing entities and external stakeholders

EC Discussion:

1. Agreement that the SAMC's focus is on science?
2. Does the EC provide the policy oversight component (i.e. attention to MRGESCP mission and goals; laws and regulations)?
3. Considering the EC will have oversight of the SAMC, does the SAMC need express EC approval to convene and task a Science and Technical Ad Hoc Group?

Related Comments:

1. # 15: How is the SAMC different from the EC?
2. Comment #'s 16, 18, 19 [Theme: The SAMC should be science-focused]
3. # 17: Change to: The SAMC serves to initiate, evaluate, guide, and communicate science and adaptive management efforts for the MRGESCP, particularly to reduce scientific uncertainties important to water management efforts related to listed species in the MRG.

III. RESPONSIBILITIES

Coordinate and lead the implementation of the MRGESCP's Science and Adaptive Management Program:

- 1. As per direction from the EC, convene and coordinate the efforts of the Science and Technical Ad Hoc Groups to complete tasks, including the following (see **Note 1*; see *Appendix C: Science and Technical Ad Hoc Group Formation*):**
 - A. Complete executive summaries to identify alternative hypotheses regarding critical uncertainties
 - B. Develop scopes of work to test research hypotheses and/or collect necessary data
 - C. *Compile, synthesize and encapsulate the results of field studies, modeling and monitoring to develop recommendations
 - D. *Update the Science and Adaptive Management Plan as new information and opportunities become available
 - E. Update conceptual ecological models to incorporate new information

**Note 1:* With EC approval, the SAMC may complete specific tasks, or they may task Science and Technical Ad Hoc Groups to complete tasks
- 2. Review MRGESCP-related field studies, modeling and monitoring activities, and translate the results into best research and management practices**
 - A. Identify issues that require or would benefit from outside review
 - B. Provide suggestions to the EC regarding independent peer review
- 3. Work with the Fiscal Planning Committee (FPC) to coordinate EC-approved work products (e.g. studies, projects)**
 - A. The FPC will determine resources available to complete work
 - B. The FPC will work with the SAMC to determine implementation schedules based on funding availability
 - C. The SAMC will work with the EC to determine implementation schedules based on regulatory commitments
 - D. The EC will approve implementation schedules
 - E. The EC will approve work products to move forward
- 4. Regularly communicate updates at each EC meeting, including the following:**
 - A. Present potential work products and status of in-progress work products
 - B. Propose formation of Science and Technical Ad Hoc Groups with draft charges for EC review and approval
 - C. Propose implementation schedules
 - D. Suggested amendments to the Science and Adaptive Management Plan
 - E. Provide documented range of SAMC opinions, as necessary, for EC review and direction (see *Page 10, Section V. 2. For areas of non-consensus on the interpretation of scientific information*)
 - F. New science-based recommendations for best research and management practices
 - G. New recommendations for independent peer review

III. Responsibilities – Notes for the EC:

1. The anticipated time commitment for SAMC members is 10-15 hours per month
2. Administrative coordination is intended to be handled by the MRGESCP Science Coordinator
3. The EC holds final decision making authority for the direction of each MRGESCP initiative that the FPC, the SAMC, and the SAMC's ad hoc groups undertake

EC Discussion:

1. Assuming the EC agrees that the SAMC is a science focused group, are the outlined tasks appropriate for the SAMC?
2. Does the EC agree that no voting or decision-making authority belongs to the SAMC?

See Comment Matrix: #'s 20 - 39

IV. COMPOSITION AND FORMATION

1. Composition

- A. 6/7 member positions, 1 facilitator (*see Positions and Qualifications*)
 - i. 5 MRGESCP member positions
 - ii. At least 1 external expert position member
 - iii. 1 SAMC Facilitator (MRGESCP Science Coordinator)
- B. Serve a 1-year term
 - i. Ability to reapply for a position in 3 subsequent terms
 - ii. Individuals may not serve more than 4 subsequent years on the SAMC
- C. SAMC Facilitator (MRGESCP Science Coordinator)
 - i. Coordinate meetings
 - ii. Facilitate the administrative functions to include:
 - 1. Drafting Science and Technical Ad Hoc Group charges
 - 2. Coordinating with the FPC, S&T Ad Hoc Groups, and any independent peer review tasks
 - 3. Relaying updates and recommendations to the EC

2. Positions and Qualifications (*see Application Packages for overall qualifications*)

- A. Aquatic Ecology Expertise: Scientist knowledgeable in aquatic ecology
 - Michael Porter
 - Dana Price
 - Eric Gonzales
 - Mike Marcus
 - Thomas Archdeacon
 - Alison Hutson*
 - Megan Osborne*
 - Tom Turner*
 - Rich Valdez*
 - Wade Wilson*
 - Kathy Lang*
 - Rob Dudley* **
 - Douglas Tave* **
 - ??
- B. Terrestrial Ecology Expertise: Scientist knowledgeable in terrestrial ecology
 - Vicky Ryan
 - Stephen Ryan
 - Lori Walton**
 - Dana Price
 - Meaghan Conway
 - Jeff Sanchez**
 - Paul Tashjian*
 - Amy Erickson*
 - Jon Hayes*
 - ??
- C. Ecosystem Expertise: Scientist knowledgeable in ecosystem function
 - Matthew Wunder
 - Nathan Schroeder*
 - Cody Walker*
 - Michael Scialdone*
 - Yasmeen Najmi
 - Paul Tashjian*
 - Amy Erickson*
 - Kim Eichhorst*
 - Kim Fike*
 - Ondrea Hummel*
 - Todd Caplan*
 - Chad McKenna*
 - ??

D. Hydrology Expertise: Hydrologist knowledgeable in hydrology and water operations

- Grace Haggerty
- Paul Tashjian
- David Gensler
- Ryan Gronewold
- Anne Marken
- Trevor Birt
- Carolyn Donnelly**
- Dagmar Luellen**
- Nabil Shafike**
- Ed Kandl**
- ??

E. Executive Committee Position:

- i. Provide the larger Program perspective
- ii. Ensure topics and recommendations are current within the scope as decided by the EC
- iii. Provide direction for the completion of summary documents to the EC

F. External Expert Position(s): (*Note: the EC may decide that more than one external expert may be needed in a given year – see examples below*)

- i. Provide objective input throughout the adaptive management process, especially for complex issues
- ii. Provide an outside, big-picture perspective that is free of conflict
- iii. Examples of expertise: science communicator; climate scientist; statistician; environmental planner; watershed scientist
- iv. May be internal or external to the Middle Rio Grande
- v. *Future Discussion*: May be volunteers; may be jointly funded by signatories; may be funded by one signatory

- U.S. Geological Survey
- The Nature Conservancy
- Rio Grande Water Fund
- National Oceanic and Atmospheric Administration
- ??

G. SAMC Facilitator (MRGESCP Science Coordinator)

- i. Skill in translating science to communicate effectively across professional levels
- ii. Doctorate degree in an area of applied science

Notes for EC Consideration:

1. Assuming the EC agrees that the SAMC members are voted in by the EC, and that the SAMC is not a voting or decision-making body: Provisions have not been made for alternate members and meetings will accommodate all member schedules
2. Original term limit stated as serving staggered terms for 2 years, not to exceed 4 total years

EC Discussion:

- 1. Is the proposed term limit appropriate?**
- 2. What is the appropriate size to maintain a functional science-focused group?**
 - a. #41: The SAMC is on the cusp of being too large and unwieldy. I don't see any positions that can be removed without diminishing the SAMC capabilities. The composition resembles a governing board for an NGO, which [is] a good approach.
 - b. #42: The make-up of the group is very complicated. [The EC needs discussion] of whether there needs to be such requirements [, or if it can be simplified. We think 9-11 people would be good, 7 seems a little small.
 - c. #43: I understand the smaller is better concept but I think many of the signatories may be interested in a larger role in the program.
- 3. If additional membership is proposed, what value do the additional members offer to the efforts of the SAMC?**
 - a. #61: Add an Agricultural Expert member
 - b. #63: Make the [Aquatic Ecology Expert] position be two people. So much emphasis is on water and RGSM, this concerns me as to the potential for bias.
 - c. #64: Is this [Terrestrial Ecology Expert] both birds, mouse, and sunflower? Are there other expertise needed?
 - d. #66: Because you are doing AM planning and implementation perhaps this [Hydrology Expert] can be 2 positions, one water ops and one ecosystem hydrology/modeler or other expertise
- 4. If additional membership is proposed, what are the proposed member's qualifications on a science-focused group?**
- 5. Assuming a science-focused group, is an EC member position appropriate?**
 - a. #67: Delete Executive Committee member position
 - b. #68: The EC member can represent the SAMC to the EC. It would be useful to have somebody knowledgeable about policy on the SAMC.
 - c. #69: Should [EC member] be more of an advisor or liaison rather than a EC Member?
 - d. #70: EC position seems unnecessary given the SAMC should be a small group of experts focused on science
- 6. *Is holding a SAMC position a conflict of interest for contractors and tribes?**
- 7. Should contractors and tribes be permitted to hold SAMC positions as MRGESCP members (see position #'s 1-4)?**
- 8. What about applicants that are a contractor to a MRGESCP signatory (e.g. NMISC & SWCA; USACE & Tetra Tech), and contractors that are MRGESCP signatories (e.g. BEMP, UNM, Pueblos)?**
- 9. **Should individuals employed by a MRGESCP signatory, but not active MRGESCP members, be permitted to hold a SAMC position? Are they able to apply for the External Expert position?**

Notable Related Comment: #3

3. Formation Process

- A. Executive Committee
 - i. Recommend names of individuals that may have time to sit on the SAMC
 - ii. Work with the MRGESCP Science Coordinator to invite potential individuals to apply for SAMC positions
- B. Interested Individuals
 - i. Individuals with interest in positions 1-4 and 6 work with the Science Coordinator to complete the respective application package (*see Application Packages*)
 - ii. If an individual is interested in being considered for more than one position, one application package must be filled out for each position
- C. MRGESCP Science Coordinator
 - i. Work with interested individuals to complete and submit an application package (*see Application Packages*)
 - ii. Submit application packages to the EC
- D. Executive Committee
 - i. Review application packages
 - ii. Nominate one or more EC member(s) for position #5 (if more than one EC member expresses interest, the EC will vote on the position)
 - iii. Each signatory's EC representative casts one vote per SAMC position
- E. Prospective Date for SAMC Launch: 2020 - Late fall/Early winter

EC Discussion:

1. Is the formation process clearly outlined?
2. Is the formation process appropriate?

See Comment #'s: 2, 27, 86

V. MEETING OPERATIONS

1. The SAMC will operate under a modified version of Robert's Rules of Order, including the following:
 - A. Each agenda after the first meeting will include time for non-member comment; individuals must request time two days prior to the meeting and will have up to 3 minutes to speak
 - B. Only SAMC members may participate in meeting deliberations. Prior to the meeting, the SAMC members may invite Ad Hoc Group leaders and outside experts to participate on specific agenda items as needed
 - C. Formal agendas will be drafted for review and approval at each meeting. Draft meeting materials will be made publically available on the Program Portal one week prior. The draft materials will be distributed to the SAMC members via email one week prior
 - D. Each meeting will have formal meeting minutes, which will be used to document meeting deliberations and decisions, and communicate activities to the MRGESCP and external interested parties
 - E. The finalized agendas, read aheads, and minutes will be included in the MRGESCP's Annual Administrative Record and stored on the Program Portal
2. If the SAMC cannot reach consensus during the translation of scientific results:
 - A. SAMC member(s) will document the various opinions, each with justification
 - i. The opinions will be provided to the EC for review and direction
 - ii. The EC may direct the SAMC to use the documented opinions to inform a Science and Technical Ad Hoc Group's further actions
 - iii. The EC may work with the SAMC to determine if a form of independent peer review is necessary
3. SAMC members will abide by all federal, state, tribal, and local agency rules and regulations regarding conflict of interest

EC Discussion:

1. What is the best way for the science-focused committee to be productive while allowing for non-member input?

VI. EVALUATION

Executive Committee

1. The MRGESCP Science Coordinator will provide an annual update
 - a. SAMC's work plan status
2. Evaluation of the SAMC members

EC Discussion:

1. What should be included in the annual update?
2. How should the SAMC be evaluated, and at what frequency?

APPENDIX A: APPLICATION PACKAGES

1. APPLICATION PACKAGE FOR SAMC SIGNATORY MEMBER TOPICAL EXPERT POSITIONS

The SAMC coordinates MRGESCP-related science initiatives and signatory efforts through identifying and assigning scientific tasks to Science and Technical Ad Hoc Groups; compiling the results of scientific studies, modeling, and monitoring efforts; and translating scientific findings into recommendations for best management practices in the Middle Rio Grande.

The SAMC comprises seven member positions (i.e., 5 Program signatory members and at least 1 external expert member). Selected individuals serve a one-year term limit, with the ability to reapply for a position in 3 subsequent years. Individuals may not serve more than 3 consecutive terms (4 years) on the SAMC. This application package is for SAMC Positions 1 – 4. The SAMC positions are as follows:

- 1. Aquatic Expert: Scientist knowledgeable in aquatic ecology**
- 2. Terrestrial Expert: Scientist knowledgeable in terrestrial ecology**
- 3. Ecosystem Expert: Scientist knowledgeable in ecosystem function**
- 4. Hydrology Expert: Scientist knowledgeable in hydrology, water operations and policy**
5. Executive Committee Position: Provide the larger Program perspective, ensure topics and recommendations are current within the scope as decided by the EC, and provide direction for the completion of summary documents to the EC
6. External Member Position: Provide objective input throughout the adaptive management process, especially for complex issues; Provide an outside perspective, free of conflict, and expertise in a specified area as determined by the EC; may be internal or external to the MRG

The SAMC will meet every other month to discuss work products and conduct committee business. The time commitment for each member will vary, but is expected to be approximately 10-15 hours per month during meeting months. Time will include document reviews and the provision of comments; discussions with Program members, the MRGESCP Science Coordinator, and SAMC members; and preparing for and attending meetings.

To be considered for a position, please complete the following form and submit to the MRGESCP Science Coordinator via email at [\[email\]](#) along with your resume (limit 2 pages) by close of business on **MM/DD/YYYY**. If you are interested in being considered for more than one position, one application package must be completed for each position.

Name: Click or tap here to enter text.

Job Title: Click or tap here to enter text.

Affiliation: Click or tap here to enter text.

Daytime Phone Number: Click or tap here to enter text.

Email Address: Click or tap here to enter text.

Position for which you are applying (choose one per application package):

Choose one per application

Specific area(s) of research/expertise: Click or tap here to enter text.

Years of experience in your respective field: Click or tap here to enter text.

Years of experience working the Middle Rio Grande: Click or tap here to enter text.

Years of experience working with the MRGESCP, and in what capacity:

Click or tap here to enter text.

Why would you like to serve on the Science and Adaptive Management Committee?

Click or tap here to enter text.

Please describe any specific experience working directly with the listed species of the Middle Rio Grande (i.e., New Mexico meadow jumping mouse, Pecos sunflower, Rio Grande silvery minnow, southwestern willow flycatcher, yellow-billed cuckoo) related to the topical area for which you are applying:

Click or tap here to enter text.

In your own words, describe what adaptive management means to you:

Click or tap here to enter text.

In your opinion, how can the MRGESCP contribute to adaptive management in the Middle Rio Grande?

Click or tap here to enter text.

In one sentence, describe the biggest challenge facing the Middle Rio Grande:

Click or tap here to enter text.

How would you maintain scientific impartiality as a member of the SAMC?

Click or tap here to enter text.

By signing this application, you are committing to abide by the following statement:

As a member of the SAMC, I agree to uphold high scientific standards, work collaboratively, and advocate for the best science possible. I understand that if selected, I would be serving in the capacity as a technical expert in a specific field, and not as a representative of a specific organization. All views expressed in SAMC meetings will be my own and not those of my organization.

Please sign and date this application by typing in the respective boxes, attach the application with your resume (limit 2 pages, no photos), and submit via email to the MRGESCP Science Coordinator by COB on **MM/DD/YYYY**.

Thank you for your interest in the Middle Rio Grande Endangered Species Collaborative Program.

Click or tap here to enter text.

Click or tap to enter a date.

Type Your Name

Today's Date

2. APPLICATION PACKAGE FOR SAMC EXTERNAL MEMBER AND SUBJECT MATTER EXPERT POSITIONS

The SAMC coordinates MRGESCP-related science initiatives and signatory efforts through identifying and assigning scientific tasks to Science and Technical Ad Hoc Groups; compiling the results of scientific studies, modeling, and monitoring efforts; and translating scientific findings into recommendations for best management practices in the Middle Rio Grande.

The SAMC comprises seven member positions (i.e., five Program signatory members, 1 external member, and one subject matter expert member). Selected individuals serve a two-year term limit, with the ability to reapply for a position in the subsequent year. Individuals may not serve more than two consecutive terms (4 years) on the SAMC. This application package is for SAMC Positions 6 and 7. The SAMC positions are as follows:

1. Aquatic Expert: Scientist knowledgeable in aquatic ecology
2. Terrestrial Expert: Scientist knowledgeable in terrestrial ecology
3. Ecosystem Expert: Scientist knowledgeable in ecosystem function
4. Hydrology Expert: Scientist knowledgeable in hydrology, water operations and policy
5. Executive Committee Position: Provide the larger Program perspective, ensure topics and recommendations are current within the scope as decided by the EC, and provide direction for the completion of summary documents to the EC
6. **External Member Position: Provide objective input throughout the adaptive management process, especially for complex issues; Provide an outside perspective, free of conflict, and expertise in a specified area as determined by the EC; may be internal or external to the MRG**

The SAMC will meet every other month to discuss work products and conduct committee business. The time commitment for each member will vary, but is expected to be approximately 10-15 hours per month during meeting months. Time will include document reviews and the provision of comments; discussions with Program members, the MRGESCP Science Coordinator, and SAMC members; and preparing for and attending meetings.

To be considered for a position, please complete the following form and submit to the MRGESCP Science Coordinator via email at [\[email\]](#) along with your resume (limit 2 pages) by close of business on **MM/DD/YYYY**. If you are interested in being considered for more than one position, one application package must be completed for each position.

Name: Click or tap here to enter text.

Job Title: Click or tap here to enter text.

Affiliation: Click or tap here to enter text.

Daytime Phone Number: Click or tap here to enter text.

Email Address: Click or tap here to enter text.

Position for which you are applying (choose one per application package):

Choose one per application

Specific area(s) of research/expertise: Click or tap here to enter text.

Years of experience in your respective field: Click or tap here to enter text.

Years of experience working with the MRGESCP, and in what capacity:

Click or tap here to enter text.

Why would you like to serve on the Science and Adaptive Management Committee?

Click or tap here to enter text.

Please describe any specific experience working directly with the listed species of the Middle Rio Grande (i.e., New Mexico meadow jumping mouse, Pecos sunflower, Rio Grande silvery minnow, southwestern willow flycatcher, yellow-billed cuckoo) related to the topical area for which you are applying:

Click or tap here to enter text.

In your own words, describe what adaptive management means to you:

Click or tap here to enter text.

In your opinion, how can the MRGESCP contribute to adaptive management in the Middle Rio Grande?

Click or tap here to enter text.

If you are not currently active in the Middle Rio Grande Endangered Species Collaborative Program as a Program signatory, explain your specific interest in participating in the SAMC, and the perspectives and expertise you and/or your organization brings that is specific to the specified area of focus:

Click or tap here to enter text.

In one sentence, describe the biggest challenge facing the Middle Rio Grande:

Click or tap here to enter text.

How would you maintain scientific impartiality as a member of the SAMC?

Click or tap here to enter text.

Please provide the name, phone number and email address of at least one active MRGESCP participant as a reference:

Click or tap here to enter text.

By signing this application, you are committing to abide by the following statement:

As a member of the SAMC, I agree to uphold high scientific standards, work collaboratively, and advocate for the best science possible. I understand that if selected, I would be serving in the capacity as a technical expert in a specific field, and not as a representative of a specific organization. All views expressed in SAMC meetings will be my own and not those of my organization.

Please sign and date this application by typing in the respective boxes, attach the application with your resume (limit 2 pages, no photos), and submit via email to the MRGESCP Science Coordinator by COB on MM/DD/YYYY.

Thank you for your interest in the Middle Rio Grande Endangered Species Collaborative Program.

Click or tap here to enter text.

Click or tap to enter a date.

Type Your Name

Today's Date

Application Packages

EC Discussion:

1. After reviewing both application forms, consider if these are the right questions to ask applicants.
 - a. Will the questions reveal leadership skills?
 - b. Will the questions reveal skills working as an effective team member?
2. How will the MRGESCP ensure impartiality amongst SAMC members?
 - a. Review the following – By signing this application, you are committing to abide by the following statement: As a member of the SAMC, I agree to uphold high scientific standards, work collaboratively, and advocate for the best science possible. I understand that if selected, I would be serving in the capacity as a technical expert in a specific field, and not as a representative of a specific organization. All views expressed in SAMC meetings will be my own and not those of my organization.

See Comment #'s (12, 47, 62, 63, 84 – regarding bias), (101 – 103 regarding qualifiers for participation)

APPENDIX B: EXAMPLE MEETING AGENDAS

1. First Meeting Agenda Example

Welcome and Introductions

Science Coordinator

- Members and roles

Overview of Executive Committee Direction

Science Coordinator

- SAMC Charter
- Work Plan

Collaborative Program Work Plan

Science Coordinator

Facilitated Discussion

- First Quarter planning
 - Hypotheses from conceptual ecological models
 - Discussion and decision on which to move forward
 - Map out process pathways for each hypothesis
 - Planned activities and steps to achieve them
 - Ad Hoc Groups to convene
- Agreement on hypotheses to move forward
- Agreement on Ad Hoc Groups to form
- ❖ **Next Step:** Provide EC update and seek approval on hypotheses and Ad Hoc Groups

Ad Hoc Group Formation

Facilitated Discussion

- Development of draft charges for EC review
 - Specific tasks
 - Timelines
 - Work products
 - Membership
- Agreement on the elements of draft Ad Hoc Group charges and membership
- Direction to PST to draft charges for EC review and approval

Meeting Summary and Action Items Review

Science Coordinator

Adjourn

2. General Meeting Agenda Example

Welcome and Introductions

Science Coordinator

10
minutes

Non-Member Comment Period

- By request at least two business days prior to the meeting
- Time limited
 - No more than 10 minutes total time for pre-prepared comments
 - 3 minutes per person (10 minute time limit includes 3 commenters and 1 minute for switching commenters)

Updates from the Ad Hoc Group Chairs

Ad Hoc Group Leaders

- Progress reports
- Presentations if necessary
- Deliverables to review
- Comments and questions
- SAMC agreement on next steps
 - Updates to models
 - Items for EC review and approval
 - Additional Ad Hoc Group formation if needed

Work Plan Updates

*Science Coordinator
Facilitated Discussion*

- Progress reports
 - Additional planned activities and steps to achieve them
 - Discussion on outstanding action items
 - Additional Ad Hoc Groups to convene if needed
- Action items to implement the work plan
- Plan for EC update and approval

Review directions from the EC since last meeting

- Hypotheses to move forward
- Ad Hoc Groups to convene
- Direction to PST to contact proposed members
- Direction to PST to convene Ad Hoc Groups once charges are approved (by the SAMC via email)

Meeting Summary and Action Items

Science Coordinator

Adjourn

APPENDIX C: SCIENCE AND TECHNICAL AD HOC GROUP FORMATION

With EC approval, the SAMC will convene and coordinate Science and Technical Ad Hoc Groups to complete assigned tasks (*See SAMC Responsibilities*)

1. The SAMC will:
 - A. Identify the tasks needed to implement the Science and Adaptive Management Plan with direction from the EC
 - B. Develop Science and Technical Ad Hoc Group charge (*see Charge Template below*) to complete a specific task, including:
 - i. Timelines and deadlines
 - ii. Deliverable(s)
 - iii. Identify Preliminary Membership
 - C. Direct the PST to draft Ad Hoc Group charges for their review
 - D. Direct the PST to contact the identified Ad Hoc Group members to secure their commitment
 - E. The SAMC may ask other individuals to join the group if an identified member declines
2. The Science and Technical Ad Hoc Groups will:
 - A. Meet as needed to carry out their charge, with support from the PST
 - B. Select a group leader
 - i. Progress updates to the SAMC
 - ii. Communicate issues to the SAMC immediately
 - C. Complete the assigned deliverables within the specified timeline
3. Once the Ad Hoc Groups submit work to the SAMC, the SAMC will take next steps, which may include the following:
 - A. Request the existing Ad Hoc Group make revisions
 - B. Translate scientific results into recommendations for EC approval
 - C. Document the range of SAMC opinions for areas of non-consensus
 - D. Get EC approval to convene a new Science and Technical Ad Hoc Group to address subsequent steps
 - i. Develop a new charge

**Science and Technical Ad Hoc Group
Charge Template**

Approved by Executive Committee on [DATE]

Approved by the Science and Adaptive Management Committee on [DATE]

I. Originating Committee

Only the Executive Committee and the Science and Adaptive Management Committee can create an ad hoc group. The ad hoc group reports to their originating committee, or as assigned.

II. Ad Hoc Group Charge

Detail the ad hoc group charge. Include specific tasks and the MRGESCP objectives addressed by those tasks.

III. Membership

A. Criteria for membership

Provide a list of qualifications and/or interests members should possess

B. Member List

List the proposed members of the ad hoc group here, including affiliation and job title. The total membership should take into account the expertise needed to carry out the group's charge, and the group should be kept at a manageable size in order to complete the task within the timeline detailed in this document.

IV. Tasks and Deliverables

*List the specific tasks the ad hoc group is being directed to complete to fulfill their charge, and the deliverable(s) associated with each task. Tasks can be a concrete activity (e.g., data analysis, a scope of work, a model), or be process-oriented (e.g., develop options for addressing a hypothesis for the SAMC's consideration). *Add or delete numbers for additional tasks as needed*

1. Task One Name

Details of task one

Objective of Task One

How will this task contribute to the group's overall charge?

Deliverable(s):

Clearly state the expected outcome

2. Task Two Name

Details of task two

Objective of Task Two

How will this task contribute to the group's overall charge?

Deliverable(s):

Clearly state the expected outcome

V. Timeline and Reporting Scheduling

Complete the table, noting when tasks are expected to be complete, any subtasks, and the expected deliverable(s) to be submitted to the originating committee for review. The tasks in the table should match with those listed above. Each task should include updates to the originating committee.

| Task | Subtask | Deliverable | To Be Completed By |
|----------|------------|------------------|--------------------|
| Task one | Subtask 1A | Deliverable Name | Deadline |
| | Subtask 1B | Deliverable Name | Deadline |
| Task two | | Deliverable Name | Deadline |

FY21 Unfunded Activities

The following list of activities were funded by U.S. Army Corps of Engineers (USACE) through FY20. In FY21, these activities will be defunded as a result of USACE budget cuts.

1. MRGESCP Program Portal and database
2. Bosque Ecological Monitoring Program
3. Avian monitoring in the MRG
4. Multi-agency study for identifying restoration priorities for threatened tamarisk-dominated habitat to benefit future habitat for SWFL
5. Multi-agency Los Lunas habitat restoration project
6. Habitat restoration site surveying
7. SWFL surveys on the Rio Grande in the Albuquerque metro area
8. Tamarisk leaf beetle monitoring
9. Multi-agency assessment and quantification of sediment and discharge at Arroyo de los Piños
10. Changes in terrestrial soil loss in the MRG basin to 2100
11. Development and application of a HEC-RAS, mobile-bed, sediment transport model of the MRG
12. MRG groundwater monitoring
13. Multi-agency engineering modeling applications for quantifying habitat for the RGSM
14. Multi-agency environmental flow analysis of hydrograph and population parameters for RGSM recruitment
15. Evaluating the grain size of bedload transported from arroyos into the Rio Grande
16. Evaluation of sediment dynamics in habitat restoration features of the Albuquerque Reach
17. Monitoring climate change in the MRG
18. Water quality monitoring of aquatic refugia in the MRG
19. Multi-agency continuous water temperature monitoring of the MRG basin
20. YBCU noise and telemetry study

**Report of the Population Monitoring Workgroup
To the Executive Committee of the
Middle Rio Grande Endangered Species Collaborative Program**

Richard Valdez, PMWG Chair
June 29, 2020

Introduction

The Population Monitoring Workgroup (PMWG) was formed by the EC in July 2012 for the purpose of evaluating and updating the fish monitoring plan for the Middle Rio Grande (MRG). The PMWG was charged with three tasks (1) Conduct a Workshop on CPUE, (2) Review the MRG Population Monitoring Plan, and (3) Update the Monitoring Plan. Recently, the PMWG has transitioned toward supporting the MRG Adaptive Management Process by helping to address scientific uncertainty and information gaps.

Meetings and Membership

Meetings are held every 1-4 months to allow time for analyses and membership availability. Meetings are attended by 15-20 MRG stakeholder representatives and interested parties. The meetings are open to the public and the notes and proceedings of each meeting are archived with WEST. Starting in March 2020, meetings are being held by webinar because of the COVID-19 Pandemic.

Actions and Accomplishments

Task 1: Conduct a Workshop on CPUE

- May 2014: Survey to EC on fish monitoring needs (DBSA 2015).
- Dec 8-10, 2015: Workshop with Independent Science Panel (Hubert, Fabrizio, Hughes).
- Apr 13, 2016: Final Report of Science Panel (Hubert et al. 2016).

Task 2: Review MRG Population Monitoring Plan

- Mar 23, 2017: PMWG requested that Reclamation incorporate eight Panel recommendations into Population Monitoring Contract.
- Jun 2017: Final Report on RGSM Scientific Uncertainties for AM (Noon et al. 2017).
- Nov 29, 2017: Consolidated review and prioritization of Science Panel Recommendations (Table 1).
- Jun 15, 2018: PMWG begin analyses of panel recommendations (e.g., Valdez 2018).
- Nov 11, 2018: Contracted biometrician initiates Integrated RGSM Population Model to evaluate management actions and science panel recommendations (Yackulic 2018).
- Feb 26, 2020: PMWG begins executive summaries of scientific topics identified from prioritized science panel recommendations (coordinated with Adaptive Management).

Task 3: Update the Monitoring Plan (inferences from Tasks 1 and 2)

- 27 years (1993-2020); long-term program with consistent methodology has value.
- RGSM CPUE has been used in:
 - Recovery criteria (USFWS 2010).
 - 2016 BiOp ITS (USFWS 2016).
 - Four modeling efforts (Miller, Goodman, Yackulic, Walsworth/Budy).
 - Estimates of survival, growth, recruitment reconcile with modeled trends.
- Modeling shows that CPUE appears to represent population trends over time.
- High variability in CPUE provides low precision for status of population, and change detection to management actions; these continue to be evaluated.
- Increased sample size and targeted mesohabitat sampling are also being evaluated.

Table 1. Science topics from Hubert and Noon Science Panel Recommendations.

| Science Topic |
|---|
| 1. Relationship of CPUE and true population size of RGSM |
| 2. Age-specific survival of RGSM |
| 3. Size and age-specific fecundity of RGSM |
| 4. Relationship of demographic rates and abiotic and biotic factors |
| 5. Evaluate existence and strength of density dependence to limit population |
| 6. Effect of augmentation on RGSM Population |
| 7. Contribution of salvaged RGSM to population dynamics |
| 8. Develop and deploy "vertically-integrating" Moore egg collectors |
| 9. Effect of environmental cues on spawning onset and activity |
| 10. Age composition of RGSM population |
| 11. Selectivity of gears used to sample RGSM |
| 12. Spatial extent and historical availability of habitat and hydraulic quality used by RGSM |
| 13. Roles and relative contributions to fish production by age in channel and floodplain habitats |
| 14. Evaluate management potential for fish production by reach |
| 15. Consolidation of mesohabitats for monitoring RGSM |
| 16. Compute CPUE from larval and standard seines by age |
| 17. Evaluate effect of zero catches on CPUE and sample design |
| 18. Effect of environmental factors on seine capture probability |
| 19. Mixture model and alternatives for computing RGSM CPUE |
| 20. Use classification and regression trees, boosted regression trees, or random forests to examine relationships between hydrologic variables and CPUE |
| 21. Effect of increased sample size on RGSM monitoring |
| 22. Implement studies using different sampling designs |

Middle Rio Grande Endangered Species Collaborative Program Population Monitoring Work Group (PMWG) 2020 Work Plan

The Population Monitoring Workgroup (PMWG) is charged by the Executive Committee (EC) of the MRGESCP with evaluating the monitoring program and demographics for the Rio Grande Silvery Minnow (RGSM) in the Middle Rio Grande, in accordance with three tasks: (1) conduct a workshop on CPUE methodology, (2) review the fish population monitoring plan and demographics, and (3) update the monitoring plan. Task 1 was completed in 2016, and Task 2 is currently being executed by the PMWG.

The PMWG plans to conduct and complete the following elements under Task 2 in 2020:

| Elements | Sub-Element | Target Completion Date |
|---|---|---|
| 1. Integrate and prioritize consolidated recommendations from two science panels ¹ | 1a. Consolidate recommendations 1b. Complete Executive Summaries on six to eight recommendations to aid in the ranking and implementation processes 1c. Work with WEST to integrate recommendations into AM process | 1a. February 18, 2020 1b. September 15, 2020 1c. Ongoing |
| 2. Develop and review integrated RGSM model ² | 2a. Complete base model 2b. Review model parameters 2c. Conduct sensitivity analyses, and run scenarios 2d. Complete draft working model | 2a. February 26, 2020 2b. July 15, 2020 2c. September 15, 2020 2d. December 20, 2020 |
| 3. Develop draft report of Integrated RGSM model and preliminary results | 3a. Complete Preliminary Draft Report on Integrated RGSM Model | 3a. December 20, 2020 |
| 4. Reports to EC | 4a. Draft Progress Report to EC 4b. Present preliminary findings to EC 4c. End of Year Report to EC | 4a. June 2020 4b. June EC Meeting 4c. Last 2020 EC Meeting |

¹ Hubert Science Panel Report was completed in 2016; Noon Science Panel Report was completed in 2017.

² Dr. Charles Yackulic of the USGS has been retained through the NMISC to develop an integrated model.

| Comment # | Revised Proposal Section ID | EC Brief Section ID | Old Proposal Section ID | Comment | Response |
|-----------|-----------------------------|---------------------|-------------------------|--|---|
| 1 | n/a | | General | Suggest start conversation at EC with reminder that the EC agreed to the new Program structure, including all new groups except the EC | |
| 2 | IV. 2. & Appendix A | IV. Bullet 2 | IV. 3. d. | This [application packages] seems rather insulting to the Collaborative Program entities. I think there are many people who would contribute highly. Maybe discuss a workshop and from that develop a good start for membership. Throw the names for each discipline in a hat and grab them out and they begin the committee composition. Do this every year or two. Fair, impartial, and PST and Science Coordinator will have to make the best | See the full SAMC proposal detailing the list of suggested potential candidates and the Application Packets |
| 3 | IV. EC Discussion | | General | Justify why the EC should support this 'radical' SAMC for the CP. The SAMC proposal would benefit the CP by reducing the time staff spent in long meetings, just like the EC wants to cut back their time in EC meetings. This supports agencies by allowing staff more time to work on agency priorities, increasing their effectiveness, and more control on their fiscal resources. The justification should build on EC preferences to have more control on CP while focusing decisions and tasks. The EC can exert more control by selecting SAMC members based on their leadership skills and knowledge, leading to more productive tasks assigned to ad hoc / review groups. Likewise, the suggested nomination process will better support the EC and SAMC by emphasizing leadership. The balance for expert and agency representation created by the IT/QCRT structure described above can be used by good leaders to address concerns raised by a few members. | See section - backup for EC discussion point |
| 4 | n/a | | General | The proposal is well thought out and read clearly | |
| 5 | n/a | | General | [The proposal] makes sense | |
| 6 | n/a | | General | How do you get around the trust issues? | Improving communication and using transparent processes with active participation from all |

| | | | | |
|----|------------------------|---------|---|---|
| 7 | n/a | General | <p>How to balance agency / expert participation on SAMC tasks assigned to ad hoc teams.</p> <p>I suggest establishing a structure of an ad hoc implementation team (IT) w/ a complementary Quality Control review team (QCRT). This would allow the SAMC to assign smaller-right sized creative ad hoc implementation teams to writing, analysis, creative tasks that would be reviewed by a larger team (QCRT) that includes experts & agencies that were not represented in the implementation team. That allows the SAMC to focus on better IT composition to implement the task while addressing the need for more agency / expert involvement in the overall process. Suggest existing workgroups like the Population Monitoring & MAT are likely to retain the current membership, but encouraged to use the ad hoc IT/QCRT structure</p> | Did not get to this comment, may address once the EC has convened if needed |
| 8 | n/a | General | Once questions were answered, the proposal makes sense | |
| 9 | n/a | General | [The proposal] is clear and makes sense | |
| 10 | III. 3. G. | General | The non-fed group thinks this group has too much authority | See revised proposal section(s) indicated |
| 11 | III. 1. A.; III. 3. F. | General | Make sure the science being done is linked to management | See revised proposal section(s) indicated |
| 12 | Application Packages | General | Question: How to avoid perception of bias if [external] members are paid by a signatory? | See revised proposal section(s) indicated |
| 13 | V. EC Discussion | General | Question: What is the process to get agency thoughts to the SAMC? | See revised proposal section(s) indicated |
| 14 | n/a | General | In description, be clear on projects vs. studies | Section deleted |
| 15 | II. | II. | How is the SAMC different than the EC? | See section for EC discussion point |
| 16 | II. | II. | <p>We still believe an independent science panel is important to review this groups work on a regular basis. We don't see this group as the independent science panel.</p> | <p>The SAMC is intended to be a small group of experts guiding scientific reviews and proposing recommendations for independent peer review as necessary.</p> |

| | | | | | |
|----|------------------------|--------|---------|--|--|
| 17 | II. | I. | II. | Change to "The SAMC serves to initiate, evaluate, guide, and communicate science and adaptive management efforts for the MRGESCP, particularly to reduce scientific uncertainties important to water management efforts related to listed species in the MRG." | See section for EC discussion point |
| 18 | II. | | II. | The SAMC should focus on science. The EC should be the policy link | See section for EC discussion point |
| 19 | II. | | II. | Make sure the SAMC is science-focused | See section for EC discussion point and related revisions throughout the document |
| 20 | III. 1. E.; III. 4. E. | II. | III. | Add #4 "Revise SAM plan annually to incorporate new information and opportunities" | See revised proposal section(s) indicated |
| 21 | III. | | III. | SAMC Responsibilities: Leadership is an important concept for AM that should be specifically identified as a SAMC responsibility. Teamwork and problem-solving are also important concepts for effective AM, but understand if you can't work that into the bullet points. | See revised proposal section(s) indicated |
| 22 | III. 1- 4 | | III. | In general, too many responsibilities assigned to SAMC which is a small group of experts. | See revised proposal: revisions clarify that 4 main responsibilities are outlined, with the option to complete work by assigning it to other groups as needed. |
| 23 | III. | II. 1. | III. 1. | Change to "Manage the EC-approved science and adaptive management efforts" | Change not made; see revised proposal section indicated |
| 24 | III. | | III. 1. | Change "Direct" to "Coordinate" | See revised proposal section(s) indicated |
| 25 | III. 3. | | III. 1. | Should this [FPC] be an EC task? | See revised proposal section(s) indicated |

| | | | | |
|----|------------------------|-----------------|---|--|
| 26 | II.; III. 2. | III. 1. A & B | There seems to be a lot of responsibility given to this group. It seems to be both a Science and Policy committee. It may be better to have this group deal only with science. For example, in the Responsibilities section, III.1.A. seems very reasonable, but III.B. seems to step over into policy and decision making. | See EC discussion point and revised proposal section(s) indicated |
| 27 | IV. 3. D. IV. Bullet 5 | IV. 3. d. iii. | This is not necessary and again uncomfortable. We aren't sending people to the moon here. We are grateful EC signatories are providing staff to work on the SAMC and other more important work groups and efforts. | This has been added as a topic for EC discussion |
| 28 | III. 1. A - E +Note 1 | III. 1. A. i-iv | Request revision of the SAMC proposal to make clear that the ad hoc groups will do work like complete scopes of work and data analyses | See revised proposal section(s) indicated |
| 29 | III. 1. A - E +Note 2 | III. 1. A. i-v | These should all be Science and Technical Ad Hoc Group responsibilities, not the SAMC. | See revised proposal section(s) indicated |
| 30 | II. 4. E & G | III. 1. B. ii. | The ISP/science advisory panel can be another avenue if the SAMC can't make consensus. Relationship between the ISP and the SAMC should be really direct | See revised proposal section(s) indicated; ISP/science advisory panel will be detailed at a later date |
| 31 | III. 3. A - D | III. 2. A & B | Section III.2. seems like it should be more of the Fiscal Planning Committee's responsibility. SAMC should just prioritize projects but not determine funding or schedule based on funding. | See revised proposal section(s) indicated |
| 32 | III. 3. A - D II. 2. | III. 2. A & B | Change to "Coordinate with project-level workgroups to plan, implement, and report on scientific and adaptive management projects" [FPC] | See revised proposal section(s) indicated |
| 33 | III. 3. A - D | III. 2. A & B | These are Fiscal Planning Committee functions, not SAMC functions. | See revised proposal section(s) indicated |
| 34 | III. 3. A - D | III. 2. A & B | [coordinate with FPC] Seems outside the scope of the SAMC | See revised proposal section(s) indicated |
| 35 | III. 3. A - D | III. 2. A & B | Concern that the coordination with the FPC might be an EC function the SAMC shouldn't have | See revised proposal section(s) indicated |

| | | | | | |
|----|------------------|---------------|-------------|---|---|
| 36 | III. 4. F. | II. 3. | III. 3. | Change to "Recommend species and water management opportunities and changes to the EC based on evaluation of projects" | See revised proposal section(s) indicated |
| 37 | III. 4. | | III. 3. | Explicitly say a SAMC update at each EC meeting. | See revised proposal section(s) indicated |
| 38 | III. 4. F. | | III. 3. | Include under functions regular reports to the EC, not just communicating scientific-based recommendations | See revised proposal section(s) indicated |
| 39 | I.; II.; III. 2. | | III. B. ii. | This [translating science...] should be a primary function of the SAMC | See revised proposal section(s) indicated |
| 41 | IV. | | IV. 1 & 2. | The SAMC is on the cusp of being too large and unwieldy. However, I don't see any positions that can be removed without diminishing the SAMC capabilities. Good job with formulation. The composition resembles a governing board for an NGO, which I view as a good approach. You may want to develop language in Sections IV.1 and IV.2 to reinforce this concept for the EC. The examples for external member and SME use climate science for both. I suggest revising so the examples don't overlap and emphasize these positions would bring different perspectives to the SAMC. | See EC discussion point and revised proposal section(s) indicated |
| 42 | IV. | | IV. 1. | The make-up of the group is very complicated. I think we need some discussion at the EC of whether there needs to be such requirements, or if it can be simplified. We think 9-11 people would be good, 7 seems a little small. | See EC discussion point and revised proposal section(s) indicated |
| 43 | IV. | III. Bullet 1 | IV. 1. | I understand the smaller is better concept but I think many of the signatories may be interested in a larger role in the program. The EC is not the place to get work done. So this group and workgroups have to work well together in order for this to work. Seems like there is a big disconnect between the SAMC and the workgroups that needs to be thought out –no evidence of that in this documents – and then described. | See EC discussion point and revised proposal section(s) indicated |

| | | | | | |
|----|-------------------|-----------------------------|------------------|---|---|
| 44 | IV. | | IV. 1. | Only having one member per role can lead to issues with meeting scheduling or a quorum. Consider provisions for an alternate per position. | See EC discussion point and revised proposal section(s) indicated |
| 45 | IV. | | IV. 1. | Question: Who chooses the alternate? The main member, or the EC? | See EC discussion point and revised proposal section(s) indicated |
| 46 | IV. | III. Bullet 1; sub-bullet 1 | IV. 1. a. i. | (Voting?) [5 Members] | The SAMC is not intended to be a voting body. |
| 47 | IV. EC Discussion | III. Bullet 1; sub-bullet 2 | IV. 1. a. i. | If RGSM is our main concern I think that most projects will be minnow related. Therefore the other members won't have much input and if that expert is from certain agencies there could be strong biases that can set us back from learning. | See EC discussion point and revised proposal section(s) indicated |
| 48 | IV. EC Discussion | | IV. 1. a. i-iii. | Is there a required ratio of Fed to non-fed? | See topic for future EC discussion |
| 49 | IV. EC Discussion | III. Bullet 1; sub-bullet 2 | IV. 1. a. ii-iii | nonvoting? [1 External Member, 1 SME] | The SAMC is not intended to be a voting body. |
| 50 | IV. | III. Bullet 1; sub-bullet 3 | IV. 1. a. ii-iii | The area of focus? Two outside members? I'm ok with SAMC inviting scientists in to help on subject matter in general. They don't need to sit on a committee that meets often though) | See full proposal |
| 51 | III. & IV. | III. Bullet 1; sub-bullet 3 | IV. 1. a. ii-iii | Why not just get the Independent Peer Review started and leave the external reviews there? | See full proposal |
| 52 | IV. 1. B. i-ii. | III. Bullet 2 | IV. 1. b. | If everyone gets on the committee at the same time then how to stagger? | See revised proposal section(s) indicated |
| 53 | IV. 1. B. i-ii. | | IV. 1. b. | I like the idea of term limits | Noted |
| 54 | IV. 1. B. i-ii. | | IV. 1. b. | External members: Liked idea of having 1 year terms renewable up to 3 times (total 4 years) | See revised proposal section(s) indicated |
| 55 | IV. 1. B. i-ii. | | IV. 1. b. | Suggest External and SME positions aren't 2 year terms, but one year with renewal. | See revised proposal section(s) indicated |
| 56 | IV. 1. C. | | IV. 1. c. | If the Science Coordinator is the chair, does this person vote? | See revised proposal section(s) indicated |

| | | | | | |
|----|----------------------|-------|-----------|--|--|
| 57 | IV. 1. C.; IV. 1. H. | | IV. 1. c. | Are they [the Science Coordinator] just an administrator? | See topic for EC discussion and revised proposal section(s) indicated |
| 58 | IV. 1. C. | | IV. 1. c. | Also, who will this person [the Science Coordinator] be if there is not third-party management? | See topic for future EC discussion and revised proposal section(s) indicated |
| 59 | IV. | | IV. 2. | Not a wide variety of Program representation in this group, could end up being more federal than non-federal representatives. | See topic for EC discussion and revised proposal section(s) indicated |
| 60 | Appendix A | | IV. 2. | Suggestion to add list of qualifications/skills to help EC think through SAMC membership (ex: leadership, collaborative) | See revised proposal section(s) indicated |
| 61 | IV. | V. | IV. 2. | Add an Agricultural Expert position | See topic for EC discussion and revised proposal section(s) indicated |
| 62 | Appendix A | | IV. 2. | Bias based on agency POV would be hard to remove for individual members | See revised proposal section(s) indicated |
| 63 | IV. | V. 1. | IV. 2. a. | Make the [Aquatic Ecology Expert] position be two people. So much emphasis is on water and RGSM, this concerns me as to the potential for bias. | See topic for EC discussion and revised proposal section(s) indicated |
| 64 | IV. | V. 2. | IV. 2. b. | Is this [Terrestrial Ecology Expert] both birds, mouse, and sunflower? Are there other expertise needed? | See full proposal |
| 65 | IV. | V. 3. | IV. 2. c. | I assume the ecosystem expertise also understand ecosystem. Not sure what you are looking for here. | See full proposal |
| 66 | IV. 2. D. | V. 4. | IV. 2. d. | Because you are doing AM planning and implementation perhaps this [Hydrology Expert] can be 2 positions, one water ops and one ecosystem hydrology/modeler or other expertise. | See topic for EC discussion and revised proposal section(s) indicated |

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| 67 | IV. 2. E. | V. 5. | IV. 2. e. | Delete Executive Committee member position | See topic for EC discussion and revised proposal section(s) indicated |
| 68 | IV. 2. E. | | IV. 2. e. | The EC member can represent the SAMC to the EC. It would be useful to have somebody knowledgeable about policy on the SAMC. | See topic for EC discussion and revised proposal section(s) indicated |
| 69 | IV. 2. E. | | IV. 2. e. | EC position: Should this person be more of an advisor or liaison rather than a full EC Member? | See topic for EC discussion and revised proposal section(s) indicated |
| 70 | IV. 2. E. | | IV. 2. e. | EC position seems unnecessary given the SAMC should be a small group of experts focused on science | See topic for EC discussion and revised proposal section(s) indicated |
| 71 | IV. 2. | | IV. 2. f & g. | External members and SME's for the SAMC should likewise have the support of their organizations, but may be nominated by CP agencies (not a requirement). | See revised proposal section(s) indicated |
| 72 | future discussion | | IV. 2. f & g. | External members: Goal is volunteers, but put in that they could be jointly funded | See topic for future EC discussion |
| 73 | future discussion | | IV. 2. f. | Who pays for this person's [External Member] time to be on the SAMC? | See topic for future EC discussion |
| 74 | future discussion | | IV. 2. f. | I like the idea of having an external member of the SAMC, where does the funding for this position come from? | See topic for future EC discussion |
| 75 | future discussion | | IV. 2. f. | Are there provisions for paying external members? | See topic for future EC discussion |
| 76 | future discussion & IV. 2. | V. 7. | IV. 2. g. | Bring in expertise as needed and provide small budget to do so. Can then eliminate this [Subject Matter Expert] position. | See topic for future EC discussion and revised proposal section(s) indicated |

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| 77 | future discussion & IV. 2. | | IV. 2. g. | Does this person [Subject Matter Expert] rotate into the SAMC depending on the specific science topics being discussed? | See topic for future EC discussion and revised proposal section(s) indicated |
| 78 | future discussion | | IV. 2. g. | Also, who pays for this person's [Subject Matter Expert] time to be on the SAMC? | See topic for future EC discussion and revised proposal section(s) indicated |
| 79 | IV. 3. A. i. | IV. Bullet 2 | IV. 3. | I think the EC members could offer names [of interested individuals as SAMC members] that have the time to sit on the SAMC. | See revised proposal section(s) indicated |
| 80 | future discussion | IV. Bullet 1 | IV. 3. a. i. | What is this? [area of focus recommendation example] Sounds like a waste of time. How are we discussing getting projects completed from this focus? | Focus area temporarily deleted and awaiting future EC discussion |
| 81 | future discussion | IV. Bullet 1 | IV. 3. a. i. | Better to have SAMC provide options for focus studies and then have the EC decide. | Focus area temporarily deleted and awaiting future EC discussion |
| 82 | future discussion | | IV. 3. a. i. | First area of focus needs to be asking science questions and providing the science-based answers for uncertainties, CEM hypotheses and monitoring questions. | Focus area temporarily deleted and awaiting future EC discussion |
| 83 | future discussion | | IV. 3. a. i. | Forecasting and scenario planning should come out of the resolution of scientific uncertainties. Our first area of focus should be resolving the current uncertainties around monitoring. | Focus area temporarily deleted and awaiting future EC discussion |
| 84 | VI. 2. & Appendix A | | IV. 3. b. | In the Columbia River, they have a list of skills and qualifications to consider when deciding who to appoint to the science group. They try and get at implicit bias, not just conflict of interest related to contracting. | See revised proposal section(s) indicated |
| 85 | III. 1. E.; III. 4. E. | | III. | There should be some reference to the actual adaptive management plan in the proposal, with the SAMC having the responsibility of updating the AM Plan annually. | See revised proposal section(s) indicated |
| 86 | IV. 3. D. | IV. Bullet 4 | IV. 3. d. ii. | Why is this [EC nomination of EC member] necessary? The EC member really only represents themselves. I think it is not a good idea and likely will not have time to devote to this committee. | This has been added as a topic for EC discussion |

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| 87 | III. 1 - 3 | | III. 1. A. | The functions seemed to be a lot of work - highlight the delegation better. | See revised proposal section(s) indicated |
| 88 | Appendix B | | IX. 1 & 2 | The agendas give the perception the SAMC is like an EC. Suggest redoing them to show the EC is still providing direction and the SAMC is pushing products up. | See revised proposal section(s) indicated |
| 89 | n/a | Intro | n/a | Is this group [SAMC] assisting the Science Coordinator or visa versa? | See full proposal |
| 90 | n/a | Intro | n/a | None of this was useful. How about, this is the PST's proposal for the purpose and composition of the SAMC. Is this a decision item for the EC in June? If so, say so. | See full proposal |
| 91 | Appendix C; III. | | S&T Ad Hoc | Would like more detail on how ad hoc groups are formed and composed. Question of agency representation on those groups. | See revised proposal section(s) indicated |
| 92 | IV. 2. | | V. | I would reframe the discussion on CP staff members who are also contractors to focus on leadership and team work. I think the EC could become stuck in this rabbit hole. Likewise, if an agency nominates someone who has been more peripheral to the CP, they should be evaluated on their merits rather than having tenure in the CP. This is an opportunity for new perspectives. | See revised proposal section(s) indicated |
| 93 | IV. 2. A - E | | V. | Under Section V. you should move the list of potential members to a separate list. It distracts readers into thinking about who they think should be on the SAMC. It would be useful to compile a supporting spreadsheet of all the agency and contractor experts, with columns listing their skills. The SAMC can use it for identifying people for the ad hoc committees. I would emphasize the opportunities for everyone (who is interested) to participate on the ad hoc committees under the direction of the SAMC. | See revised proposal section(s) indicated |
| 94 | future discussion | | V. | How does the EC decide an area of focus? | Focus area temporarily deleted and awaiting future EC discussion |
| 95 | future discussion | | V. | More details on the area of focus. | Focus area temporarily deleted and awaiting future EC discussion |

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| 96 | future discussion | V. | Question: Would the members change when the area of focus changes? | Focus area temporarily deleted and awaiting future EC discussion |
| 97 | n/a | V. 5. | Can any CP signatory apply for these positions or just those listed here? | No signatory is precluded from applying for a SAMC position |
| 98 | IV. 2. & EC discussion | V. EC discussion | Add tribal agencies to the conflict of interest list | See revised proposal section(s) indicated |
| 99 | future discussion | V. Example 2 | I think the SAMC should be focusing on the science uncertainties in each reach and how those are resolved, not necessarily the project planning. | Focus area temporarily deleted and awaiting future EC discussion |
| 100 | future discussion | V. Example 3 | Science to understand how to improve habitat restoration or what restoration efforts are effective is a useful subject for the SAMC. | Focus area temporarily deleted and awaiting future EC discussion |
| 101 | IV. 2. | VI. | SAMC qualifications (for all members) must include leadership and team skills in addition to technical expertise (governing board concept). These skills are very different from supervisory or contract oversight. A single leader may be productive on the SAMC. A SAMC composed of more leaders with team skills is more likely to move the program forward. I would add several leadership / team work / problem-solving requirements to the application form. | See topic for future EC discussion and revised proposal section(s) indicated |
| 102 | Appendix A | VI. | I think the SAMC applications (1-4) should be supported (signature /letter) by the CP agency chief/ EC member, and forwarded through the CP agency representative. A nomination letter / support signed by the agency would elevate serving on the SAMC as representing the agency and the CP. I recognize that a more formal process won't guarantee better leadership, but it may help. For the EC representative, the EC should nominate the person(s), hopefully based on their leadership / teamwork skills. | This is not applicable to all signatories |

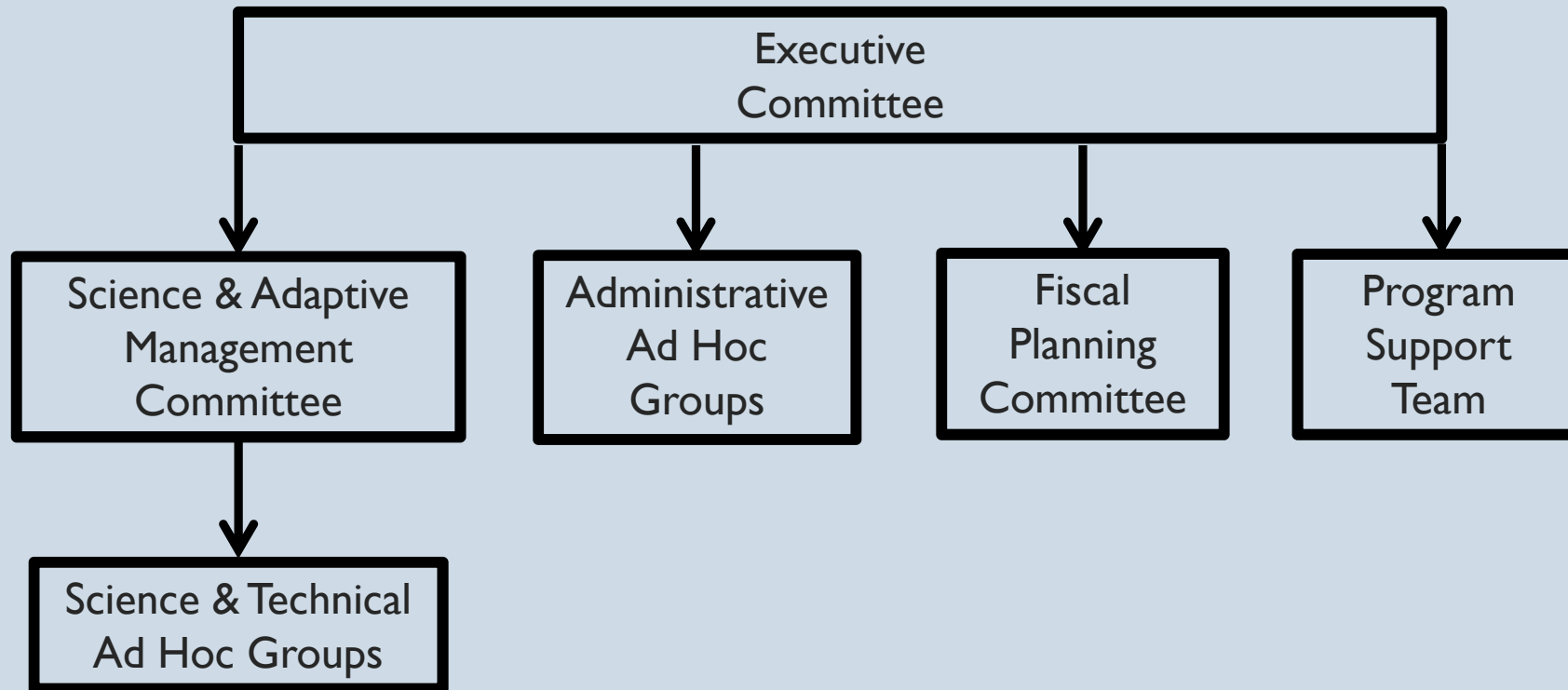
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| 103 | Appendix A | VI. | Move the VI. SAMC applications into an attachment (preferred) or to the end of the detailed proposal (minimum). If the EC wants to review the application forms, that should occur after they accept the basic SAMC proposal. This squirrel will keep the EC distracted for hours. Much better as a homework assignment. | See revised proposal section(s) indicated |
| 104 | V. | VII. Bullet 1, sub-bullet 1 | Since the EC does not require two days advanced notice for public comment, I don't think the SAMC should have that either. You want participation and public engagement in the Program, so public comment should be signed up for on a sign-up sheet available prior to the meeting. | This has been added as a topic for EC discussion. |
| 105 | V. | VII. Bullet 1, sub-bullet 1 | Public comment is too rigid. Wants to have people attend meetings and hear the conversations | This has been added as a topic for EC discussion. |
| 106 | V. | VII. Bullet 1, sub-bullet 3 | Add "and read-aheads" | See revised proposal section(s) indicated |
| 107 | V. 2. iii. | VII. Bullet 2 | Items with disagreement should be referred for independent peer review. Can the SAMC decide to send something for independent peer review, or is that an EC decision? Items referred to an independent peer review panel should be pertinent to achieve Program goals. If the item of issue does not support achieving a Program goal, it may not be beneficial to send for independent peer review by the Program. | The SAMC can make a recommendation, but the EC is the ultimate decision maker on independent peer review. Many factors play into whether or not independent peer review is appropriate or possible (possible = resources). |

SCIENCE AND ADAPTIVE MANAGEMENT COMMITTEE PROPOSAL

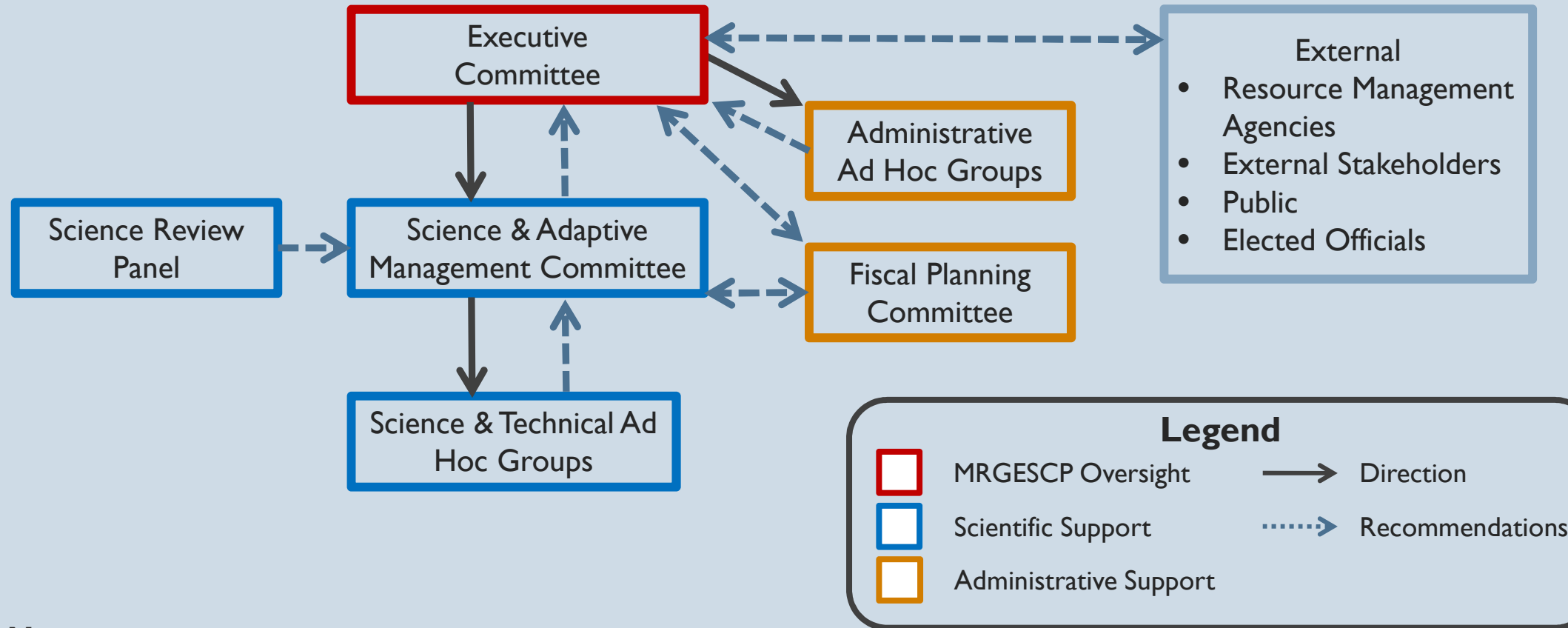
Executive Committee Meeting

June 29, 2020

MRGESCP HIERARCHICAL STRUCTURE



OPERATIONAL STRUCTURE FOR IMPLEMENTING THE MRGESCP'S SCIENCE & ADAPTIVE MANAGEMENT PROGRAM



Note:

The **Program Support Team** (PST) coordinates the overall MRGESCP operations, including providing administrative, scientific and technical support for the meetings and the lines of direction and recommendations. The PST has not been added to this directional process structure.

KEY POINTS

1. Page 2: Several questions arose that are more appropriate for a future meeting, once the foundation has been agreed upon by the EC
2. The SAMC is not a voting or decision-making group
 - a. Responsibility: Translate and synthesize scientific results and recommendations, including the rationale for any supported differences of opinion within the MRGESCP, to the EC
3. The EC is the decision-making body for the MRGESCP
 - a. Provide direction to committees and groups
 - b. Consider the science-based recommendations within a policy context
 - c. Communicate final recommendations to implementing entities and external stakeholders

PURPOSE

Questions:

1. Does the EC agree that the SAMC's focus is on science?
2. Does the EC agree that the EC provides the policy oversight component (i.e., attention to MRGESCP mission and goals; laws and regulations)?
3. Does the SAMC need express EC approval to convene and task Science and Technical Ad Hoc Groups?

RESPONSIBILITIES

Questions:

1. Are the outlined tasks appropriate for the SAMC?
2. Does the EC agreed that no voting or decision-making authority belongs to the SAMC?

COMPOSITION AND FORMATION

Questions:

1. Is the proposed term limit appropriate?
2. What is the appropriate size to maintain a functional science-focused group?
3. If additional membership is proposed, what value do the additional members offer to the efforts of the SAMC?
4. If additional membership is proposed, what are the proposed members' qualifications on a science-focused group?

CONTINUED: COMPOSITION AND FORMATION

Questions:

5. Assuming a science focused group, is an EC member appropriate?
6. Is holding a SAMC position a conflict of interest for contractors?
 - a. Should contractors be permitted to hold SAMC positions as MRGESCP members?
 - b. What about applicants that are a contractor to a MRGESCP signatory?
Contractors that are MRGESCP signatories?
7. Should individuals employed by a signatory but not active Program participants be permitted to hold a SAMC position as a signatory member?
Are they able to apply for the External Expert position?

FORMATION PROCESS

Questions:

1. Is the formation process clearly outlined?
2. Is the formation process appropriate?

MEETING OPERATIONS

Questions:

- I. What is the best way for the science-focused committee to be productive while allowing for non-member input?

EVALUATION

Questions:

1. What should be included in the annual update?
2. How should the SAMC be evaluated, and at what frequency?

APPLICATION PACKAGES

Questions:

- I. After reviewing both application forms, consider if these are the right questions to ask applicants
 - a. Will the questions reveal leadership skills?
 - b. Will the questions reveal skills working as an effective team member?

CONTINUED: APPLICATION PACKAGES

Questions:

- I. How will the MRGESCP ensure impartiality amongst SAMC members?
 - a. Review the following – *By signing this application, you are committing to abide by the following statement: As a member of the SAMC, I agree to uphold high scientific standards, work collaboratively, and advocate for the best science possible. I understand that if selected, I would be serving in the capacity as a technical expert in a specific field, and not as a representative of a specific organization. All views expressed in SAMC meetings will be my own and not those of my organization.*