



MIDDLE RIO GRANDE ENDANGERED SPECIES COLLABORATIVE PROGRAM

February/March 2022 Newsletter

INTERVIEW WITH THE CO-CHAIRS

The Executive Committee (EC) Co-Chairs, Katrina Grantz, U.S. Bureau of Reclamation, and Mark Kelly, Albuquerque Bernalillo County Water Utility Authority, sat down for an interview with the Program Support Team on the future of the Collaborative Program and its role in the Middle Rio Grande (MRG) in the face of impending climate change.



Katrina Grantz
Federal Co-Chair



Mark Kelly
Non-Federal Co-Chair

Q What do you view are the short-term (1 -3 years) opportunities and challenges for the Collaborative Program?

A **Mark:** Adjusting to being a science-based program from where we were in the past and making the Collaborative Program “all about the science.”

A **Katrina:** I agree, and would add that some of the great opportunities are due to good momentum. There’s a challenge to continue that momentum through improving Program governance and the effectiveness of committees doing great work. There’s an opportunity to use the adaptive management framework to improve the performance of projects like constructed habitat sites and the captive propagation program, and to address

uncertainties related to river drying and fish salvage, specifically developing and testing hypotheses. We should maximize the use and implementation of the Science and Adaptive Management Information System (SAMIS), to compile and synthesize the existing science associated with the listed species.

The administrative challenge relates to the stability and/or uncertainty in funding of signatory contributions. That will probably always be a challenge, and determining how to be nimble and responsive to funding needs is an opportunity for the Collaborative Program.

Q What do you think are the long-term (4 -10 years) needs for the MRG? How can the Collaborative Program help address those needs?

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FEATURED THIS ISSUE:

- ◆ Interview with the Co-Chairs
- ◆ Habitat Photo Contest
- ◆ Climate Change and Resiliency Poll
- ◆ Admin & Science Updates
- ◆ Recent Publications
- ◆ Summary of the MRG Conferences
- ◆ Upcoming Dates & Announcements



Congratulations Danielle Galloway, winner of the Habitat Photo Contest! More info on pg 4.

INTERVIEW WITH THE CO-CHAIRS

A Mark: One issue is going to be extended drought and lower flows/snow packs. There's a need for more water but not a supply. The Collaborative Program needs to start thinking about the implications of lower flows for projects. Are we addressing the correct flows when looking at habitat sites? When implementing projects, are we taking into account potential future conditions? How can we help endangered species deal with reduced flows or hotter temperatures in the future? We also have to consider the long-term needs of the various water management agencies, many of which are signatories, working together to ensure there is water in the river and best use what we do get.

A Katrina: The long-term needs of the MRG are going to revolve around water supply. We need clarity on the timing, location, and quantity of water in the future, and how to maximize the benefit to all of the resources in the river in the best way possible. We should also link science-based knowledge needs to budget cycles through long-term planning, looking ahead multiple years out so we can maximize the financial resources available to benefit the physical resources in the MRG.

Finally, we need to ensure we don't lose momentum as the Collaborative Program establishes itself as a science-driven program. We have an opportunity to establish a model for collaborative science programs in the West, with other basins learning from our success.

Q What do you see as the Collaborative Program's role in the MRG?

A Mark: I see it as a place for professionals to talk to each other and get ideas, but also help each other ensure various endangered species projects are done the right way, in a way that has the greatest benefit to the species, while also providing data that can be used by others to make things better in the future. The Collaborative Program is a space where people can talk about the same issues and try and make each other better.

A Katrina: It serves as a collaborative space for identifying uncertainties, working together to resolve uncertainties as best we can, sharing data and science, leveraging each other's good work so each of us can do better for the action agencies that need a good, solid

foundation of science. The Collaborative Program also serves as a clearinghouse for listed species science through the SAMIS. It can provide consensus on science for managing resources. Sharing science, and coming to a consensus on science, are powerful for the whole river.

Q Climate change is a looming issue for the entire southwest and will have implications for the Collaborative Program's work. What type of collaborations do you envision for the Collaborative Program to address those bigger issues in the MRG?

A Mark: We can all be more responsive in terms of how climate change is going to affect species and start designing projects to have a hotter, drier future, and use the science process to determine the best way to deal with that. We need to keep things focused on the species in terms of the Collaborative Program, and for the work to be science-based and recommendation-based.

A Katrina: I agree with Mark. It's very important to be a venue for climate change experts, to the extent of connecting information like warming temperatures and changes in precipitation to the species affected to help inform on-the-ground management actions and recognize the various signatory authorities. Just having the Collaborative Program as a venue for experts to share information and learn from each other is incredibly important, and contributes to an understanding of what the future could look like, so any projects we're working on are resilient and we focus our efforts where they're most needed and beneficial.



Photo credit: Mike Marcus, MRG Water Advocates

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INTERVIEW WITH THE CO-CHAIRS

Q We have heard from signatories a desire for the Collaborative Program to be more responsive to management needs. What do you see as opportunities for the Collaborative Program be more proactive with anticipating and responding to future priorities?

A Katrina: Supporting water management decision-making as it relates to listed species through defensible, consensus-driven science, including responding to projections of more uncertainty based on climate change. Additionally, we have opportunities to be proactive by providing recommendations to inform implementation of management activities and other projects. We also have to acknowledge that, while it's important to have a long-term goal and work towards it, as science evolves and we learn new things, as a Collaborative Program and as individual signatories, we need to be nimble in addressing potential changes in priorities.

A Mark: As Katrina said, thinking ahead is important. As a way to be proactive, we can try and identify the threats to the species and how they are connected with future

climate change and drought. We can leverage other studies and efforts, like the Rio Grande Basin Study, to determine future threats and plan for them.

A Katrina: We need to know the biggest challenges and the related knowledge gaps.

A Mark: Is anyone looking at climate studies and trying to figure out how they affect species like the Pecos sunflower, yellow-billed cuckoo, or other listed species? I'm not sure how we become more responsive to management needs besides getting more people involved at different levels outside of just EC and SAMC representatives. Maybe getting more staff to be tuned in about it.

A Katrina: How early on do we know what management needs are? How early are they voiced? We don't always know what our needs are. But focusing on potential threats will help with upcoming needs, and assessing risk in order to prioritize those areas of highest risk.



Photo credit: Mike Marcus,
MRG Water Advocates

HABITAT PHOTO CONTEST

Collaborative Program photographers were invited to join in a photo contest with the theme of "Habitat." Participants sent in their best habitat photos and a winner was selected. The winning photo was taken by [Danielle Galloway](#) from the U.S. Army Corps of Engineers. The photo depicts a Rio Grande cottonwood gallery during fall in the Bosque. Rio Grande cottonwoods serve as habitat for many avian species in the MRG, including the southwestern willow flycatcher and yellow-billed cuckoo. Three Photo Contest honorable mentions are featured on pg 5.



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PHOTO CONTEST HONORABLE MENTIONS



Photo on left (outlined in blue) was taken by [Quantina Martine](#) from Audubon Southwest, and depicts a backwater channel at the Los Chavez irrigation outfall designed to provide slack water habitat for Rio Grande Silvery Minnow (RGSM) during spring spawning.

Photo on right (outlined in purple) was taken by [Matthew Schmader](#) from the University of New Mexico, and depicts cranes reflected in a wetland at Ladd Gordon Wildlife Refuge, Bernardo, New Mexico.

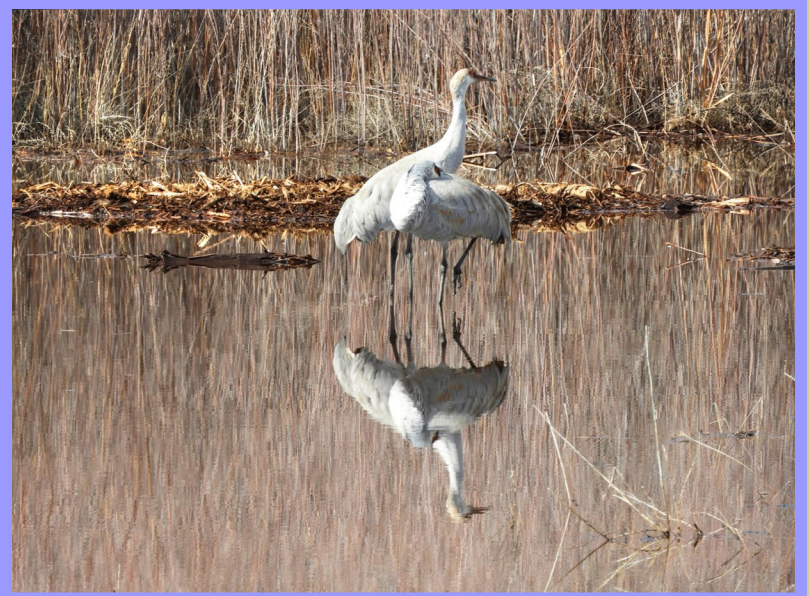


Photo on left (outlined in pink) was taken by [Michael Scialdone](#) from the Pueblo of Sandia, and depicts woodhouse toad tadpoles in a constructed pond created in 2018 to increase habitat diversity in a portion of dried bosque on the Pueblo of Sandia.

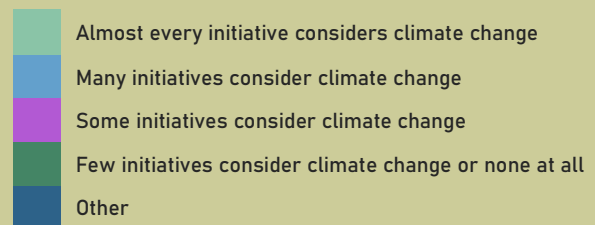
CLIMATE CHANGE & RESILIENCY POLL

Collaborative Program participants and interested members of the public were invited to participate in an anonymous poll on the topic of climate change and resiliency. This poll is part of a Collaborative Program poll series meant to encourage the sharing of science and adaptive management ideas. Responses to the poll provide insights on climate change efforts and opinions in the MRG Basin. Below is summary of responses from 23 poll participants. To view the full anonymous responses to each question, use the link: <https://webapps.usgs.gov/MRGESCP/documents/responses-to-the-february-2022-collaborative-poll>.

Question 1: What organization do you represent?

Federal agency	11
State agency	2
Local agency	2
Non-governmental organization	2
Pueblo	2
Anonymous	2
Municipal water utility	1
University	1

Question 2: To what extent does your organization consider climate change in its future planning?



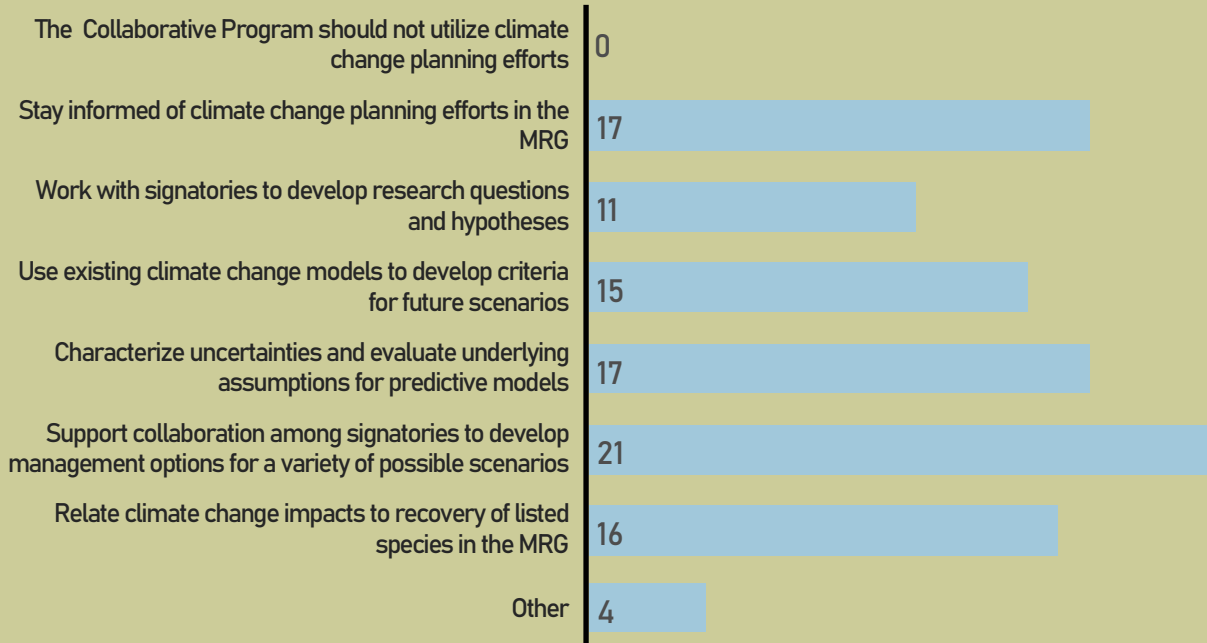
Question 3: Provide examples for how your organization is incorporating climate considerations into its future planning.



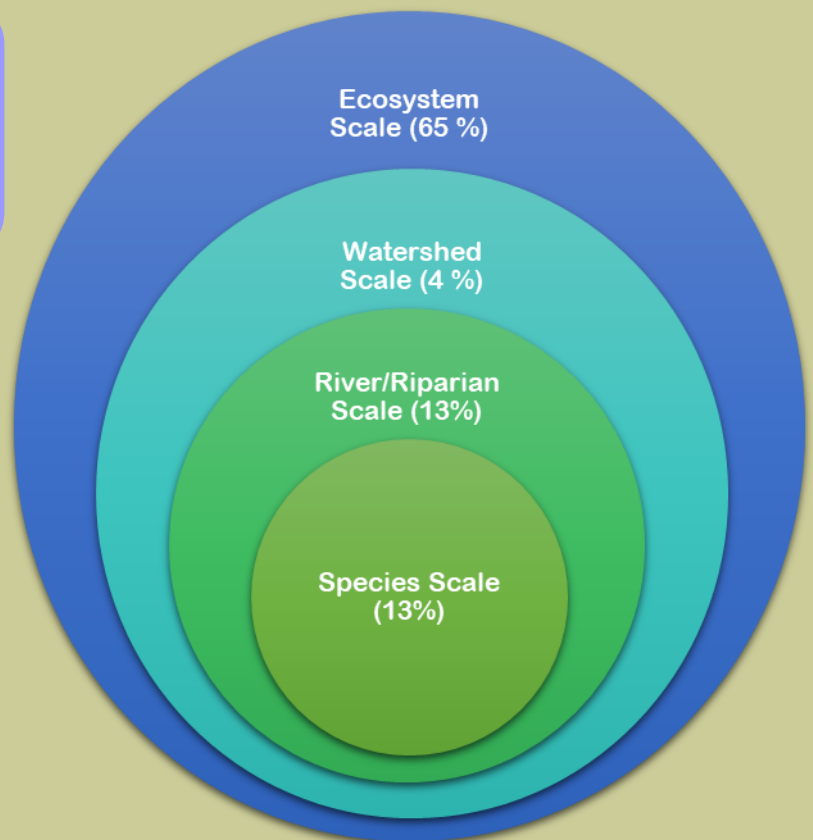
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CLIMATE CHANGE & RESILIENCY POLL CONT.

Question 4: In your opinion, how should the Collaborative Program utilize existing climate change planning efforts under the science and adaptive management framework? [select all that apply]



Question 5: What, in your opinion, is the most important focal point for which the Collaborative Program should consider climate change and resilience?



ADMIN & SCIENCE UPDATES

Admin Updates

- The **2022 Memorandum of Agreement (MOA)** was sent out for signatures. All signatories must return a signed MOA by **March 15, 2022**. Contact dlee@west-inc.com with any questions.
- The draft **2021 Annual Report** was sent to the Collaborative Program for review. Please provide comments on the report, as well as late **2021 Signatory Highlights** and **2021 Signatory Activity Input Forms**, by **March 11, 2022**. Contact mtuineau@west-inc.com with any questions.
- The Program Support Team is combining the **Science & Adaptive Management Plan** and the **Long-Term Plan** into one document called the **Long-Term Plan for Science & Adaptive Management (LTP)**. A draft LTP will be up for review and approval at the Executive Committee meeting on **March 23, 2022**.

Science Updates

SAMIS TRAININGS

Science and Adaptive Management Information System (SAMIS) user application trainings have been organized by signatory organization and will be scheduled throughout the next two months. All signatory organizations are asked to designate one or two users to receive login credentials, and the Program Support Team will schedule a training session to be conducted over Zoom. Trainings should take less than one hour. Please send names of users and any questions to Science Coordinator Catherine Murphy (cmurphy@west-inc.com).

COLLABORATIVE SEMINARS

Collaborative Seminar #3: Statistical Designs and Indicators of Restoration Success

Katey Driscoll, New Mexico Department of Game and Fish – January 12, 2022

Link: <https://youtu.be/ldZQB8WqRnl>

Katey shared her experience working in the Santa Fe National Forest (SFNF) at San Antonio Creek in the Jemez Ranger District, and in Carson National Forest (CNF) at Vidal Creek in the Valle Vidal Unit. These systems have been exposed to multiple interacting stressors that result in down-cutting and incising, which have disconnected the channels from their floodplains. Restoration techniques employed at these sites include beaver dam analogs in the SFNF and plug-and-pond treatments in the CNF. Katey discussed the use of Before-After-Control-Impact (BACI) study designs for evaluating the effectiveness of these restoration treatments, with considerations for resource constraints, goals and monitoring plans, as well as ability to interpret and apply the results of the analysis. Katey shared her insights on the importance of evaluating ecosystem function and the choice of metrics as indicators of function. As restoration targets, indicators of ecosystem function provide a different type of assessment of restoration success, one that may be potentially more persuasive. These insights are scalable and incredibly valuable to the Collaborative Program's evaluation of restoration efforts within the Middle Rio Grande.

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SCIENCE UPDATES CONT. & RECENT PUBLICATIONS

Collaborative Seminar #4: RGSM Integrated Population Model and Expert Elicitation

Dr. Charles Yackulic, U.S. Geological Survey – February 24, 2022

Link: <https://youtu.be/SntYffel1fk>

Dr. Charles Yackulic, U.S. Geological Survey, presented on an integrated population model for RGSM that was funded by the New Mexico Interstate Stream Commission. The model was developed collaboratively with Collaborative Program experts and integrates various sources of information. It can be used to predict outcomes of management and associated uncertainty, evaluate multiple competing hypotheses, and determine monitoring and research needs to reduce uncertainty or discriminate against competing hypotheses. Charles provided an overview of the model's structure and the data used to develop the model, and summarized some of the preliminary model results, including an assessment of the effectiveness of different management alternatives in different years and locations. The model framework can be continually updated and improved upon as new information becomes available.

Call for Collaborative Seminars!

The Collaborative Program will continue hosting Collaborative Seminars on research and management activities and other topics related to listed species in the MRG. If you would like to present a seminar or need more information, please contact Michelle Tuineau (mtuineau@west-inc.com).

RECENT PUBLICATIONS

Water Quality in Three Potential Drought Refuges in an Arid-Land River: Assessing Habitat Suitability for At-Risk Fish Species. Van Horn D.J., Reale J.K., Archdeacon T.P. (2022). *Knowledge and Management of Aquatic Ecosystems*, 423, 7. <https://rb.gy/26ttkk>

Examining Alternative Water Management Strategies to Support Rio Grande Silvery Minnow Conservation Within and Across Years. Walsworth T.E., Budy P. (2022). Report prepared for U.S. Bureau of Reclamation. <https://rb.gy/b0gngj>

Sustainability Management of Short-Lived Freshwater Fish in Human-Altered Ecosystems. Hatch M.D. (2021). A dissertation submitted to the Graduate School, New Mexico State University. <https://rb.gy/y3h44u>

2021 RiverEyes Monitoring Report. McKenna C. (2022). Prepared by GeoSystems Analysis, Inc. Prepared for U.S. Bureau of Reclamation. <https://rb.gy/ro1hiv>

NMMJM RECOVERY PLAN

One of the Collaborative Program's listed species of interest is the New Mexico Meadow Jumping Mouse (NMMJM). The U.S. Fish and Wildlife Service recently released the Draft Recovery Plan for the NMMJM and is accepting comments. The draft NMMJM Recovery Plan may be found online (<https://rb.gy/os9uwm>). Comments must be received on or before **11:59 Eastern Time on March 14, 2022**. Comments may be submitted online (<https://www.regulations.gov/>) or via postal mail addressed to:

Public Comments Processing
Attn: Docket No. FWS-R2-ES-2021-0136
U.S. Fish and Wildlife Service Headquarters
MS: PRB/3W
5275 Leesburg Pike
Falls Church, VA 22041-3803

For more information or questions, please email nmesfo@fws.gov or call 505-346-2525.

SUMMARY OF THE MRG CONFERENCES

In January, the New Mexico Water Dialogue (NMWD) held their annual meeting, and the Middle Rio Grande Water Advocates (MRGWA) held their annual conference. Both had similar themes, focused on the threat of climate change and the imminent need for action in response to the projected water shortages, drought, and rising temperatures. The Lower Middle Rio Grande Summit was also held in January and provided a forum for participants to share information about their projects and discuss collaborative and funding opportunities. The summit highlighted the importance of partnerships for long-term success in achieving shared goals. While none of the meetings focused specifically on endangered species, the issues and options discussed will have direct impact on the Collaborative Program's species of concern.

An important opportunity exists for the Collaborative Program to learn from these and other conversations, and to use them to inform, prioritize and adapt our own activities. The outcomes of these different discussions can help us to frame management-relevant questions and plan scientific studies. In return, the Collaborative Program can share its findings and recommendations with external groups. The Collaborative Program's focus on multiple endangered species provides a unique perspective regarding the effects of climate change. Because these vulnerable populations are already closely monitored, their long-term datasets offer an opportunity to examine trends related to water supply, water quality, temperature, vegetative composition, and other ecosystem variables.

Using the tools developed to support the science and adaptive management program, such as the SAMIS, new and existing information can be compiled and related to management issues, scientific uncertainties, and the Collaborative Program goals and objectives. Additionally, the Program Portal houses datasets, some that can be visualized on the interactive mapper, that are useful for exchanging information within and external to the Collaborative Program. Using existing processes and tools, the Collaborative Program can support not only the internal conversations around science priorities and management recommendations, but those happening throughout the MRG and New Mexico.

Write-ups for each conference are below. Check them out for more information!

New Mexico Water Dialogue

LINK: <https://nmwaterdialogue.org>

DATE: January 12-13, 2022

KEYNOTE: Mike Hamman, Senior Water Advisor for the New Mexico Governor's Office

THEME: An Unprecedented Water Crisis: A Time to Act

In his keynote speech, Mike Hamman described how New Mexico continues to learn from its history and is evolving to be nimble and responsive as its understanding of water availability and management improves. Yet, the New Mexico Governor's Office, with the leadership of Mr. Hamman, is not waiting to act. Mr. Hamman described how history and experience inform New Mexico's strategic approach to addressing the water crisis as it deploys both short term (e.g., streamline regulations) and long term (e.g., storm-water capture & treatment) solutions. Mr. Hamman emphasized that the alternative of waiting and hoping for more water is not a position New Mexico is willing to embrace because "hope is not a plan."

The audience was challenged, informed, and educated with four panel discussions under a unifying theme for all to engage with a sense of urgency and purpose because New Mexico needs 'all hands on deck' to be responsive and strategic to address the water crisis. The four panels included 1) Equity, Justice, & Legislative Action in Times of Climate Change, 2) The Role of the (Draft) 2021 Leap-Ahead Analysis in the 50-Year Water Plan, 3) Lessons Learned about Community Resilience, and 4) Adaptation Strategies.

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MRG CONFERENCES CONT.

Annual 2022 Middle Rio Grande Water Advocates Conference

LINK: <https://mrgwateradvocates.org/>

DATE: January 8, 12, 15, 19, and 22, 2022

KEYNOTE: Honorable Melanie Stansbury, U.S. Rep CD1

THEME: The Great Change: Surviving New Mexico's Arid Future - A Call to Action

The conference was held virtually over Zoom and was free for all attendees. Representative Stansbury gave an insightful keynote address on the need for transformative change in New Mexico's water governance, particularly the management institutions and policies that were designed under a bygone hydrological paradigm. Following the keynote, a panel addressed four strategic actions (i.e., funding New Mexico's water future, reforming water governance, reliable compliance with the Rio Grande Compact, and equitable sharing of water shortages in the MRG), and fielded questions for general discussion. The panel included Norm Gaume, MRGWA President and former Director, New Mexico Interstate Stream Commission; Mike Hamman, New Mexico Governor Lujan Grisham's Water Advisor; and Paula Garcia, Executive Director of New Mexico Acequia Association. Each of the four follow-on meetings focused on one of the potential strategic actions presented by the panel. Each featured a short presentation followed by breakout room discussions and a white-board exercise to develop specific action plans.

Lower Middle Rio Grande Summit

DATE: January 6, 2022

THEME: Addressing Bosque Ecosystem Health and Fire Danger

The summit was hosted by New Mexico State Forestry (NMSF) and the Save Our Bosque Task Force (Task Force) in January 2022 to invite collaboration on the development of a shared initiative to address bosque ecosystem health and fire danger on a large scale. This summit offered a space for attendees to discuss their current and ongoing projects, share ideas for future project development, and to collaborate on how to accomplish shared goals in the future. The summit hosts introduced the NM Forest Action Plan as well as funding opportunities, highlighting how partnerships might be beneficial in the future to secure funding for large-scale management efforts in the Lower Middle Rio Grande. This event highlights the importance of forming partnerships and working collaboratively to achieve shared objectives, ideas that have driven the Collaborative Program since its inception. Keeping these fundamental ideas in the forefront of our minds and sharing opportunities for project collaboration may be an answer for achieving larger-scale projects while addressing funding needs that have been highlighted as pressing among Collaborative Program signatories in the past. NMSF and the Task Force plan to host another summit in the coming months and this information will be shared with the Collaborative Program as it is announced.

UPCOMING DATES & ANNOUNCEMENTS

UPCOMING MEETINGS

Minnow Action Team Meeting

March 11, 2022
9:00 AM—11:00 AM

Executive Committee Meeting

March 23, 2022
1:00 PM—4:00 PM

Science and Adaptive Management Committee Meeting

April 12, 2022
8:00 AM—12:00 PM

PROGRAM DEADLINES

Signatories Review the draft 2021 Annual Report

March 11, 2022

Signatories Sign the 2022 MOA

March 15, 2022

WELCOME VIRGINIA SEAMSTER!



Virginia Seamster, Assistant Chief for Technical Guidance, joined the EC as the alternate representative for New Mexico Department of Game and Fish.



Photo credit: Mike Marcus, MRG Water Advocates

The information in this newsletter should not be attributed to the Collaborative Program or its Executive Committee, but to the organization from which it was submitted.

For comments and inquiries, contact:

Program Support Team | (307) 630-6961 | mtuineau@west-inc.com