



MIDDLE RIO GRANDE ENDANGERED SPECIES COLLABORATIVE PROGRAM

February 2023 Newsletter

CALL FOR CLIMATE SCENARIO WORKSHOP VOLUNTEERS

Photo: Dry riverbed in the Middle Rio Grande
Credit: Program Support Team



This fall, the Collaborative Program will host a **Climate Scenario Planning Workshop** to play out likely future scenarios and gauge the affected management outcomes in a collaborative setting in order to inform strategic planning and adaptive management. The Collaborative Program is calling for volunteers with expertise or experience in **climate science, hydrological forecasting, geomorphology, Middle Rio Grande (MRG) ecology, surface and groundwater modeling and management, agricultural practices, vegetation management, endangered species conservation, human-environment interactions, and water operations and policy**, to help characterize likely climate scenarios for the MRG in preparation for this workshop. Patterned after established planning practices, the objective of these planning sessions is to develop a set of scenarios that are plausible (i.e., based on best available science), relevant (i.e., focused on the management question), divergent (i.e., characterize a range of future conditions), and challenging (i.e., effective for examining established practices and assumptions and fostering creative thinking). If you would like to volunteer or suggest others with expertise in the listed areas, please contact Debbie Lee, dlee@west-inc.com, or Catherine Murphy, cmurphy@west-inc.com, for more information.

FEATURED THIS ISSUE:

- ◆ Call for Workshop Volunteers
- ◆ HR Coordination Field Trip
- ◆ MRG Announcements
- ◆ Recent Publications
- ◆ Program Admin & Science Updates
- ◆ New Faces
- ◆ Upcoming Dates



Photo: Flock of goats grazing at the Romero Fire burn site
Credit: Michelle Tuineau

HR COORDINATION FIELD TRIP

VALENTINE'S DAY AT BOSQUE HABITAT RESTORATION SITES

Provided by Michelle Tuineau, Program Support Team (PST)

On **February 14, 2023** (Valentine's Day), the **Habitat Restoration (HR) Coordination Group** ventured out on its very first **field trip**. The group meets quarterly and recently opted to plan a field trip every other meeting. The first trip was planned by **Michael (Scial) Scialdone, Pueblo of Sandia**, and **Dustin Chavez-Davis, City of Albuquerque (CoA) Open Space Division**, who led a group of 19 on a tour of habitat restoration areas on or near the Pueblo of Sandia. Along the way, the group discussed topics relevant topics such as non-native species control, maintenance and monitoring needs, and fire risk reduction techniques, among others.

The group opened the tour at **CoA Alameda Open Space**. Dustin started the group off with background information on the Bosque Assessment Update & Prioritization (BAUP; 2023), which is an update to the Bosque Action Plan (1993), a guidance document for CoA's management of the Rio Grande Valley State Park. The BAUP includes designs for priority projects, with the Alameda site being one of them. Dustin asked the group to consider how to plan for collaborative HR projects while managing high-traffic, multi-use spaces and what opportunities there are for education around the topics of HR, water conservation, and wildlife preservation. The group then walked through the Open Space area until they reached an Albuquerque Bernalillo County Water Utility Authority diversion channel, where they stopped to continue discussions.

After, the group headed to Pueblo of Sandia lands, first stopping at the **Albuquerque Metropolitan Arroyo Flood Control Authority / North Diversion Channel**. There, Scial explained that the channel was partially filled in with vegetation to prevent the flow of water with low dissolved oxygen into the Rio Grande, which was detrimental for fish. He

also spoke on the challenges associated with the channel, the primary being trash buildup.

The group then stopped at a section of the river that was previously lowered to produce floodplain. While the **lowered bank** initially flooded, leading to the growth of healthy native species and formation of Rio Grande silvery minnow habitat, since then, incising of the river has prevented high enough flows to continue flooding the area. As a result, the vegetation in the area has died out from lack of water. The result is a learning lesson for HR planners.

Finally, the group arrived at the **Romero Fire burn site** on Pueblo of Sandia lands. In 2012, the Romero Fire burned over 360 acres in bosque north of Albuquerque. Although plantings have been attempted since then, vegetation has been difficult to grow, likely due to the scorching of the earth from debris burning on the ground. To remove invasives and remediate the soil, the Pueblo has utilized the help of a local goat rancher named Max and his flock of 200 goats to clear non-native vegetation and debris in the area. The HR Coordination Group met up with Max and had the chance to discuss fire hazard reduction techniques, all while petting his goats as they happily munched on tumbleweed, a well-known fire hazard.

For additional photos from the trip, check out the next page. If you'd like to join the HR Coordination Group, please contact Michelle Tuineau, mtuineau@west-inc.com.



Photo: Group member with a goat grazing at the Romero Fire burn site
Credit: Debbie Lee

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HR COORDINATION FIELD TRIP CONT..



Photo: Group members at a diversion channel bridge in Alameda Open Space
Credit: Debbie Lee



Photo: Group members at a diversion channel on Pueblo of Sandia lands
Credit: Debbie Lee



Photo: Group members in front of a lowered bank on Pueblo of Sandia lands
Credit: Debbie Lee



Photo: Romero Fire burn site on Pueblo of Sandia lands
Credit: Debbie Lee



Photo: Goat rancher, Max, and his flock of goats grazing at the Romero Fire burn site
Credit: Debbie Lee



Photo: Group member with a goat grazing at the Romero Fire burn site
Credit: Debbie Lee

WHAT'S HAPPENING IN THE MRG?

Find out what's happening in the Middle Rio Grande, including area announcements, job announcements, funding announcements, and recent publications.

MRG ANNOUNCEMENTS

- **Video recordings** from the **Western Yellow-billed Cuckoo Working Group's** fall meeting on **November 9, 2022** are available at <https://youtu.be/g7LUw1yd4Dk>. Due to storage limits on the Cloud, many of the afternoon talks were not recorded. PDFs of these talks will be posted at www.yellowbilledcuckoo.org.
- The **2023 Land & Water Summit** will take place on **March 2-3, 2023** at the **Indian Pueblo Cultural Center**, Albuquerque, New Mexico, with a **Pre-Conference Field Trip** on **March 1, 2023**. Register for the event at www.landandwatersummitnm.org.
- **Lisa Sinclair** will give an **ASPIREational Talk** on improved arid land habitat maps through an ensemble remote sensing approach for fine-scale vegetation mapping on **March 7, 2023** at the **UNM Student Union Building, Main Level**.
- The **Urban Waters Quarterly Meeting** will be held on **March 14, 2023** via **Zoom**. Join the event with the following link: <https://tinyurl.com/ah4kh8ax>.
- The **Northern Wetlands Roundtable** will be held on **March 21, 2023** via **Webex**. Contact maryann.mcgraw@env.nm.gov to have a Webex link sent to you.
- **RiversEdge West's Planting for the Future Workshop**, will be the first of its **2023 Workshop Series**. The workshop will take place at the **Tamaya Wellness Center** in Albuquerque, New Mexico on **April 14, 2023**. For more information, visit www.riversedgewest.org/events/planting-future.

JOB ANNOUNCEMENTS

Urban Forester for EMNRD

Audubon Southwest is hiring an **avian biologist**. The **Energy, Minerals and Natural Resources Department (EMNRD)** is seeking an **Urban Forester** in Socorro. The application is posted at <https://tinyurl.com/u8m5mry6>. Applications are due **April 5, 2023**.

Natural Resource Scientist for Bernalillo County

Bernalillo County is seeking applications for a **Natural Resource Scientist** who will support the Water Conservation Program. The application is posted at <https://tinyurl.com/2v6utuph>. Although the job description is quite general, this position will focus on water conservation, including education and outreach, water efficiency consultations, provision of water conservation incentives, water use monitoring/water efficiency projects at County facilities, and development of the 5-Year Water Conservation Plan. For more information, or to discuss the position, please email Megan Marsee (mmarsee@bernco.gov). Applications are due March 3, 2023.

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WHAT'S HAPPENING IN THE MRG? CONT...

FUNDING ANNOUNCEMENT

Cornell Land Trust Small Grant RFP

Over six years, the **Cornell Land Trust Small Grant Program** has supported 50 projects to the tune of \$734,000 with more than 345 partners engaged. 2023 RFP applications are due **March 1, 2023**, with funds dispersed at the end of May. To learn more and apply for a grant, see **RFP Information**, an **overview of past awards**, and **grant awards and expectations**.

Reclamation FY23 Environmental Water Resources Projects

Grant proposals for U.S. Bureau of Reclamation (Reclamation) FY23 environmental water resources projects are due **March 28, 2023**. The full announcement can be found at: <https://tinyurl.com/4ydvsmeb>. Reclamation hosted a webinar on **February 6, 2023** to discuss eligible applicants and project types, program requirements, and the evaluation criteria for the Environmental Water Resources Projects funding opportunity and the new Aquatic Ecosystems Restoration Program. Click here to watch a recording: <https://tinyurl.com/4bau64mk>.

RECENT PUBLICATIONS

Hatchery supplementation increases potential spawning stock of Rio Grande Silvery Minnow after population bottlenecks

Archdeacon, T.P., Dudley, R.K., Remshardt, W.J., Knight, W., Ulibarri, M., Gonzales, E.J. (2023). *Transactions of American Fisheries Society*. Accepted Author Manuscript. <https://doi.org/10.1002/tafs.10398>

Abstract:

Supplementation of imperiled wild fish stocks with captively-raised fish is a commonly used conservation tool. Programs designed to maintain or improve fish populations through supplementation should be evaluated to determine if they are meeting conservation objectives. Rio Grande Silvery Minnow *Hybognathus amarus* is a small-bodied, endangered minnow endemic to the Rio Grande Basin of the Southwestern United States. The wild population of Rio Grande Silvery Minnow has been supplemented with captively-reared fish beginning in 2000. Our objective was to determine if supplementation is measurably increasing the number of spawning fish following years of population bottlenecks. The objective was simplified because nearly all captively-reared fish that have been released have been given identifying markings. We leveraged a long-term fish sampling dataset (14 years) covering the species' contemporary range and a single-season, high spatial coverage fish sampling dataset to determine if the number of potential spawners was increased by the addition of hatchery fish. Hatchery-reared fish increased catch-rates of spawners, up to an order of magnitude in some years. We also observed that most hatchery-reared fish were recaptured near the point of release. We were able to determine supplementation with hatchery fish increased the abundance and distribution of Rio Grande Silvery Minnow and provided the desired demographic boost following severe population bottlenecks. We used our results to make recommendations for other short-lived, freshwater fishes in need of conservation hatchery programs.

Rio Grande Silvery Minnow Augmentation in the Middle Rio Grande, New Mexico

Archdeacon, T.P. Prepared by U.S. Fish and Wildlife Service, New Mexico Fish and Wildlife Conservation Office. Prepared for U.S. Bureau of Reclamation, Albuquerque Area Office. <https://tinyurl.com/mr5kev9w>

Rio Grande Silvery Minnow Fish Rescue 2022 Annual Report

Archdeacon, T.P., Boro, M.E., Thomas, L.I., Epping, K.C. Prepared by U.S. Fish and Wildlife Service, New Mexico Fish and Wildlife Conservation Office. Prepared for U.S. Bureau of Reclamation, Albuquerque Area Office. <https://tinyurl.com/bdexxz4a>

NEW FACES IN THE PROGRAM

WELCOME CETAN CHRISTENSEN!



Cetan Christensen, Senior Water Resources Manager, joined the EC as an **alternate representative for the Albuquerque Bernalillo County Water Utility Authority**.

WELCOME BRITTNEY ERDMANN!



Brittney Erdmann, Hydrology Technician, joined the EC as an **alternate representative for the Middle Rio Grande Conservancy District**.

INTRODUCING ANGELA MEDINA GARCIA, ASSISTANT SCIENCE COORDINATOR

Dr. Angela (Spanish pronunciation [link](#)) **Medina Garcia** is a behavioral ecologist with a background in statistical modeling. Her research has integrated experimental and theoretical approaches drawn from multiple disciplines, including ecology, evolutionary biology, behavioral ecology, and ethology. She earned a Ph.D. in Biology from New Mexico State University for her work on avian cognition and mate choice. Her postdoctoral research at University of Colorado, Boulder, focused on the social cognition of barn swallows, for which she conducted fieldwork in Boulder County, Colorado.

During her 13 years of research experience, she has successfully developed research programs that have resulted in high-impact publications in her field of expertise. Dr. Medina Garcia has recruited, mobilized, and managed teams of junior scientists to collect and analyze high-quality data both in a lab setting and in the field. As an **Assistant Science Coordinator** on the Program Support Team, she looks forward to leveraging her broad research experience and expertise in multivariate statistics, generalized linear modeling, model selection, social networks, and survey design and analysis to support the Collaborative Program. Angela can be reached at amedina@west-inc.com.



INTRODUCING ZOË ROSSMAN, ASSISTANT SCIENCE COORDINATOR



Zoë Rossman joined the Program Support Team in February 2023 as an **Assistant Science Coordinator** for the Collaborative Program. Zoë earned a Master of Science in Biology from the University of New Mexico in 2022, where her research centered around the ecology of mammals in arid, urban ecosystems, with a specific focus on Albuquerque's urban mammal community. In addition to her background in local urban ecology, she also has experience studying riparian areas in and around Albuquerque. Zoë has worked on collaborative projects with a variety of public and private stakeholders, and has expertise in science communication, education, and outreach, both locally and throughout the country. Zoë can be reached at zrossman@west-inc.com.

PROGRAM ADMIN & SCIENCE UPDATES

Photo: Middle Rio Grande
Credit: SWCA Environmental Consultants



PROGRAM ANNOUNCEMENTS

ASKING FOR HELP TRANSITIONING TO IN-PERSON MEETINGS

To foster greater collaboration and networking among our Collaborative Program participants, the Executive Committee Co-Chairs and PST would like to **encourage in-person meeting attendance**, whenever possible. We understand that your time is a valuable and limited resource, and we will continue offering a virtual option for many of our meetings; however, we recognize that certain complex tasks can be accomplished more efficiently in-person. It is, therefore, in the best interest of all that we increase in-person attendance and reduce the need for more virtual meetings. We welcome your suggestions and feedback as we design a more streamlined approach engaging in Collaborative Program activities. Whether in-person or online, we appreciate your continued engagement. — Thank you!

CALL FOR REVIEWERS OF STANDARD LANGUAGE DEVELOPED FOR PROPOSALS

The Fiscal Planning Committee (FPC) is developing **templates and standard language to support the proposals** of its signatories. This task is an effort to leverage participation in the Collaborative Program to the benefit of our signatories. Standard language will cover topics such as adaptive management, the value of long-term monitoring, species descriptions, key uncertainties, and the value of the Collaborative Program. The FPC is seeking volunteers to review and strengthen the language developed. Draft language will be available for review late March with a two-week review period. All those interested, please contact Debbie Lee (dlee@west-inc.com).

SCHEDULING ONE-ON-ONE MEETINGS

As a result of recent feedback, the PST is scheduling **one-on-one in-person meetings** with our signatories to improve engagement within the Collaborative Program. This is a one-hour meeting, which all staff who interact with the Collaborative Program are highly encouraged to attend. As you prepare to attend a meeting, please consider any additional support needs your organization may have and how we can increase engagement in the Collaborative Program. Michelle Tuineau (mtuineau@west-inc.com) will be in contact get these meetings scheduled!

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COLLABORATIVE SEMINAR

2022 COLLABORATORY OUTCOMES AND NEXT STEPS

Debbie Lee and Catherine Murphy, Program Support Team — February 16, 2023

Recording Link: <https://youtu.be/A8Z-ozDHS-Q>

Debbie Lee, Program Manager, and Catherine Murphy, Science Coordinator, presented on **next steps regarding the outcomes from the first biennial Collaborative Program Collaboratory**, which was held on **December 6-7, 2022**. The objectives of the Collaboratory were to prioritize management needs for planning and to increase the management relevance of current Collaborative Program activities. Participants at the in-person Collaboratory included 71 individuals representing 25 different organizations, and they engaged in breakout discussions designed to move the Collaborative Program “from planning to practice,” which was the overall theme of the Collaboratory.

Breakout groups at the Collaboratory identified immediate, short-, and long-term research and planning priorities relating to five focal areas: (1) habitat restoration assessment and monitoring, (2) management of vegetated islands and bank-attached bars, (3) Rio Grande silvery minnow management and conservation, (4) water operations and flexibility, and (5) strategic planning for river drying. These priorities will be used to update the Collaborative Program Long-Term Plan for Science & Adaptive Management to incorporate multi-year out-planning, as well as to revise the activities in the 2023 Work Plan, so that the Collaborative Program addresses the current and future management needs of its signatories. Next steps and progress on each issue will be documented and tracked using the Science and Adaptive Management Information System (SAMIS).

From the collective group discussions, emerged two overarching needs: (1) planning for climate change and (2) applying an ecosystem approach. These two initiatives will inform all other work taken on by the Collaborative Program in order to pursue our various activities more holistically and view them at broader spatial and temporal scales. The planned fall 2023 workshop will focus on climate scenario planning, and will enable water and natural resource managers to consider potential future conditions and associated impacts to their management decisions. The ability to envision possible futures and gauge outcomes collaboratively is an excellent way to cope with the uncertainty brought on by the changing climate. Furthermore, applying an ecosystem approach to the management of our listed species within the MRG Basin will help to identify ecosystem services that are critical to our mission, factor human uses of natural resources into sustainable planning, and encourage adaptive management of complex ecosystem processes.

UPCOMING DATES

PROGRAM DATES

Information and Data Quality
Standards Ad Hoc Meeting

March 9, 2023

9:00 AM—11:00 AM MT

Minnow Action Team Meeting

March 10, 2023

1:00 PM—3:00 PM MT

Executive Committee Meeting

March 30, 2023

1:00 PM—4:00 PM MT

MRG DATES

Cornell Land Trust Small Grant RFP

March 1, 2023

2023 Land & Water Summit

March 1-3, 2023

ASPIREational Talks: Lisa Sinclair

March 7 2023

Urban Waters Quarterly Meeting

March 14, 2023

Northern Wetlands Roundtable

March 21, 2023

Reclamation FY23 Environmental
Water Resources Projects

March 28, 2023

RiversEdge West's Planting for the
Future Workshop

April 14, 2023



Photo: Middle Rio Grande
Credit: Mike Marcus

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