

Executive Committee Meeting

March 25, 2021

Meeting Materials:

Agenda

Minutes

2008 Memorandum of Agreement [read-ahead, not included]

2021 Addendum to the 2008 Memorandum of Agreement [read-ahead, not included]

Revised MRGESCP 2021 Work Plan [read-ahead, not included]

Program Activity Definition [read-ahead, draft]

Science and AM Update [presentation]

Program Portal [presentation]

Draft 2021 Science Objectives [follow-up, draft]

Revised Program Activity Definition [follow-up, draft]



Middle Rio Grande Endangered Species Collaborative Program

Est. 2000

Executive Committee (EC) Meeting March 25, 2021 9:00 AM – 12:00 PM

Location: Zoom Meeting

<https://west-inc.zoom.us/j/8983593120?pwd=bU54V3NGeG93bXVlSlJFcElzcE9wZz09>

Call-In: +1-669-900-6833

Meeting ID: 898-359-3120; Passcode: 1251

Meeting Agenda

Meeting Objectives:

- Approve an addendum to the 2008 Memorandum of Agreement (MOA) extending the MOA term by one calendar year.
- Receive an update on the Program Portal and learn of its different functionalities.
- Hear the results from the Objectives Workshop.
- Learn about opportunities for the Adaptive Management Relational Database.
- Define a "Program activity."

9:00 – 9:05	Welcome, Introductions, Agenda Review <ul style="list-style-type: none">• Ground rules for Zoom meeting• New EC members:<ul style="list-style-type: none">○ Mark Kelly, Non-Federal Co-Chair, Albuquerque-Bernalillo County Water Utility Authority (ABCWUA)○ Sarah Hendrickson, ABCWUA (alternate)○ Greg Kaufman, Pueblo of Sandia (alternate) <p>✓ Decision: Approval of March 25, 2021 EC meeting agenda</p>	<i>EC Co-chairs</i>
9:05 – 9:10	December 2020 Meeting Summary <ul style="list-style-type: none">• Action items review <p>✓ Decision: Approval of December 17, 2020 EC meeting minutes</p> <p>Read ahead:</p> <p><input type="checkbox"/> December 17, 2020 EC meeting minutes</p>	<i>EC Co-chairs</i>
9:10 – 9:20	Program Manager Update <ul style="list-style-type: none">• Administrative announcement:<ul style="list-style-type: none">○ FY20 Annual Report deadlines○ 2020 Science Symposium presentations○ 2020 Bibliography• By-laws revisions update• Science and Adaptive Management Committee (SAMC) update <p>➤ Action Item: Submit comments on the FY20 Annual Report to the PST by March 30, 2021</p>	<i>Debbie Lee, Program Support Team (PST)</i> <i>Catherine Murphy, PST</i>
9:20 – 9:30	2008 Memorandum of Agreement Addendum <p>✓ Decision: Approval of 2008 MOA Addendum</p>	<i>Debbie Lee, PST</i>

- **Action Item:** All signatories sign the 2008 MOA Addendum by May 1, 2021

Read ahead:

- ☐ 2008 MOA
- ☐ 2008 MOA Addendum

9:30 -9:45	2021 MRGESCP Work Plan <ul style="list-style-type: none"> • Proposed revisions to the 2021 Work Plan ✓ Decision: Approval of MRGESCP 2021 Work Plan revisions <p>Read ahead:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Revised MRGESCP 2021 Work Plan 	<i>Debbie Lee, PST</i>
9:45 – 10:00	Program Portal Presentation <ul style="list-style-type: none"> • Program Portal features • Next steps on Portal funding ➤ Action Item: Task the Fiscal Planning Committee with investigating additional funding options for the Portal 	<i>Debbie Lee, PST</i>
10:00 – 10:10	Hydrology and Rio Grande Silvery Minnow (RGSM) Update <ul style="list-style-type: none"> • 2021 hydrology forecasts • RGSM augmentation and rescue plans 	<i>Jennifer Faler, U.S. Bureau of Reclamation Debra Hill, U.S. Fish & Wildlife Service</i>
10:10 – 10:35	Results from the Objectives Workshop <ul style="list-style-type: none"> • Presentation ➤ Action Item: Provide comments on objectives to the PST by April 2 	<i>Catherine Murphy, PST</i>
10:35 – 10:45	Break	
10:45 – 11:10	Adaptive Management Relational Database <ul style="list-style-type: none"> • Updates and next steps • Reporting application 	<i>Catherine Murphy, PST</i>
11:10 – 11:30	Program Activities <ul style="list-style-type: none"> • What is a “Program activity”? • Discussion on how this relates to a cost-share, and how signatory contributions to the Program are reported and tracked. ✓ Decision: Definition of “Program activity” ➤ Action Item: Fiscal Planning Committee continue discussing changes to cost-share/signatory contributions based on EC discussion <p>Read ahead:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Proposed “Program activity” definition 	<i>Debbie Lee, PST Facilitated Discussion</i>
11:30 – 11:50	Program and Science Support (PASS) Contract <ul style="list-style-type: none"> • Update on PASS contract 	<i>EC Co-chairs</i>
11:50 – 11:55	Announcements and Public Comment	
11:55 – 12:00	Meeting Summary and Action Items Review <ul style="list-style-type: none"> ➤ Next EC Meeting: July 2021 	<i>EC Co-chairs</i>
12:00	Adjourn	



Middle Rio Grande Endangered Species Collaborative Program

Est. 2000

Executive Committee (EC) Meeting Minutes

March 25, 2021; 9:00 AM–12:00 PM

Location: Zoom Meeting

Decisions:

- ✓ Approval of March 25, 2021 EC meeting agenda
- ✓ Approval of December 17, 2020 EC meeting minutes
- ✓ Approval of 2008 Memorandum of Agreement (MOA) Addendum
- ✓ Approval of 2021 Middle Rio Grande Endangered Species Collaborative Program (MRGESCP) Work Plan revisions

Announcements:

- ❖ Wayne Pullan, U.S. Bureau of Reclamation (Reclamation), will be replaced as Federal Co-chair by Katrina Grantz, Reclamation, by the next EC meeting.
- ❖ Funding for Bosque Ecosystem Monitoring Program (BEMP) was heavily cut. BEMP will cut staff and school programs, which means fewer monitored sites. BEMP will be working with partners to decide which sites to continue monitoring and is pursuing funding through any available routes.
- ❖ The U.S. Army Corps of Engineers (USACE) received funding for the Sandia Pueblo to Isleta Pueblo Ecosystem Restoration project and is seeking a non-federal sponsor during the design stage. There are two years of funding for design at a total of \$1.8 million. Cost-share is 50/50.
- ❖ Through July, the City of Santa Fe and Buckman Direct Diversion will be scoping for a new project to return treated wastewater to the Rio Grande. Program participants can contact Kyle Harwood for more information.
- ❖ The City of Albuquerque received a WaterSMART grant, with Reclamation as the lead federal agency.
- ❖ The Rio Grande Compact Commission meeting will be held virtually on April 8, 2021. The link to attend is on the New Mexico Interstate Stream Commission (NMISC) website.

Action Items:

WHO	ACTION ITEM	BY WHEN
PST (Program Support Team)	Send out a Doodle Poll to schedule the next EC meeting for the last half of July	3/26/2021
PST	Send out presentations in the meeting follow-up	3/26/2021
Annual report contributors	Submit comments on the FY20 Annual Report to the PST	3/30/2021
PST	Draft a 2008 MOA Addendum cover letter for EC Co-chairs to review and to be sent with the Addendum to each signatory	4/1/2021
EC	Provide comments on the draft science objectives to the PST	4/9/2021

PST	Draft and send a thank you letter from the MRGESCP to U.S. Geological Survey (USGS) to be signed by the EC co-chairs	4/15/2021
PST	Draft and send a letter of support from the MRGESCP for BEMP to be signed by the EC co-chairs	4/16/2021
Jim Wilber and PST	Work with Ashleigh Morris, Office of the Solicitor, U.S. Department of the Interior (DOI), to produce written confirmation of the decision made on changes to cost-share	4/16/2021
Fiscal Planning Committee (FPC)	Discuss changes to cost-share/signatory contributions based on EC discussion	4/21/2021
All signatories	Sign the 2008 MOA Addendum	5/15/2021
Signatories without signed 2008 MOA signature pages	Sign the 2008 MOA	5/15/2021
PST	Add the objectives for defining “program activity” to the document, refine the definition as necessary based on EC discussion, and bring it back to the EC for review at the next meeting	July 2021
FPC	Investigate future funding options for the Portal	7/1/2021

Next Meeting: July 2021

Meeting Minutes

Welcome, Introductions, Agenda Review

Wayne Pullan, Reclamation, and Federal Co-Chair, opened the meeting and led introductions. Wayne P. announced that Katrina Grantz, Assistant Regional Director for Reclamation's Upper Colorado Basin, will be replacing him as Federal Co-chair by the next EC meeting. Debbie Lee, Program Manager with the PST, reviewed the March 25, 2021 meeting agenda and no amendments were made.

- ✓ **Decision:** Approval of the March 25, 2021 meeting agenda by the EC
- ❖ **Announcement:** Wayne Pullan will be stepping down as Federal Co-chair by the next EC meeting, and will be replaced by Katrina Grantz

December 17, 2020 Meeting Minutes

The December 17, 2020 meeting minutes were reviewed by the EC and approved with no amendments.

- ✓ **Decision:** Approval of the December 17, 2020 EC meeting minutes by the EC

Program Manager Update

Debbie L. provided the Program Manager update. Summary points are below:

Administrative announcements:

- The draft FY20 Annual Report was sent to contributors for review. Comments are due March 30, 2021.
- Recordings of the 2020 Science Symposium presentations are available on the Portal.
- The 2020 MRGESCP Bibliography is available on the Portal.

By-laws revisions update:

- The By-Laws Ad Hoc Group has been revising the MRGESCP By-Laws one section at a time. The finalized version will be available for EC review prior to the July EC meeting.

Catherine Murphy, Science Coordinator with the PST, gave a Science and Adaptive Management Committee (SAMC) update. Summary points are below:

SAMC update:

- Three Science & Technical (S&T) Ad Hoc Groups are in different stages of development.
 - The SAMC convened the 2021 Science Objectives Workshop and draft objectives are ready for EC review.
 - The SAMC is working on a habitat restoration initiative based on multiple requests.
- **Action Item:** The annual report contributors will submit comments on the FY20 Annual Report to the PST

2008 Memorandum of Agreement Addendum

Debbie L. presented the draft 2008 MOA Addendum for EC approval (see draft addendum). Summary points are below:

- The draft 2008 MOA Addendum extends the 2008 MOA by one calendar year, giving the MRGESCP time to draft a new one that reflects the Collaborative Program's shift to operating as a science and adaptive management program.
- The current 2008 MOA ends in May 2021, but the addendum extends it to May 2022.

- Signing the 2008 MOA Addendum signifies a commitment to continued participation in the MRGESCP. Only active signatories are eligible to sign.
- There is no record of 2008 MOA signature pages from several signatories. Those with missing signature pages will also be sent the 2008 MOA to sign.
- What should EC representatives tell their respective entities about the one-year extension?
 - The extension gives the MRGESCP time to advance under the new science and adaptive management process and to draft a new MOA for EC approval in 2022. The revised 2021 MRGESCP Work Plan includes a task for developing the new MOA.
 - The PST will draft a cover letter for the addendum noting the above.
- ✓ **Decision:** Approval of the 2008 MOA addendum by the EC
- **Action Item:** The PST will draft a 2008 MOA Addendum cover letter for EC Co-chairs to review and to be sent with the Addendum to each signatory
- **Action Item:** All signatories will sign the 2008 MOA Addendum
- **Action Item:** Signatories without a signed signature page to the 2008 MOA will sign the 2008 MOA

2021 MRGESCP Work Plan

Debbie L. reviewed the proposed revisions to the 2021 MRGESCP Work Plan. Summary points are below:

- The deadlines for updating the Long-Term Plan and Science & Adaptive Management Plan were pushed out from July to the end of calendar year.
 - The Adaptive Management Relational Database (AMRDB) needs to be developed further to facilitate planning.
- The task of developing a scenarios planning workshop was taken out and scenario planning will be charged to a S&T Ad Hoc Group by the SAMC.
- There is a new task of drafting a MOA by the end of year for EC approval in 2022.
- ✓ **Decision:** Approval of 2021 MRGESCP Work Plan revisions by the EC

Program Portal Presentation

Debbie L. presented an update on the Program Portal and its current functionalities (see presentation). Summary points are below:

- USACE funding for development of the Portal by USGS ended in January 2021.
- The Portal features an “About” section, announcements banner, dataset repository, event calendar, downloadable meeting read-ahead materials, interactive map, document library, science symposium information, species pages, hydrology resources, and more.
- Although the PST can continue updating most of these features, no funding is currently available for adding new functionalities or updating/adding filters to the interactive map.
- Next steps:
 - The Albuquerque Bernalillo County Water Utility Authority (ABCWUA) will provide base level funding to keep the Portal online for at least the next year.
 - Adding new functionalities will require more funding. For example, the site is not currently mobile-friendly and no updates can be made to the interactive map.
 - The PST can continue uploading documents, updating datasets, and maintaining the calendar.
 - Program participants should inform the PST of any bugs on the site.
 - The EC tasks the FPC with investigating future funding options for the Portal.

- The EC tasked the PST with writing a thank you letter to the USGS development team.
- In the future, can Portal funding be included in the program and science support (PASS) contract from Reclamation?
 - Portal funding can be folded into the new request for proposal (RFP), but responding to Portal needs may be less nimble.
 - A smaller agency could be more responsive as far as contract changes.
 - Reclamation would need to commit to one price every year with no changes.
 - The Portal is currently hosted on a USGS server and there may be issues if Reclamation contracts USGS through the PASS contract. If the Portal needs to be moved to a new server, there is the risk of losing information or functionality.
- The Portal search function is slow, which needs to be addressed in the future.
- **Action Item:** Draft and send a thank you letter from the MRGESCP to USGS to be signed by the EC co-chairs
- **Action Item:** The FPC will investigate future funding options for the Portal

Hydrology and Rio Grande Silvery Minnow Update

Jennifer Faler, Reclamation, presented a hydrology update using the New Mexico Drought Monitor, River Basin Storage, and SNOTEL Interactive Map pages on the Portal. Summary points are below:

- According to the drought monitor, most of the state is in exceptional drought.
- According to the teacup diagrams, reservoir storage is 14% full at El Vado and 40% full at Abiquiu. Although reservoirs should be filling up at this time of year, they are fairly empty.
- According to the interactive SNOTEL map, the snow water equivalent at Elephant Butte Reservoir is 64% of average.
- There was a dry fall, which means the average snowmelt runoff will not result in as much water as with a wet fall. The 50-70% snowpack will not have a big effect on the reservoirs.
- At Heron Reservoir, inflow into the Azotea Tunnel is 20-30 cubic feet per second (cfs).
- San Juan-Chama allocation was zero in January. There will be a small amount of water in April.
- 11,000 acre-feet of water is stored at El Vado. That water is stored for the pueblos. No additional native water will be stored under Article VII.
- The irrigation season was delayed a month. Farmers will start getting water in mid-April.
- About 1,300 acre-feet of Rio Grande silvery minnow (RGSM) water was carried over from 2020. More water will be purchased around May or June. In the early part of the irrigation season, there may be no water to supplement the fish.

Additional updates from Page Pegram, NMISC, and Dave Gensler, Middle Rio Grande Conservancy District (MRGCD), are below:

- The State Engineer decided there would be no relinquishment credit storage under Article VII.
 - The big problem this year is no upstream storage. We will have to rely on river runoff.
- 2021 is shaping up to be a bad water year. 2018-2021 have been sequential bad water years.
 - In 2019, a large volume of water in the middle valley did not make it to Elephant Butte Reservoir because of inefficiencies in the river system. We cannot make our Rio Grande Compact deliveries in high water years.
- Despite some snow, the March 1 forecast went down.
- Rio Grande Compact storage is 200,000 acre-feet. New Mexico has an accrued debit of nearly 100,000 acre-feet.
- San Juan-Chama allocation is expected to be 75% or 15,000 acre-feet of water.

- Dave G. recommends holding onto that water and using it in 2022.
- There is about 680 cfs coming through the middle valley. When MRGCD starts operations April 1, they will use 400 cfs immediately. That will increase to 500 cfs in mid-April and 600 cfs by the end of April.
 - Early drying is expected, possibly as early as April without runoff.
- U.S. Fish and Wildlife Service (USFWS) should consider emergency actions for the RGSM if the river dries up to Angostura this year.

Debra Hill, USFWS, gave an update on RGSM recovery efforts. Summary points are below:

- The New Mexico Fish and Wildlife Conservation Office (NMFWCO) will not be augmenting fish this spring because there will only be three months of water.
- NMFWCO will not preemptively conduct fish rescue. Rescue will start at first drying, which may be early compared to other years.
- Due to COVID-19 restrictions, NMFWCO will not have mixed crews.
- The augmentation plan is based on September surveys and predicted spring flows in April. The hatcheries will likely produce 250,000-300,000 RGSM, which is the maximum number.
- Although there will not be a “jiggle,” natural runoff could facilitate spawning.
- Is egg salvage planned this year?
 - Yes, the MAT will likely organize volunteers with the Albuquerque BioPark leading the effort.

Science & Adaptive Management Progress Report

Catherine M. gave a Science & Adaptive Management Progress Report (see presentation). Summary points are below:

Results from the Objectives Workshop

- The purpose of the workshop was to align the science objectives with the MRGESCP’s mission and goals. The science objectives and strategies should be assessed annually.
- 40 participants representing approximately 20 organizations attended.
- The workshop groups revised or developed 23 total draft science objectives with multiple strategies for each.
- The EC will review the draft science objectives by April 9, 2021.
- The SAMC will form S&T Ad Hoc Groups to develop the strategies further.
 - Details that appear to be missing in the objectives will be included in the strategies.
- **Action Item:** The EC will provide comments on the draft science objectives to the PST

Science & Technical Ad Hoc Groups

- RGSM Population Monitoring Work Group Summary Report – *concluding*
 - The SAMC will review the report and add larger context before it heads to the EC.
 - This is the first group testing SAMC processes.
- RGSM Population Modeling – *in progress*
 - Charles Yackulic, USGS, is incorporating expert elicitation into the model. Results will be out in the summer.
- RGSM Conceptual Ecological Model (CEM) Enhancement – *in formation*
 - The group’s work will provide a template for other species CEMs.

- Genetics and augmentation/propagation program components need to be added to the RGSM CEM.
- Wade Wilson, USFWS Southwestern Native Aquatic Resources and Recovery Center, will lead the group.

Adaptive Management Relational Database

- The AMRDB content team is wrapping up populating content. The AMRDB design team is building relationships among different database tables and designing queries.
- The design team is defining different user needs to create reporting tools.
 - The two types of users are scientific and administrative.
- MRGESCP members are encouraged to reach out to the PST about scientific and administrative query needs, including how information could best be summarized for grant applications, internal reporting, signatory presentations, etc.
 - Which data fields should be included? What filters are needed to sort information? How should the summary report be formatted?
 - Suggestion to send a snapshot or sketch of a desired report format.

Comments:

- Will project costs be added to the AMRDB?
 - Yes, if provided, each proposed project will include an estimated contract cost.
 - Sensitive information can be password-protected.
- What pivot tables will be produced?
 - The Long-term Plan pivot table will have project titles with linkages to science objectives, recovery criteria, management actions, and priority based on the number and quality of linkages. Metadata for each project, including type, reach, species, hydrological conditions, etc. can be used to sort the table.
 - The SAMC and EC can use the Long-Term Plan report as a decision support tool to help determine which projects to recommend.
 - When MRGESCP members submit project proposals, project descriptions, or annual report write-ups, they are filling out fields in the AMRDB.
- How far back will you go when pulling project information?
 - Proposed projects from the previous Long-Term Plan are in the Project Bank (2018-present).
 - Only recently implemented and proposed projects will be included.
 - Information from new projects is needed for use in adaptive management.
 - Scientific findings and uncertainties from past projects are linked to the CEMs and other tables within the AMRDB.

Program Activities

Debbie L. opened discussion on the definition of a program activity. Summary points are below:

- The proposed definition sent as a read-ahead was revised based on comments.
 - Edits: Specify signatory activities, specify species in the Middle Rio Grande, and reference the Long-Term Plan.
- The first part of the definition covers contributions to MRGESCP operations. The second part covers science contributions.

Comments:

- The definition can be limiting the MRGESCP. Suggestion to add categories for on-the-ground habitat restoration activities, public outreach, water management, land management, fish management, etc. to encompass more of the work being done.
 - The MRGESCP is on the right track and the definition is compatible with that. The addition of other categories could slow scientific momentum.
 - Is there a cost-share requirement?
 - Yes, the DOI Solicitor, Ashleigh Morris, is investigating the possibility of flexibility in the 25% non-federal cost-share requirement.
 - The program activity definition conversation is intended to help the FPC discussion around a new cost-share proposal.
 - A limited definition could affect NMISC as its work is largely on the ground, unless there is no cost-share requirement.
 - The impact of on-the-ground work should be monitored and incorporated into the MRGESCP to inform management recommendations.
 - Project updates could be included in the newsletter to help share information and coordinate efforts without taking up meeting time.
 - Implementing on-the-ground projects and managing habitat is a focus of the Pueblo of Santa Ana and that should be represented in the definition.
 - Every habitat change is a field experiment and data should be collected to study the effects. The scientific value of that work will be incorporated.
 - The FPC will continue the conversation on changing cost-share/signatory contributions based on EC discussion.
 - Ashleigh M. will provide an answer on the flexibility in the cost-share requirement by the next FPC meeting.
 - The FPC could be utilized to coordinate partners for projects, and projects could be announced at EC meetings.
 - The MRGESCP can create a list of all scientific and on-the ground activities when necessary. The program activity definition is adequate so long as the scientific impacts of all work is acknowledged.
 - The MRGESCP EC will wait for an answer from the DOI Solicitor before they vote on approval of the definition.
 - The EC members request written confirmation of the decision made by the DOI solicitor on cost-share requirement.
 - The objectives for defining a program activity should be added to the definition.
- **Action Item:** Jim Wilber, Reclamation, and the PST will work with Ashleigh Morris, Office of the Solicitor, DOI, to produce written confirmation of the findings related to flexibility with cost-share
 - **Action Item:** The FPC will discuss changes to cost-share/signatory contributions based on EC discussion
 - **Action Item:** The PST will add the objectives for defining “program activity” to the document, refine the definition as necessary based on EC discussion, and bring it back to the EC for review at the next meeting

Program and Science Support Contract

Jennifer F. gave an update on the Program and Science Support contract. Summary points are below:

- The ABCWUA will not take over management of the MRGESCP at this time.

- Reclamation approved a six-month extension (ending March 2022) of the Western EcoSystems Technology, Inc. (WEST) contract.
- Reclamation has started a new RFP.
- There will be a transition period of a few months to the new PST if it is not WEST.

Announcements

- ❖ **Announcement:** Funding for BEMP was heavily cut. BEMP will cut staff and school programs, which means fewer monitored sites. BEMP will be working with partners to decide which sites to continue monitoring and is pursuing funding through any available routes.
 - BEMP is applying to different grants and working with lobbyists to get funding.
 - The MRGESCP EC will provide a letter of support for BEMP.
 - BEMP data is critical for learning during a bad water year, like 2021.
 - The BEMP report will be out at the end of March.
- ❖ **Announcement:** USACE received funding for the Sandia Pueblo to Isleta Pueblo Ecosystem Restoration project and is seeking a non-federal sponsor during the design stage. There are two years of funding for design; the total amount for design is \$ 1.8 million and cost-share is 50/50.
- ❖ **Announcement:** Through July, the City of Santa Fe and Buckman Direct Diversion will be scoping for a new project to return treated wastewater to the Rio Grande. Program participants can contact Kyle Harwood for more information.
- ❖ **Announcement:** The City of Albuquerque received a WaterSMART grant, with Reclamation as the lead federal agency.
- ❖ **Announcement:** The Rio Grande Compact Commission meeting will be held virtually on April 8, 2021. The link to attend is on the NMISC website.
- **Action Item:** The PST will draft and send a letter of support from the MRGESCP for BEMP to be signed by the EC co-chairs

Public Comment

No public comments were received.

Closing Items

- **Action Item:** The PST will send out a Doodle Poll to schedule the next EC meeting for the last half of July
- **Action Item:** The PST will send out presentations in the meeting follow-up

Meeting Participants

Participant	Organization
Alan Hatch	Pueblo of Santa Ana
Alyssa O'Brien	City of Albuquerque, Open Space
Bill Grantham	New Mexico Office of the Attorney General
Catherine Murphy	MRGESCP Support Team
Cynthia Naha	Santo Domingo Pueblo
Dale Strickland	MRGESCP Support Team
David Gensler	Middle Rio Grande Conservancy District
Debbie Lee	MRGESCP Support Team
Debra Hill	U.S. Fish and Wildlife Service
Grace Haggerty	New Mexico Interstate Stream Commission
Jennifer Faler	U.S. Bureau of Reclamation
Jim Wilber	U.S. Bureau of Reclamation
Julie Dickey	MRGESCP Support Team
Kim Eichhorst	Bosque Ecosystem Monitoring Program
Kyle Harwood	Buckman Direct Diversion
Lynette Giesen	U.S. Army Corps of Engineers
Major Katrina Johns	U.S. Army Corps of Engineers
Mark Kelly	Albuquerque Bernalillo County Water Utility Authority
Matthew Wunder	New Mexico Department of Game and Fish
Megan Osborne	University of New Mexico
Michael Scialdone	Pueblo of Sandia
Michelle Tuineau	MRGESCP Support Team
Page Pegram	New Mexico Interstate Stream Commission
Paul Tashjian	Audubon New Mexico
Rich Valdez	SWCA Environmental Consultants
Rick Carpenter	Buckman Direct Diversion
Ryan Gronewold	U.S. Army Corps of Engineers
Sarah Hendrickson	Albuquerque Bernalillo County Water Utility Authority
Shawn Sartorius	U.S. Fish and Wildlife Service
Trevor Birt	New Mexico Interstate Stream Commission
Trevor Stevens	U.S. Army Corps of Engineers
Wayne Pullan	U.S. Bureau of Reclamation
Yasmeen Najmi	Middle Rio Grande Conservancy District

A Middle Rio Grande Endangered Species Collaborative Program (MRGESCP) activity is defined as follows:

- (1) An activity that contributes to MRGESCP operations, including:
 - Active participation in MRGESCP committees and ad hoc groups, and
 - Administrative support of the MRGESCP.
- (2) An activity that advances the scientific contribution of the MRGESCP, including:
 - Reducing a scientific uncertainty by addressing one or more MRGESCP objectives,
 - Providing findings for incorporation into the MRGESCP's science and adaptive management tools (e.g., Adaptive Management Relational Database, conceptual ecological models, etc.),
 - Contributing to the collective body of knowledge about the Middle Rio Grande, and
 - Informing the MRGESCP's recommendations on future scientific activities and/or management actions.

Middle Rio Grande Endangered Species Collaborative Program

Science & Adaptive Management Progress Report



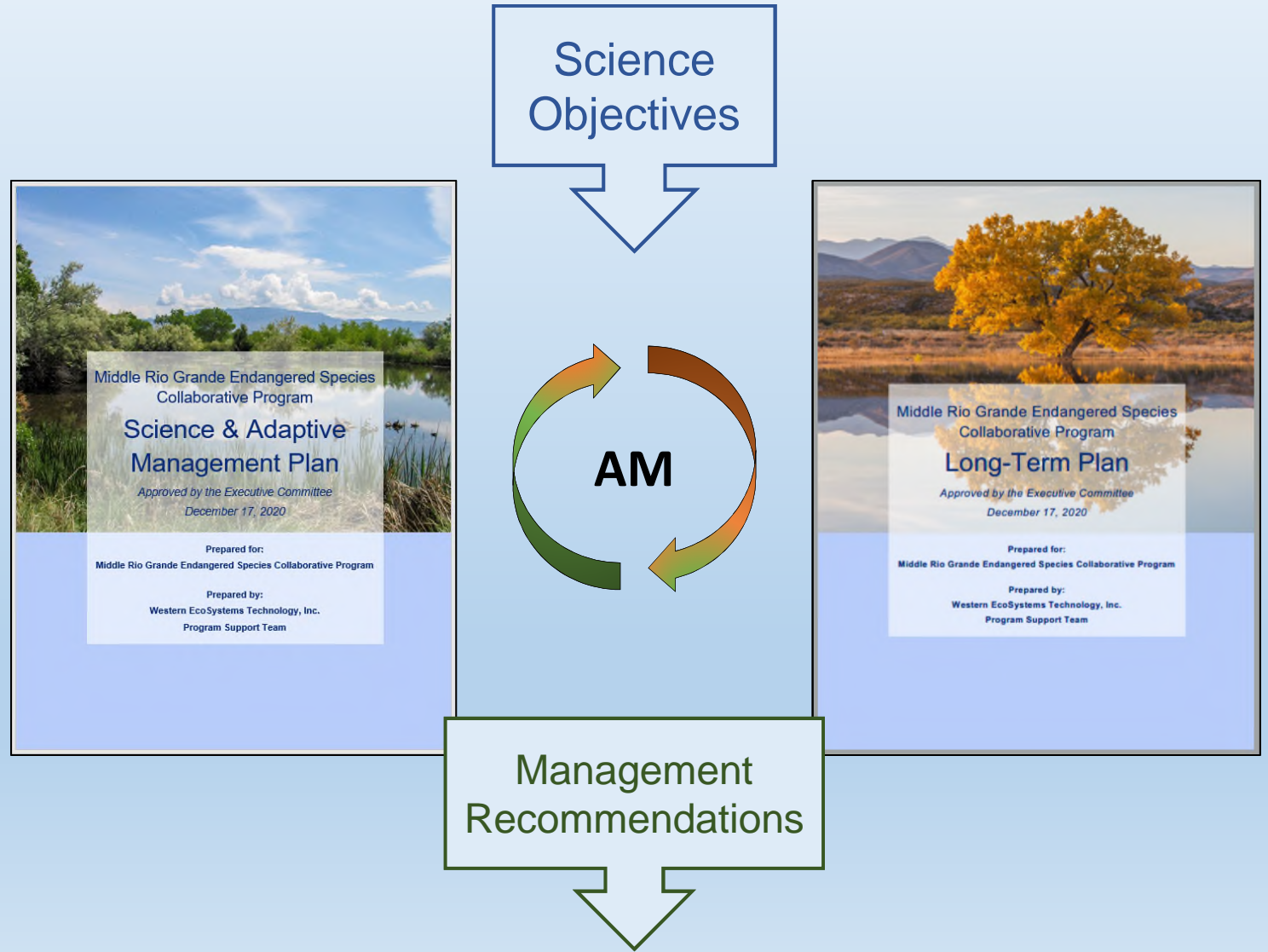
25 March 2021

Science Coordinator update to Executive Committee

Science & Adaptive Management Accomplishments

Science Objectives Workshop

- February 10-11, 2021
- Purpose:
 - ❖ Align the Collaborative Program's scientific planning objectives with its mission statement and goals.
 - ❖ Appraise the objectives and associated strategies yearly with input from stakeholders and technical experts.



Science & Adaptive Management Accomplishments

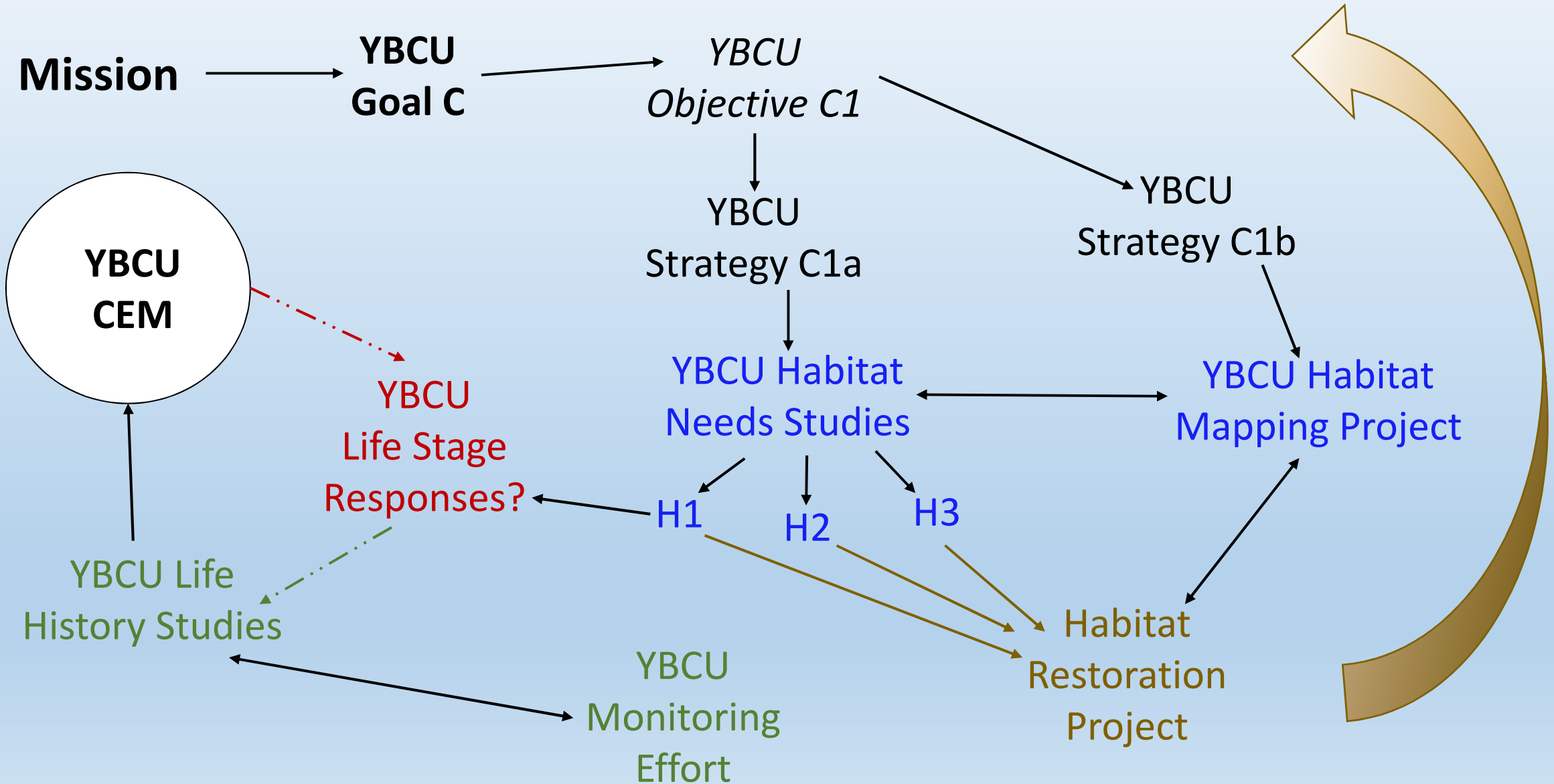
Science Objectives Workshop – February 10-11, 2021

✓ Purpose:

- ❖ Align the Collaborative Program's scientific planning objectives with its mission statement and goals.
- ❖ Appraise the objectives and associated strategies yearly with input from stakeholders and technical experts.

- 40 participants representing ~20 organizations/offices
- Revised/drafted 23 objective statements to address MRGESCP goals
- Reviewed by SAMC; ready for review by EC
- Suggested strategies will be assessed by SAMC and further developed by Science & Technical ad hoc groups
- Science objectives are being linked to projects to enable transparent prioritization for long-term planning

Science & Adaptive Management Plan – Pieces to pathways



DRAFT 2021 Science Objectives - RGSM



Objective A-1: Estimate the abundance of augmented and wild born RGSM populations in the Angostura, Isleta, and San Acacia reaches from year to year.

Objective A-2: Increase understanding of how the life history traits of the RGSM change over time and space, to better inform management of the species and increase the probability of recovery.

Objective A-3: Determine the relationships between base flow and survival and recruitment of RGSM in the Middle Rio Grande.

Objective A-4: Determine suitable environmental flow (i.e., timing, duration and magnitude of spring hydrograph) needed to cue spawning and recruitment for the RGSM population, given system constraints and opportunities.

DRAFT 2021 Science Objectives - RGSM



Objective A-5:

A-5.1: Refine existing research and modeling efforts to understand the quantity and quality of habitat available at different flow regimes.

A-5.2: Develop a range of options for increasing habitat availability and refugia at life stage-limiting flow regimes for all life stages.

Objective A-6:

A-6.1: Evaluate the effects of species management (i.e., propagation, augmentation, rescue/salvage) on RGSM genetic diversity.

A-6.2: Evaluate the effects of species management (i.e., propagation, augmentation, rescue/salvage) on RGSM population viability.

DRAFT 2021 Science Objectives - SWFL



Objective B-1: Monitor for SWFL in the MRG management unit of the Rio Grande recovery unit.

Objective B-2: Determine habitat availability for SWFL within the MRG.

Objective B-3:

B-3.1: Characterize optimal breeding habitat conditions in currently occupied SWFL locations to inform restoration.

B-3.2: Manage successional processes that maintain existing SWFL breeding habitat in the Program Area.

B-3.3: Expand SWFL breeding habitat through restoration efforts in the Program Area.

DRAFT 2021 Science Objectives - YBCU



Objective C-1:

C-1.1: Characterize optimal habitat (i.e., foraging and nesting) conditions on landscape and microhabitat levels in currently occupied YBCU locations to inform habitat mapping and restoration efforts.

C-1.2: Determine successional processes that promote optimal YBCU habitat (i.e., foraging and nesting) in the Program Area.

C-1.3: Expand monitoring efforts for YBCU.

DRAFT 2021 Science Objectives - NMMJM



Objective D-1:

D-1.1: Initiate and support NMMJM monitoring efforts to locate existing populations, identify relevant habitat features, and identify potentially suitable unoccupied habitat.

D-1.2: Contribute to efforts to expand habitat and preserve existing habitat in the MRG.

DRAFT 2021 Science Objectives - PESU



Objective E-1:

E-1.1: Continue and expand monitoring and surveying for PESU stands in the West-Central New Mexico Recovery Region.

E-1.2: Preserve and expand existing habitat stands in the West-Central New Mexico Recovery Region.

DRAFT 2021 Science Objectives - OTHER



Objective F-1: Monitor trends in ecosystem function in the MRG for indications of decline (e.g., changes in vegetation structure and composition, population trends in other special status species, etc.).

Objective G-1: Support efforts to enhance the operational flexibility of water managers to support species.

Objective H-1: Determine the impacts from non-native vegetation on listed species' habitat availability and population dynamics.



Break

Science & Adaptive Management Accomplishments

✓ Science Objectives Workshop

☐ Science & Technical Ad Hoc Groups

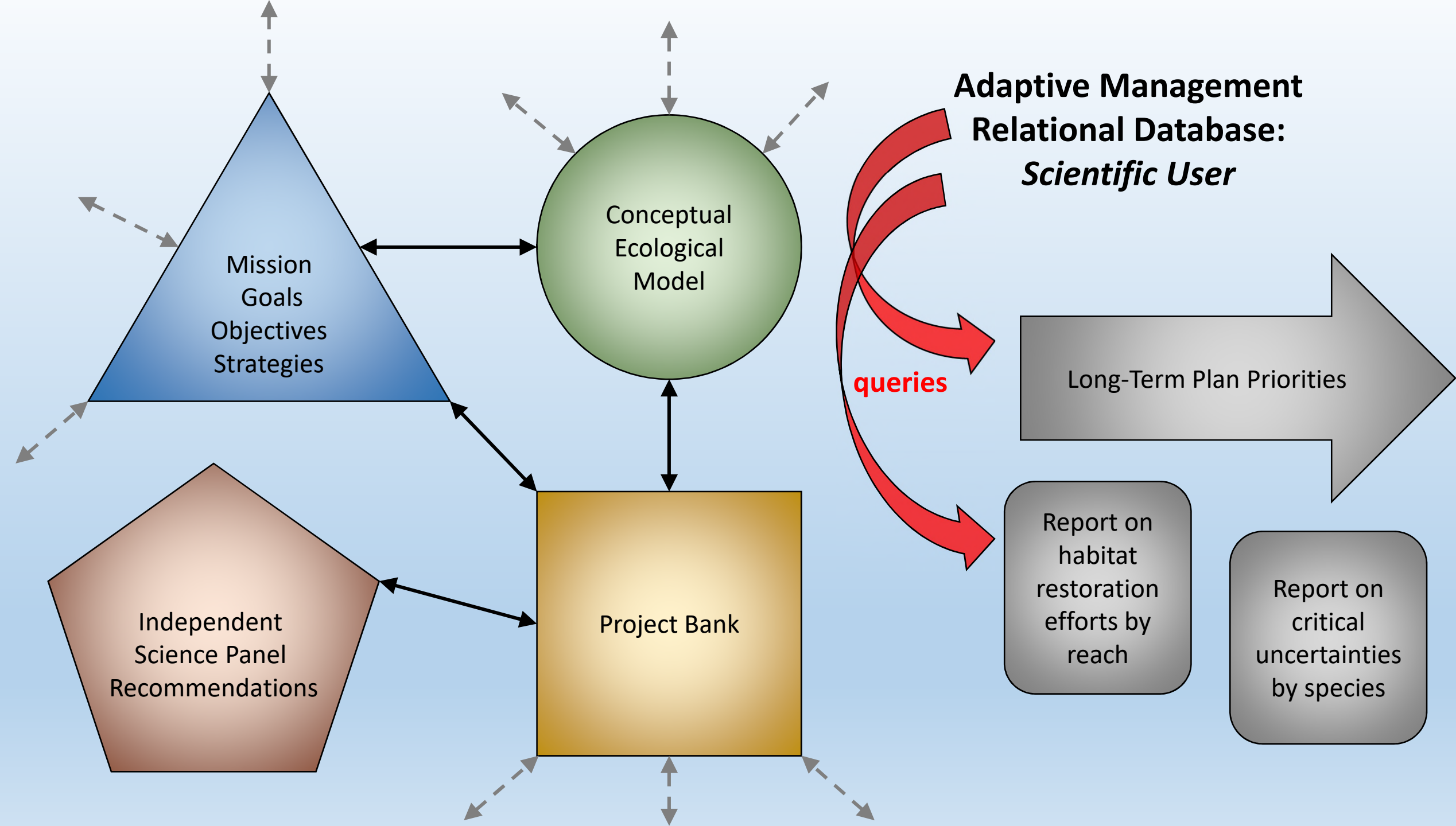
- RGSM Population Monitoring Work Group summary report (R. Valdez) - *concluding*
- RGSM Population Modeling group (C. Yackulic) – *in progress*
- RGSM Conceptual Ecological Model enhancement (W. Wilson) – *in formation*

☐ Adaptive Management Relational Database

- Populating content, building relationships, designing queries
- Defining different user needs to construct reporting tools

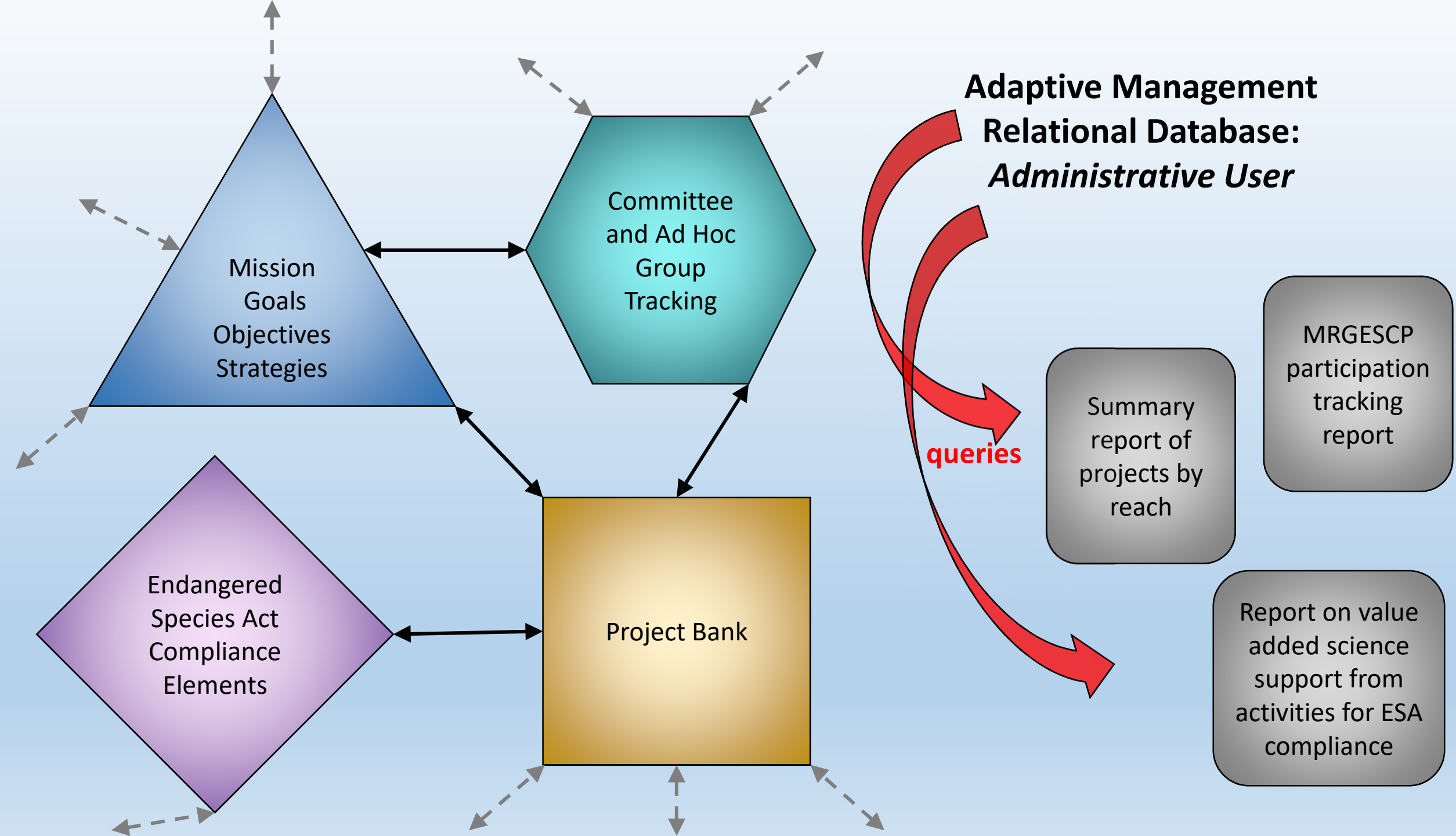
Adaptive Management Relational Database Users

- User – a Collaborative Program participant wishing to search for information and generate reports on MRGESCP activities (completed, ongoing, proposed), and to relate activities to science and adaptive management initiatives.
 - Scientific user – a user with scientific or technical queries, such as:
 - ☐ Track progress being made on critical uncertainties
 - ☐ Summarize scientific investigations by reach, species or type
 - ☐ Determine how a particular project supports the science objectives



Adaptive Management Relational Database Users

- User – a Collaborative Program participant wishing to search for information and generate reports on MRGESCP activities (completed, ongoing, proposed), and to relate activities to science and adaptive management initiatives.
 - Scientific user – a user with scientific or technical queries, such as:
 - ☐ Track progress being made on critical uncertainties
 - ☐ Summarize scientific investigations by reach, species or type
 - ☐ Determine how a particular project supports the science objectives
 - Administrative user – a user with administrative queries, such as:
 - ☐ Track participation in MRGESCP ad hoc groups and committees
 - ☐ Quickly summarize projects by reach, species or type
 - ☐ Evaluate science support gained from carrying out activities for ESA compliance



Please let us know your reporting needs

What types of queries/reports do you need?

- Scientific
- Administrative
- Quickly summarize information for grant applications or presentations
- Others?

Which data fields should be included?

What sort filters you would like to enable (species, reach, year, agency, etc.)?

How would you like your report formatted (table, list, graphic)?

Example of report: Long-Term Plan

</

Adaptive Management Relational Database FAQ

❖ Who is developing the AM Relational Database (AMRDB)?

The WEST Program Support Team (PST) is building the AMRDB and establishing the functional linkages that make it relational. Linkages can be reviewed and modified by Administrative and Technical Ad Hoc Groups.

❖ On what platform is the AMRDB being developed?

Initially, the AMRDB is being formatted using MS Office (for convenience). Once formatting is complete, it can be transitioned to a SQL server (for stability).

❖ Who will manage and host the AMRDB?

During development, the PST will manage and host the AMRDB. Once established, the Collaborative Program can decide between the Program Portal or a cloud-based hosting service. Scoping for these and additional options can be provided by WEST.



Program Portal Presentation

Debbie Lee, Program Manager
Executive Committee Meeting
March 25, 2021

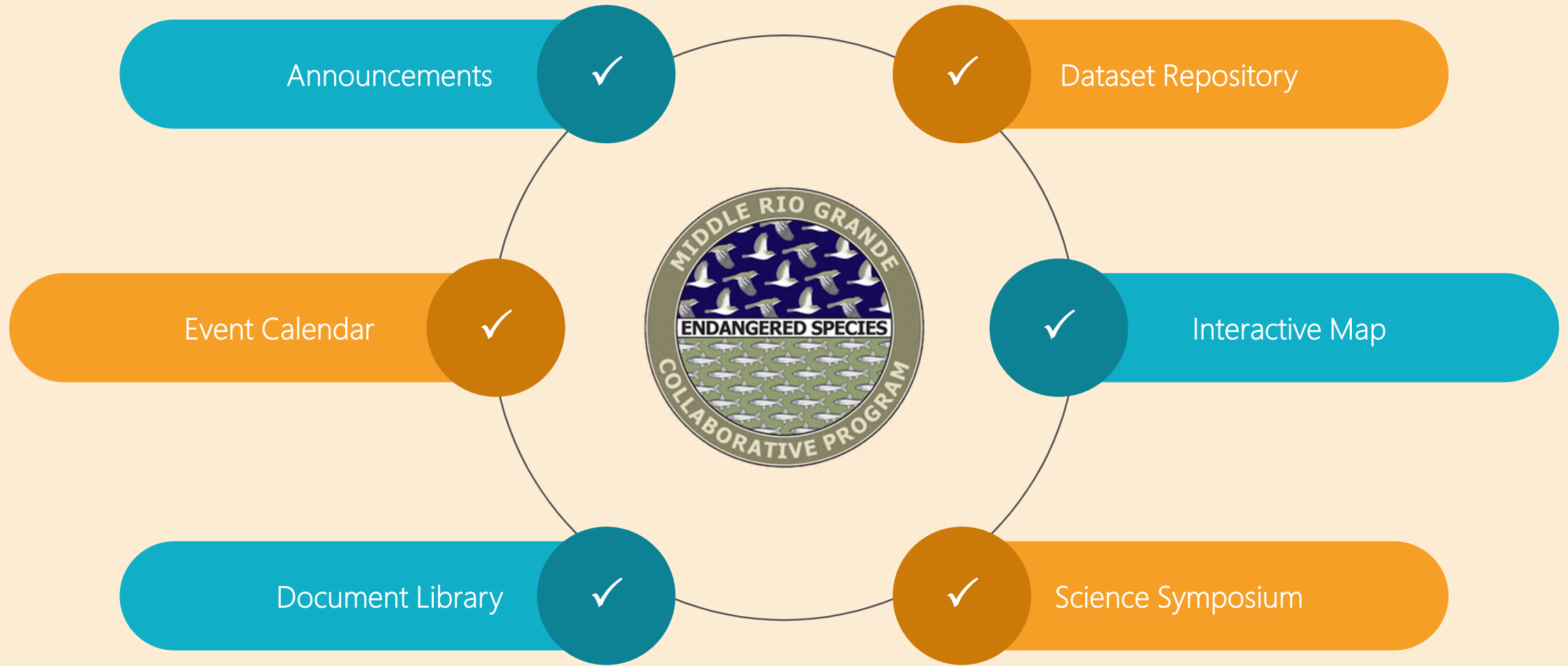
<https://webapps.usgs.gov/MRGESCP>



Development Summary

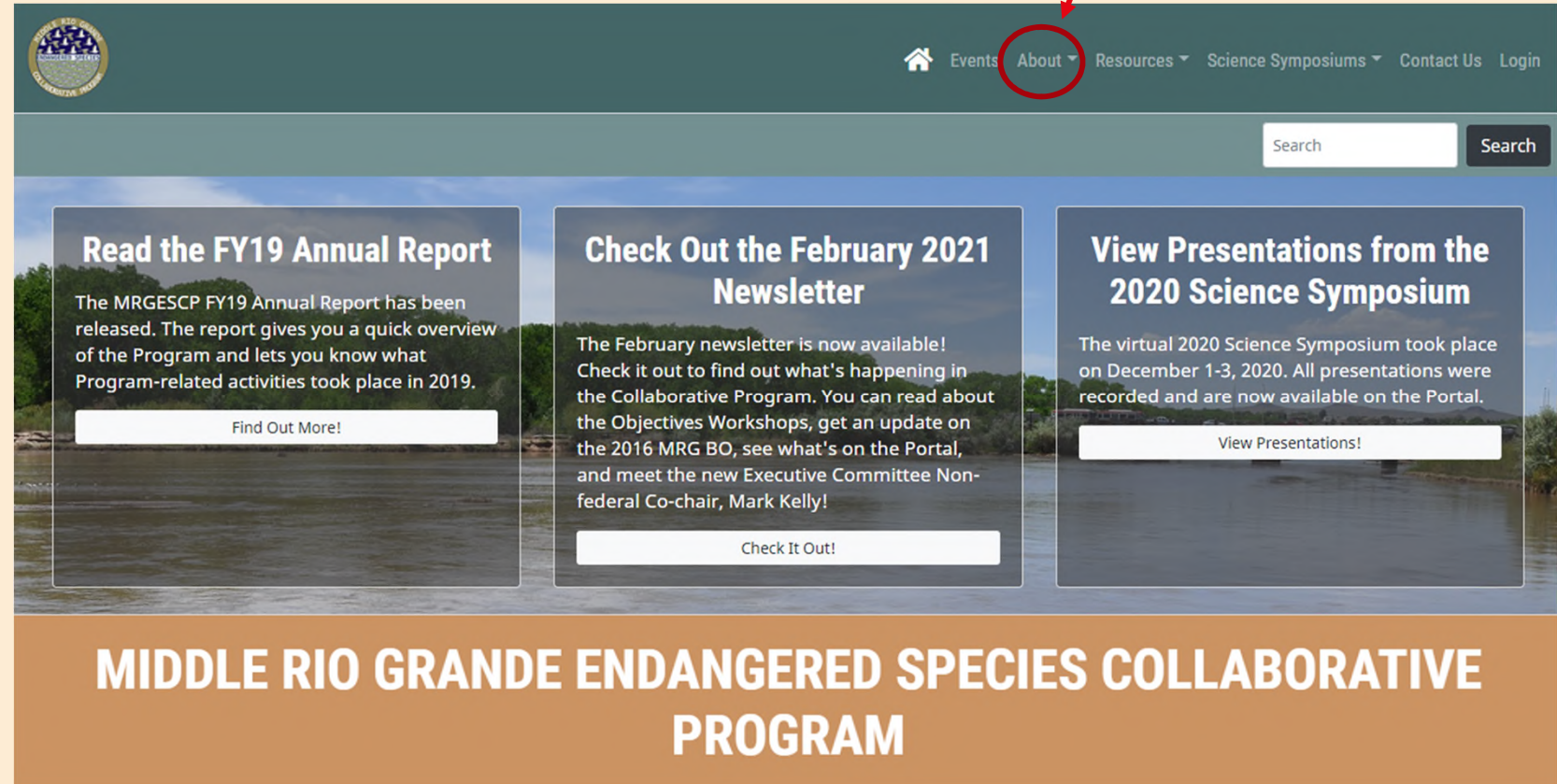
- Previous DBMS contract ended in 2017
- December 2017: The Executive Committee requested the U.S. Army Corps of Engineers (USACE) contract development of a new Program website with the U.S. Geological Survey (USGS)
- April 2018: Beta site launched
- May 2018: User survey sent
- May 2018: Program scoping meeting
- October 2018: Program data protocol meeting
- December 2019: Program Portal site launched
- December 2020: Interactive map launched
- January 2021: USACE funding ended

Portal Features



Program Portal Front Page

- Navigation menu
- Search bar
- Announcements
- Mission
- Upcoming Events
- Recent Publications
- Species of Interest



About

- Basic Collaborative Program information
 - Background
 - Program area
 - Signatory list
 - Mission and Goals
 - Organizational structure
- Information about the species of interest
- Standing Collaborative Program committees
 - Executive Committee
 - Science & Adaptive Management Committee
 - Fiscal Planning Committee

Event Calendar

- Time and Location
- Host
- Read ahead documents

MRGESCP Events

Search by Group:

Search by Keyword:

March 2021 **2 events**

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
1	2	3 ● Science and Adaptive IV	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21

Document Library

- Under “Resources”
- Search by keyword
- Filter by:
 - Date
 - Document Type
 - Species
 - Group
 - Organization

MRGESCP Documents

BIBLIOGRAPHY

Bibliography of Literature Published in 2020

Date: 2021

Author(s): MRGESCP

<h4>RELATED INFORMATION</h4> <p>Species: Rio Grande Silvery Minnow, Southwestern Willow Flycatcher, Yellow-Billed Cuckoo</p>	<h4>RELATED DOCUMENTS</h4> <p>View List of Related Documents</p>	
---	--	--

Dataset Repository

- Under “Resources”
- Current datasets:
 - River reaches
 - River miles
 - RioRestore
 - RGSM rescue
 - Vegetation
 - RGSM monitoring
 - RiverEyes

RiverEyes

Geospatial data collected to document Middle Rio Grande (MRG), New Mexico river drying during irrigation season. The data collection began in 2002 and continues through 2019.

Data Contact
Michael D. Porter
U.S. Army Corps of Engineers
505-342-3264

Metadata and Zip File

Metadata
[RiverEyes Compiled GIS Metadata 062019](#)

Zip File
Download metadata, datasets, and current report in a zip file.
[Download Zip File](#)

Data Sets

- [RiverEyes Compilation 1996-2019](#)
- [RiverEyes Compilation 2002-2018](#)
- [Rio Grande Dry Summary](#)
- [Rio Grande Dry RM](#)

For archived data sets, contact the person listed under “Data Contact” above.

Reports

Current Report
[Mc Kenna 2019 River Eyes Monitoring Report](#)

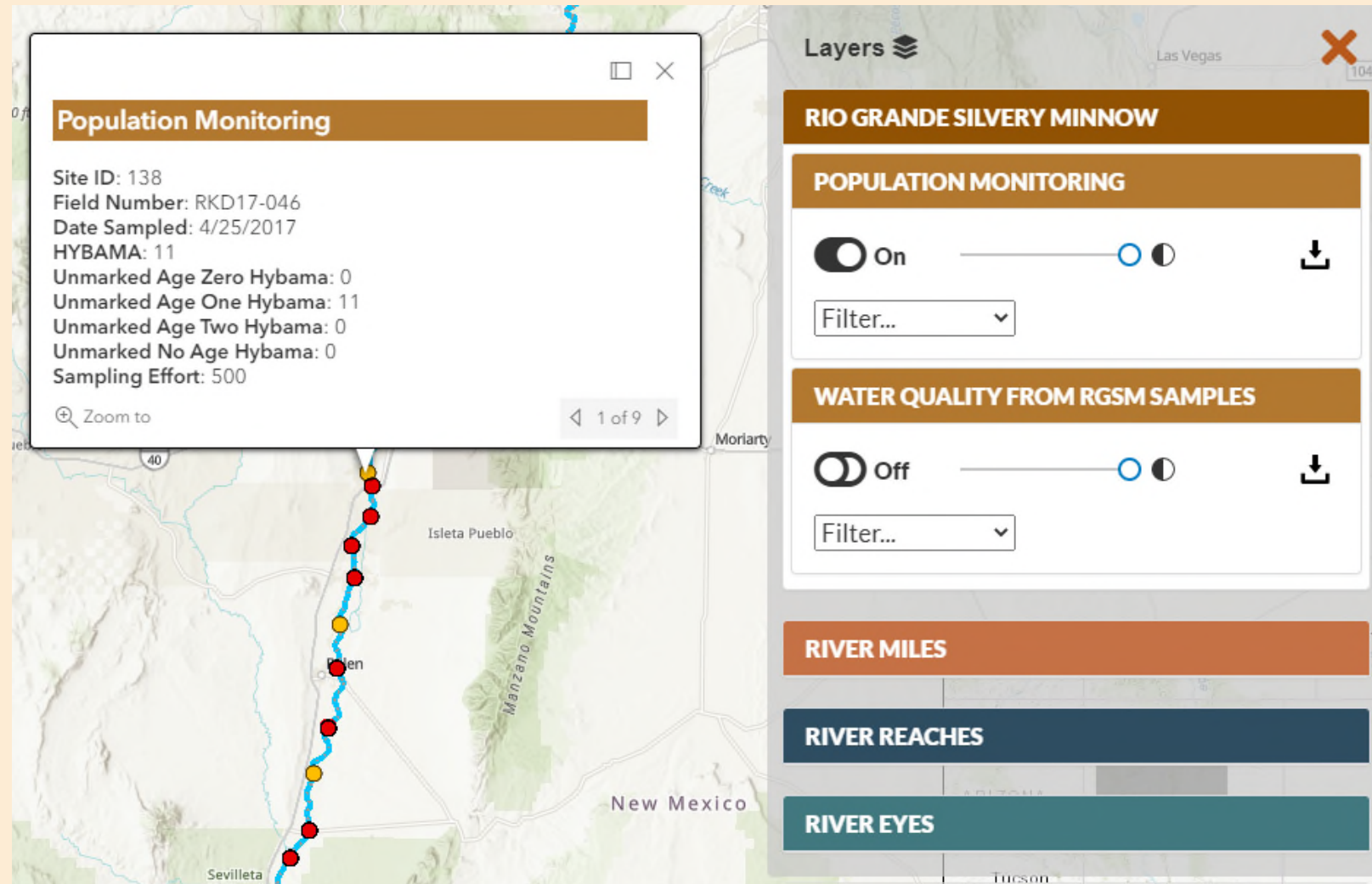
Related Reports
The button below links to a list of all related reports.
[Related Reports](#)

Data Description

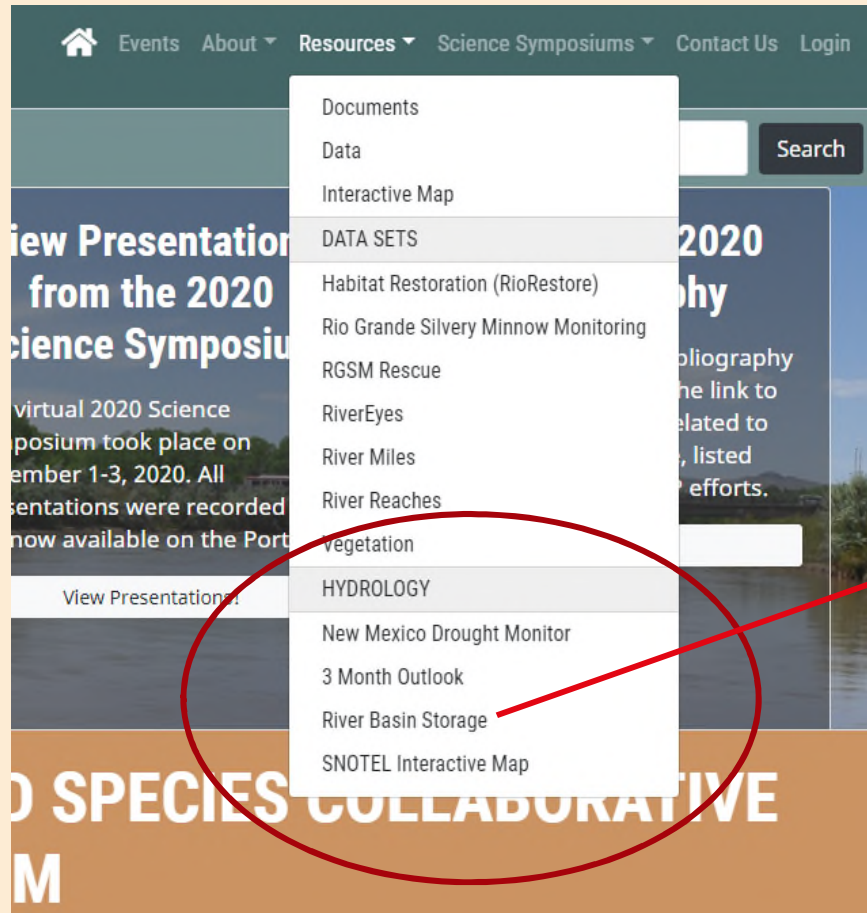
Interactive Map

- Under “Resources”
- Layers:
 - River miles
 - River reaches
 - RGSM data
 - RiverEyes
 - Habitat restoration
 - Hink & Ohmart

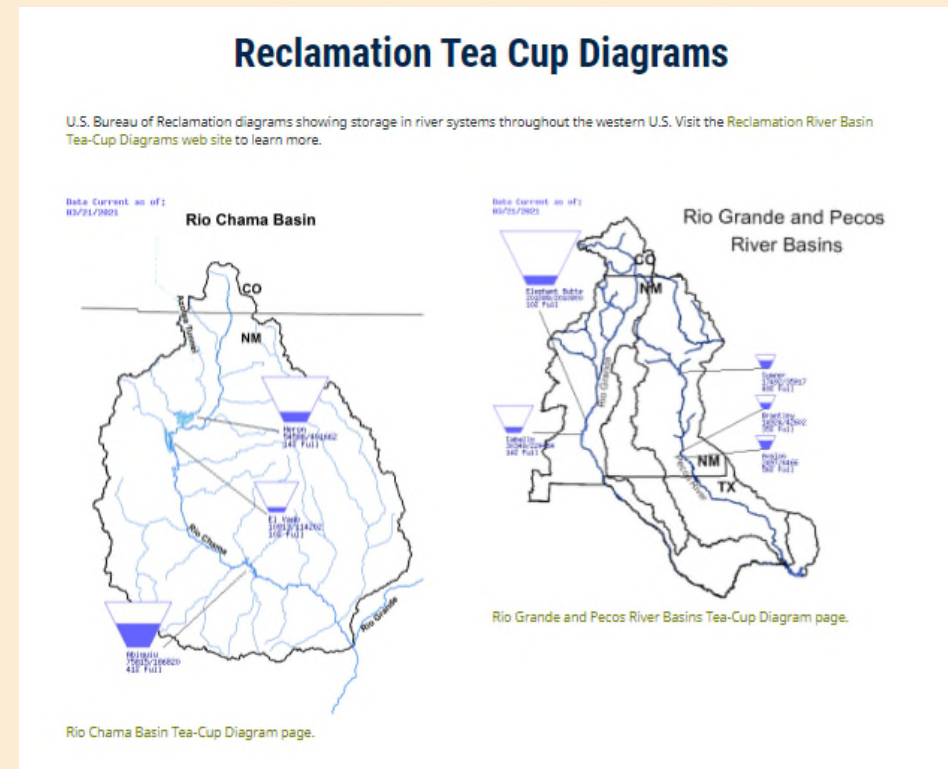
Adding new layers or updating existing layers is additional development



Hydrology Resources



Pulls from the most current hydrology information with links



Science Symposium

- Archives 2019 and 2020 agenda, abstracts, and presentations
 - Embedded YouTube videos



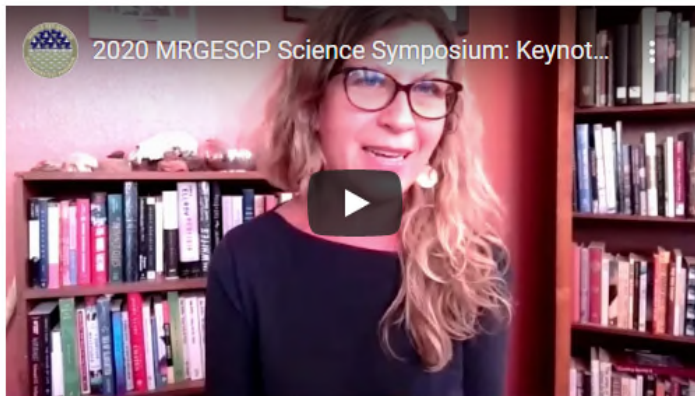
11:30 – 12:00

Keynote Speaker – Laura Paskus

Moderated By: Debbie Lee

Keynote Speaker – Laura Paskus

Laura Paskus, New Mexico PBS



Click on presentation titles to view abstracts, download presentations, or watch presentation recordings.

Program Portal Next Steps

- Albuquerque-Bernalillo County Water Utility Authority will be funding basic maintenance for at least the next year
 - Any future development will require additional funding
 - New functionality
 - Updates or new layers to the interactive map
 - Program Support Team (PST) will continue uploading documents, updating datasets, and maintaining the event calendar
 - Report any bugs with the Program Portal to the PST
- Investigate options for future Program Portal funding

Acknowledgements

USGS Development Team

- Toby Welborn
- Shannon Watermolen
- Florence Thompson
- Chad Fanguy
- Lauren Sherson
- Daniel Pearson
- Justin Robertson

MRGESCP Coordination

- Lynette Giesen, USACE
- Mick Porter, USACE
- Ashlee Rudolph, Reclamation
- Grace Haggerty, NMISC
- Program Support Team



Questions?

MRGESCP 2021 Science Planning Objectives

Presented for Executive Committee review on 25 March 2021

Below is a list of MRGESCP science planning objective statements drafted at the February 10-11, 2021 Science Objectives Workshops and revised by the Science and Adaptive Management Committee (SAMC). A list of workshop attendees for each day is provided on the last page. The science objective statements are presented to the Executive Committee (EC) for review and comment by April 9, 2021. The final revision will inform SAMC-recommended updates to the EC-approved Science and Adaptive Management Plan, Adaptive Management Relational Database, and Long-Term Plan for the MRGESCP.

RGSM Objective A-1

Revised statement:

Estimate the abundance of augmented and wild born RGSM populations in the Angostura, Isleta, and San Acacia reaches from year to year.

RGSM Objective A-2

Revised statement:

Increase understanding of how the life history traits of the RGSM change over time and space, to better inform management of the species and increase the probability of recovery.

RGSM Objective A-3

Revised statement:

Determine the relationships between base flow and survival and recruitment of RGSM in the Middle Rio Grande.

RGSM Objective A-4

Revised statement:

Determine suitable environmental flow (i.e., timing, duration and magnitude of spring hydrograph) needed to cue spawning and recruitment for the RGSM population, given system constraints and opportunities.

RGSM Objective A-5

Revised statements:

A-5.1) Refine existing research and modeling efforts to understand the quantity and quality of habitat available at different flow regimes.

A-5.2) Develop a range of options for increasing habitat availability and refugia at life stage-limiting flow regimes for all life stages.

RGSM Objective A-6

Proposed statements:

A-6.1) Evaluate the effects of species management (i.e., propagation, augmentation, rescue/salvage) on RGSM genetic diversity.

A-6.2) Evaluate the effects of species management (i.e., propagation, augmentation, rescue/salvage) on RGSM population viability.

SWFL Objective B-1

Revised statement:

Monitor for SWFL in the MRG management unit of the Rio Grande recovery unit.

SWFL Objective B-2

Revised statement:

Determine habitat availability for SWFL within the MRG.

SWFL Objective B-3

Revised statements:

B-3.1) Characterize optimal breeding habitat conditions in currently occupied SWFL locations to inform restoration.

B-3.2) Manage successional processes that maintain existing SWFL breeding habitat in the Program Area.

B-3.3) Expand SWFL breeding habitat through restoration efforts in the Program Area.

YBCU Objective C-1

Revised statements:

C-1.1) Characterize optimal habitat (i.e., foraging and nesting) conditions on landscape and microhabitat levels in currently occupied YBCU locations to inform habitat mapping and restoration efforts.

C-1.2) Determine successional processes that promote optimal YBCU habitat (i.e., foraging and nesting) in the Program Area.

C-1.3) Expand monitoring efforts for YBCU.

NMMJM Objective D-1

Revised statements:

D-1.1) Initiate and support NMMJM monitoring efforts to locate existing populations, identify relevant habitat features, and identify potentially suitable unoccupied habitat..

D-1.2) Contribute to efforts to expand habitat and preserve existing habitat in the MRG.

PESU Objective E-1

Revised statements:

E-1.1) Continue and expand monitoring and surveying for PESU stands in the West-Central New Mexico Recovery Region.

E-1.2) Preserve and expand existing habitat stands in the West-Central New Mexico Recovery Region.

OTHER Objective F-1

Revised statement:

Monitor trends in ecosystem function in the MRG for indications of decline (e.g., changes in vegetation structure and composition, population trends in other special status species, etc.).

OTHER Objective G-1

Revised statement:

Support efforts to enhance the operational flexibility of water managers to support species.

OTHER Objective H-1

Proposed statement:

Determine the impacts from non-native vegetation on listed species' habitat availability and population dynamics.

Workshop Attendees (Day 1 - RGSM)	Workshop Attendees (Day 2 – Avian/Other)
Alison Hutson, NMISC	Alyssa O'Brien, City of ABQ Open Space
Alyssa O'Brien, City of ABQ Open Space	Amy Erickson, Audubon Southwest
Andy Dean, USFWS ES Office	Andy Dean, USFWS ES Office
Anne Marken, MRGCD	Ari Posner, USBR
Ara Winter, BEMP	Casey Ish, MRGCD Conservation Program
Ari Posner, USBR	Dave Moore, USBR Technical Service Center
Ashlee Rudolph, USBR	Debra Hill, USFWS
Carolyn Donnelly, USBR	Eric Gonzales, USBR
Casey Ish, MRGCD Conservation Program	Grace Haggerty, NMISC
Charles Yackulic, USGS	Hector Garcia, USBR
Cynthia Naha, Santo Domingo Pueblo	Jenny Davis, USFWS
Dale Strickland, WEST, Inc.	Lawrence Abeita, BIA
Debra Hill, USFWS	Liza Yazzie, Realty Specialist, USBR
Eric Gonzales, USBR	Mark Kelly, ABCWUA
Grace Haggerty, NMISC	Maya Pinon, Rep. Deb Haaland--NM01
Guilherme Dias, UNM Department of Biology	Meaghan Conway, NMDGF
Hector Garcia, USBR	Megan Friggens, USFS Rocky Mountain
Liza Yazzie, Realty Specialist, USBR	Mo Hobbs, ABCWUA
Mark Kelly, ABCWUA	Ondrea Hummel, Tetra Tech
Maya Pinon, Rep. Deb Haaland--NM01	Ryan Gronewold, USACE
Meaghan Conway, NMDGF	Trevor Birt, NMISC
Megan Osborne, UNM	<i>Catherine Murphy, PST</i>
Mick Porter, USACE	<i>Debbie Lee, PST</i>
Mike Marcus, MRG Water Advocates Board	<i>Melissa Welsch, PST</i>
Mo Hobbs, ABCWUA	<i>Michelle Tuineau, PST</i>
Nate Caswell, USFWS New Mexico FWCO	
Nathan Schroeder, Pueblo of Santa Ana	
Quantina Martine, Audubon Southwest	
Reynalden Delgarito, USACE	
Rich Valdez, SWCA, representing NMISC	
Ryan Gronewold, USACE	
Steve Zipper, SWCA	
Thomas Archdeacon, USFWS-NMFWCO	
<i>Catherine Murphy, PST</i>	
<i>Debbie Lee, PST</i>	
<i>Julie Dickey, PST</i>	
<i>Melissa Welsch, PST</i>	
<i>Michelle Tuineau, PST</i>	

A Middle Rio Grande Endangered Species Collaborative Program (MRGESCP) activity is defined as a signatory activity that:

- (1) Contributes to MRGESCP operations, including:
 - Active participation in MRGESCP committees and ad hoc groups, and
 - Administrative support of the MRGESCP.
- (2) Advances the scientific contribution of the MRGESCP, including:
 - Reducing a scientific uncertainty by addressing one or more MRGESCP objectives in the Long-Term Plan,
 - Providing findings for incorporation into the MRGESCP's science and adaptive management tools (e.g., Adaptive Management Relational Database, conceptual ecological models, etc.),
 - Contributing to the collective body of knowledge about the listed species in the Middle Rio Grande, and
 - Informing the MRGESCP's recommendations on future scientific activities and/or management actions.