



MIDDLE RIO GRANDE ENDANGERED SPECIES COLLABORATIVE PROGRAM

January 2024 Newsletter

The Collaborative Program Science Symposium was rescheduled for **February 13-14, 2024**. Due to ongoing construction delays at the original the location, the event also moved to the **University of New Mexico Rotunda**.

MIDDLE RIO GRANDE
ENDANGERED SPECIES
COLLABORATIVE
PROGRAM

2024 SCIENCE SYMPOSIUM

**“Scaling Up: Adapting
Species Management for a
Changing Ecosystem”**

Date: February 13-14, 2024
Time: 9AM - 4PM
Location: UNM Rotunda
Science & Technology
Park, 801 University Blvd.
SE, 1st Floor



Student and Professional Engagement!

- Opening icebreaker to meet new people
- Scavenger hunt for contacts at different organizations
- Best student poster prize
- Bulletin board for opportunities related to volunteering, internships, jobs, funding, and potential areas of research
- Field trip

Register and/or submit an abstract by February 1, 2024.

Visit <https://webapps.usgs.gov/MRGESCP/symposium2023/2024-science-symposium> for more information.

Featured this Issue:

- [Science Symposium Announcement](#)
- [Hydrology Update](#)
- [Listed Species Updates](#)
- [MRG Announcements](#)
- [NM Potential ESA Species](#)
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- [New PST Member](#)
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- [Upcoming Dates](#)

With the event delay, the Collaborative Program is increasing its efforts to engage students. We are seeking out high school through PhD students to present posters.

Please share this information and the event flyer with students and professionals! We are accepting abstracts and registering attendees until February 1st. Check out the links below.

Registration Link [HERE](#)

Abstract Submission Link [HERE](#)

Hydrology Update

Update provided by Carolyn Donnelly, U.S. Bureau of Reclamation

2023 was quite a contrast to 2022! In 2022, runoff was poor, and the Angostura Reach dried for the first time in over 40 years. But then monsoon rains began and quickly rewet that reach and improved what had looked to be a difficult year. Runoff in 2023 exceeded even the high forecast volume predicted by the Natural Resources Conservation Service in May – El Vado Reservoir inflow from March through July was predicted to be 295,000 ac-ft, 159% of median. Actual inflow during that period was 328,595 ac-ft, 177% of median.

In part because of the high runoff volume but also because El Vado Reservoir is under construction and is not storing water, the Middle Rio Grande Valley saw extended high flows. During the runoff period from March to July, the USGS' Rio Grande at Albuquerque gage (08330000) recorded 105 days at or above 1,000 cfs, 79 days at or above 2,000 cfs, 75 days at or above 3,000 cfs, and 53 days at or above 4,000 cfs. The peak was on May 15 at an average daily flow of 5,000 cfs.

Since no water could be stored upstream in El Vado, about 120,000 ac-ft of native water could not be released from Abiquiu Dam by July 1 due to the limited channel capacity downstream. Per the Abiquiu authorization, this water was "locked in" to Abiquiu until after irrigation season.

The Middle Rio Grande Conservancy District was able to maintain full operations until mid August using flow from the mainstem Rio Grande and their San Juan – Chama Project water. Reclamation began releasing supplemental water on July 13 as the natural Rio Grande flow dropped. This helped to slow the rate of channel drying in the San Acacia Reach, which began on July 21. A total of 14,787 ac-ft of supplemental water was released through October 30.

Drying began on August 4 in the Isleta Reach, which saw 7.04 unique miles dry near Peralta wasteway and 2.13 unique miles near the Abeytas heading. In the San Acacia Reach, 30.83 unique miles dried in 2023. The river fully reconnected on November 5.

Rain was sparse in 2023 – it was the 10th driest monsoon season since the National Weather Service began keeping records in Albuquerque in 1892 (1.92 inches from June to September). By contrast, 2022 was the 10th wettest monsoon season with 6.10 inches. The rain that did fall in 2023, however, seemed to fall at the right times. The lowest daily average flow recorded at the Albuquerque gage in 2023 was 38.4 cfs on September 20 and there were 67 days between August 20 and October 29 with flow 100 cfs or less. With the help of rain and MRGCD's strategic release of water from wasteways, no drying was observed in the Angostura Reach in 2023.

From the end of irrigation season to the end of the year, the flood water locked in at Abiquiu Reservoir, as well as water offsetting the effects of groundwater pumping and water for irrigation on the Prior and Paramount lands of the Six Middle Rio Grande Pueblos retained while under Article VII Compact restrictions, was released to Elephant Butte Reservoir. This increased flow through the Middle Rio Grande Valley well above the median, hopefully delivering enough to help New Mexico meet its 2023 Compact obligation.

Listed Species Updates

Rio Grande Silvery Minnow

Update provided by Eric Gonzales, U.S. Bureau of Reclamation

The Rio Grande silvery minnow (RGSM) was formerly one of the most widespread and abundant species in the Rio Grande Basin but is now listed as endangered. Currently, the RGSM occupies less than 10 percent of its historic range and is restricted to the reach of the Rio Grande in central New Mexico from Cochiti Dam to the headwaters of Elephant Butte Reservoir. To study long-term trends of RGSM abundance, Reclamation uses October catch per unit effort (CPUE; fish/100m²) data from the species population monitoring project.

In October 2023, the RGSM monitoring program was modified to include an additional 10 sites for a total of 40 sites. Preliminary estimates of RGSM CPUE during October 2023 at 40 sample sites was 5.68 fish/100m² (Dudley et al., 2023). During October 2023, a total of 875 RGSM were collected from the 40 monitoring sites. The species was present at 27 of the 40 monitoring sites and was collected in 170 of 517 seine hauls that yielded fish (Dudley et al, 2023). All RGSM collected in October 2023 were unmarked and presumably naturally spawned fish. In addition, two age classes (2022 and 2023) of RGSM were present with the majority being young-of-year fish (n=813 fish). The results from October 2023 monitoring show that spring runoff flows in 2022 resulted in successful RGSM spawning and recruitment, with the species CPUE above the 0.30 fish/100m² threshold prescribed in the 2016 Biological Opinion.

*The information presented in this summary is preliminary and may change when a formal analysis on the catch data is conducted for the annual 2023 monitoring report.



Photo: Bucketing RGSM into the river
Credit: Pueblo of Santa Ana staff



Photo: RGSM in seine
Credit: Pueblo of Santa Ana staff

Listed Species Updates

Endangered Southwestern Willow Flycatcher

Update provided by Jenny Davis, U.S. Fish & Wildlife Service

During the summer of 2023, the Bureau of Reclamation (Reclamation) conducted surveys and nest monitoring of the Federally-listed endangered southwestern willow flycatcher (SWFL). The surveys were completed in six distinct reaches along approximately 128 river miles of the Rio Grande in New Mexico between the Isleta Pueblo and Elephant Butte Reservoir. This included, the Belen, Sevilleta, San Acacia, Escondida, Bosque Del Apache, and San Marcial reaches. Due to personnel limitations, reaches were not surveyed in their entirety but priority sites were selected in order to meet project compliance needs.



Photo: SWFL on branch
Credit: Shannon Caruso, UNM

[Continued on page 14...](#)

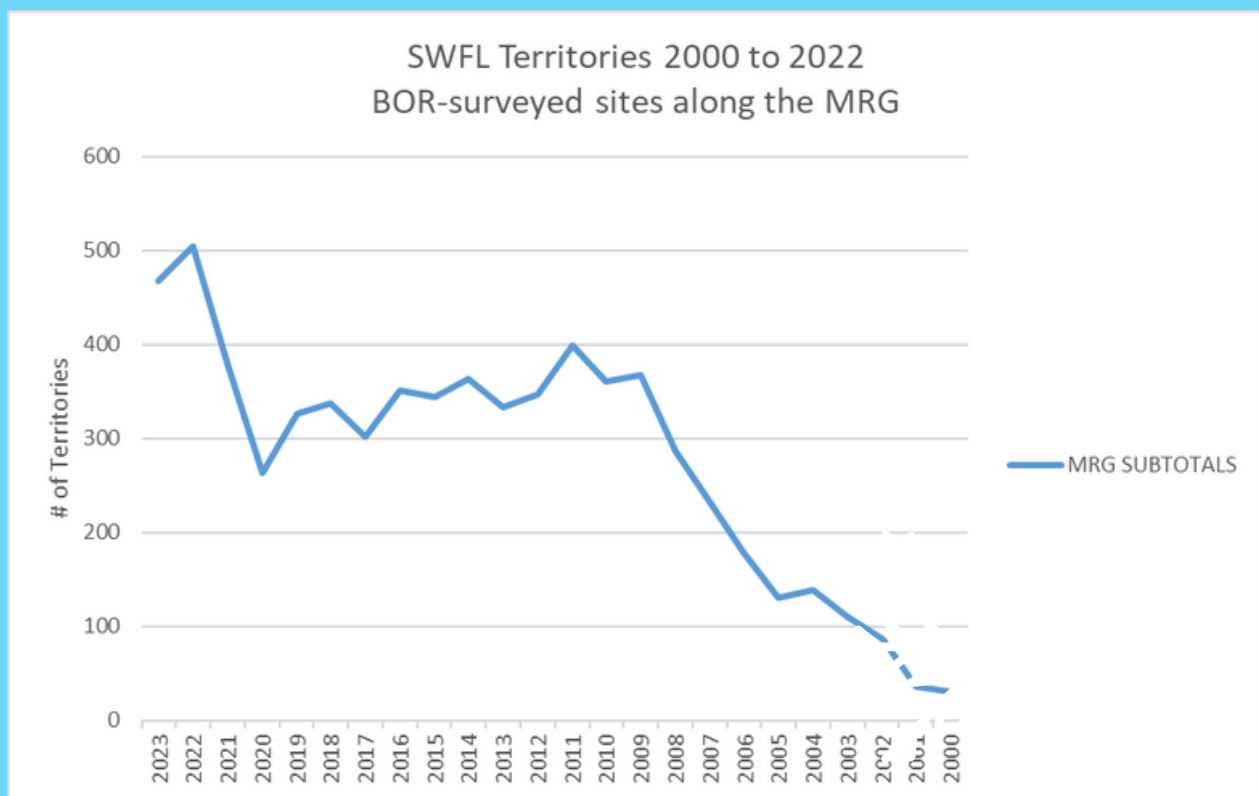


Figure 1. SWFL territories along the Middle Rio Grande (MRG) during 2000-2023. (Source: Reclamation). In 2019-2023, a full survey of the MRG was not completed, limiting comparisons that can be made with previous years.

Listed Species Updates

Threatened Western Yellow-Billed Cuckoo

Update provided by Jenny Davis, U.S. Fish & Wildlife Service

During the summer of 2023, Bureau of Reclamation personnel conducted presence/absence surveys for the Western yellow-billed cuckoo (YBCU) along the Middle Rio Grande of central New Mexico. Surveys were completed across six distinct reaches reaches between Isleta Pueblo and the delta of Elephant Butte Reservoir. Survey efforts were constrained to select high-priority study sites in 2023 due to personnel limitations. Consequently, limited comparisons can be made between population data from 2023 and previous years.



Photo: YBCU on branch
Credit: Andy Reago and Chrissy McClarren

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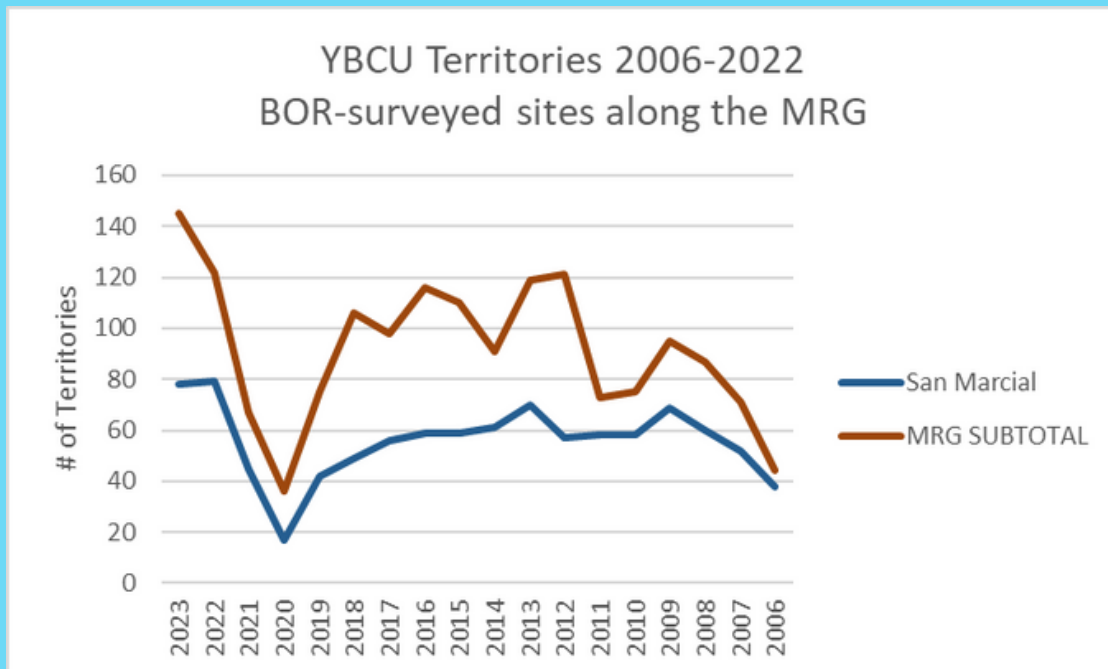


Figure 2. YBCU detections and territories during 2006-2023. (Source: Reclamation). In 2019-2023, a full survey of the MRG was not completed, limiting comparisons that can be made with previous years.

Listed Species Updates

New Mexico Meadow Jumping Mouse

Update provided by Mark Brennan, U.S. Fish and Wildlife Service

The USFWS finalized a Recovery Plan for the New Mexico meadow jumping mouse (NMMJM; *Zapus hudsonius luteus*) that published in the Federal Register in January 2023. This Recovery Plan was developed with multiple partners and stakeholders who are members of our NMMJM Recovery Team. The Recovery Plan describes the overall management objectives for recovery of the species within individual hydrological unit code 8 (HUC8) areas. These HUC8s occur within the six geographical unit (GU) recovery management areas described in the Recovery Plan that are within the historic range of the subspecies. The Bosque Del Apache National Wildlife Refuge (BdANWR) and the rest of the MRG are within one specific GU recovery unit in the Recovery Plan.



Photo: NMMJM in grass
Credit: USFWS

[Continued on page 15...](#)

Threatened Pecos Sunflower

Update provided by Sarah D. Yates, U.S. Fish and Wildlife Service

U.S. Fish and Wildlife released a five-year review report in 2023. Refer to the following document for a species update

[Pecos sunflower \(*Helianthus paradoxus*\) 5-Year Review: Summary and Evaluation](#)



Photo: Field of Pecos sunflowers
Credit: J. N. Stuart

What's Happening in the MRG

- SER Southwest Conference
- MRG Announcements
- Funding Announcements
- NM Water Dialogue
- Recent Publications

SER Southwest Conference

Program Support Team (PST) members attended and tabled for the Collaborative Program at the Society for Ecological Restoration (SER) Southwest Conference on November 16 and 17, 2023. Multiple signatory organizations were also in attendance, including NM Department of Game & Fish, Bureau of Reclamation, CABQ Open Space, US Fish & Wildlife Service, and University of New Mexico. Several of the conference sessions and symposia were particularly relevant to the Collaborative Program, including sessions on riparian restoration, fire, vegetation management, and monitoring, as well as symposia focused on native plant materials and mycorrhizal fungi in restoration.

The Collaborative Program table included a display with information about Program signatories, area, and mission, as well as our five listed species and the ecosystems in which they reside. Current Program materials, including a flyer and the most recent annual report and newsletter, were also provided at the table for conference attendees to peruse and take home.

Conference attendees visited the table during conference breaks and lunch, and 16 attendees signed up for our email list to stay up-to-date with Collaborative Program activities.



Photo: Collaborative Program Table at the SER SW Conference
Credit: Zoë Rossman, PST

What's Happening in the MRG

New Mexico Water Dialogue Meeting

The New Mexico Water Dialogue Meeting was held on January 11, 2024 in Albuquerque at the Indian Pueblo Cultural Center. This year's in-person attendance was sold out for the first time in the history of the event, with an additional ~40 attendees attending virtually.

The morning session featured an introduction and three invited presentations. Dr. Nelia Dunbar, the now-emerita Director and State Geologist with the New Mexico Bureau of Geology and Mineral Resources, presented on "Climate Change in New Mexico over the Next 50 Years: Impact on Water Resources," for which she served as lead editor. This document was produced by scientific experts in the state and discusses how climate change is expected to affect (directly and indirectly) New Mexico's water resources. Dr. Dunbar emphasized that our climate is already changing, citing recent record-breaking wildfires, mass piñon die-offs, and catastrophic post-fire floods as examples. She also noted that flows in New Mexico rivers are expected to decline by 16-28% in the next 50 years (and by ~25% in the Rio Grande, specifically).

Next, Christine Whitney-Sanchez presented on cultural changes—such as those that will be required in the future of water planning in our state. She is the Chief Culture Officer at Arizona State University. Her presentation included strategies for supporting change and growth in healthy ways and fostering connection and consideration in groups that are experiencing (or preparing for) change.

Hannah Riseley-White presented the vision of the Water Security Planning Act (WSPA), providing a background on previous water planning in the state followed by a discussion on the ways the WSPA is intended to build on the successes and address some of the challenges of previous regional water planning efforts. She noted that we seem to be at a "magic moment", where a convergence of multiple factors presents the opportunity to act in order to benefit generations to come. She provided examples of some of the opportunities to build support for the WSPA from the public and legislators, as well as other ideas for engagement around the WSPA.

The final presentation was a panel discussion including diverse perspectives from 7 individuals speaking to how WSPA is, and can be, different than previous water planning efforts in the state. Panelists shared information on water planning from their various organizations, noted where the WSPA could be stronger in its implementation, and gave examples demonstrating the importance of water planning for the future of New Mexico communities.

Following lunch, participants shared ideas and feedback about the WSPA in small groups. Among the most frequent feedback during the final report-out was that while the Act has incredible potential, there are no concrete plans for supporting implementation. The needs discussed included funding for planning efforts at the state level, increased focus on building trust with communities, and staffing to ensure there is adequate logistical support. It was also noted that the Act largely lacks any language that explicitly acknowledges the importance of equity and justice in plans, and that it only briefly and vaguely mentioned consideration of the natural environment.

What's Happening in the MRG

MRG Announcements

2024 Land and Water Summit

The 2024 Land and Water Summit is just around the corner, and organizers are now accepting poster submissions for the event. For more information, visit <https://www.landandwatersummitnm.org/>.

Event Details & Important Dates:

Conference Dates: **March 7-8, 2024**

Pre-Conference Field Trip: March 6, 2024 (Separate registration required)

Location: Indian Pueblo Cultural Center, Albuquerque

Abstract Submission Deadline: February 16, 2024

Final Poster Delivery to IPCC: March 6, 2024

Confluence 2024

Confluence is the Western Collaborative Conservation Network's (WCCN) biennial gathering that provides an indispensable space for learning and professional community-building within the collaborative conservation field. For more information on registration, visit <https://collaborativeconservation.org/western-collaborative-conservation-network/confluence/>.

Event Details & Important Dates:

Confluence 2024 will be held at the DoubleTree at Reid Park in Tucson, Arizona on **April 2-4, 2024**.

Online Early Bird Registration: November 13, 2023- January 31, 2024

Online Regular Registration: February 1, 2024 – March 19, 2024

New Mexico's Potential ESA Species

U.S. Fish and Wildlife Service (USFWS) is completing status reviews for three fish species found in New Mexico that have been petitioned for listing under the Endangered Species Act (ESA). Final status decisions on the **Rio Grande Chub** (*Gila pandora*) and **Rio Grande Sucker** (*Catostomus plebeius*) will be made in July 2024. Final status decision on the **Rio Grande Shiner** (*Notropis jemezianus*) will be made in the summer of 2025. For more information on the potential federal listing of these species, visit [Here](#) and [Here](#).

The **monarch butterfly** (*Danaus plexippus*), also found in New Mexico, is a candidate species for listing under the ESA. For more information, visit [Here](#).



Photo: Rio Grande Chub



Photo: Rio Grande Sucker



Photo: Rio Grande Shiner

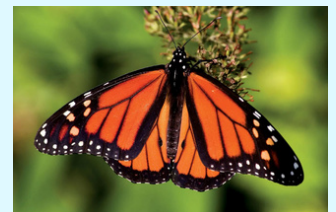


Photo: Monarch butterfly

What's Happening in the MRG

Recent Publications

Rio Grande Silvery Minnow Fish Rescue 2023 Annual Report

Archdeacon T.P., Thomas L.I., Dunnum P.M. (2023). 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://webapps.usgs.gov/MRGESCP/documents/rio-grande-silvery-minnow-fish-rescue-2023-annual-report>

Rio Grande Silvery Minnow Population Monitoring During October 2023

Dudley R.K., Platania S.P., White G.C. (2023). Prepared for U.S. Bureau of Reclamation.

<https://webapps.usgs.gov/MRGESCP/documents/rio-grande-silvery-minnow-population-monitoring-during-october-2023>

Rio Grande Silvery Minnow Reproductive Monitoring During 2023

Dudley R.K., Platania S.P., White G.C. (2023). Prepared for U.S. Bureau of Reclamation.

<https://webapps.usgs.gov/MRGESCP/documents/rio-grande-silvery-minnow-reproductive-monitoring-during-2023>

Reproductive Phenology of Wild and Hatchery-Reared Rio Grande Silvery Minnow

Archdeacon T.P., Diver T.A., Grey R.E. (2024). 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://webapps.usgs.gov/MRGESCP/documents/reproductive-phenology-of-wild-and-hatchery-reared-rio-grande-silvery-minnow>

Funding Announcements

[FY23/24 Aquatic Ecosystem Restoration Program funding opportunity](#). Applications for FY24 funding are due **January 24, 2024**.

[FY24 Water and Energy Efficiency Grants funding opportunity](#). Applications are due by **February 22, 2024**.

[FY23 Planning and Design Grants funding opportunity](#). Second round of applications are due by **April 4, 2024**.

Program Updates

- **The upcoming Science Symposium** (Theme: "Scaling Up: Adaptive Species Management for a Changing Ecosystem") will be held **February 13-14, 2024**. Please continue to submit abstracts for the event by February 1st! Visit <https://webapps.usgs.gov/MRGESCP/symposium2023/2024-call-for-abstracts> for more information on submitting an abstract.
- **The Climate Futures Planning Workshop** (scheduled for October 24-25, 2023) has been postponed. There has been a great amount of interest in the event, and a lot of work put into its development. We intend to capitalize on all that energy and excitement in **March 2024**. We will be in contact with a new date. Thank you for your patience as we continue to plan this event!
- Western EcoSystems Technology, Inc. is seeking a new Program Coordinator and Science Coordinator for the Program Support Team. More information on candidates will be available at a later time.

Welcome Cait Rottler!

Dr. Cait Rottler joined the Program Support Team as an Assistant Science Coordinator in November 2023. Cait received her PhD in Ecology with a graduate minor in Environment and Natural Resources from the University of Wyoming in 2016. Her dissertation focused on the recovery of sagebrush ecosystems (soil, plant communities, and productivity) after reclamation on oil and gas wellpads in southwestern Wyoming. Her postdoctoral research focused on soil health management practices and soil health across Oklahoma, Kansas, and north Texas.

Cait has expertise in rangeland and restoration ecology, soil science, and climate adaptation for natural resources and agriculture. She was born and raised in Albuquerque and has prior experience working in the bosque. Prior to WEST, she worked in climate adaptation, first with United States agricultural producers, and then with natural and cultural resource managers in the south-central United States, including in New Mexico. Cait can be reached at crottler@west-inc.com.



Program Updates

In Memory of Alan Hatch



Alan Hatch, former Director of Natural Resources at the Pueblo of Santa Ana and member of the Collaborative Program Executive Committee has recently passed. Please read his obituary below for details about his life and opportunities to honor his memory.

Alan Merle Hatch (March 17, 1970 - December 14, 2023)

After battling cancer for nearly a decade, Alan Hatch of Albuquerque, New Mexico passed away on December 14, 2023. Alan was born in Terre Haute, Indiana in 1970 to James and Judith Hatch. His childhood was filled with joy and adventures in Indiana and the many places across the country where his family traveled. Growing up, Alan became interested in the outdoors and completed a degree in Forestry from Purdue University. He remained a lifelong Boilermaker fan. He worked for the US Forest Service in Alaska and eventually made his way to

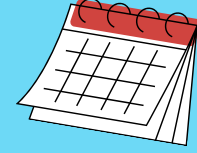
Albuquerque where he worked for the Pueblo of Santa Ana's Natural Resources Department, serving as the director for many years. Alan was very proud of his work in natural resources throughout his career and was highly respected by others in the field. Alan was an incredibly dedicated father, husband, son, sibling, and friend. He is loved dearly by those who knew him. Alan was preceded in death by his father, James. He is survived by his wife, Liz, and son, Lucas, of Albuquerque; mother, Judith, of Terre Haute; sister, Jennifer, of Indianapolis; and brother, Andy (Cilicia and Jonathan), of Portland, OR. Services will be held at a later date. Based on Alan's love of the outdoors and animals, and his long-fought cancer battle, in lieu of flowers, donations to your favorite local animal, outdoor, or cancer charity would be appreciated. Alan supported:

- Animal Humane of New Mexico (<https://animalhumanenm.org/>)
- Tread Lightly (<https://treadlightly.org/>)
- New Mexico Cancer Center Foundation (<https://nmcancercenter.org/foundation/>)
- Wabash Valley Community Foundation - James Eddy Hatch Endowment Fund (<https://wvcf.org/donate/>)

To send flowers to the family in memory of Alan Hatch, please visit the French Funerals & Cremations [flower store](#).

Upcoming Dates

Upcoming Meetings



- FPC meeting - Late January/early February
- Science Symposium - February 13-14
- HR Coordination Meeting - February
- SAMC meeting - Late February/early March
- Climate Futures Planning Workshop - March



Credit: Program Support Team

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

Listed Species Updates Continued

Endangered Southwestern Willow Flycatcher

[Continued from page 4...](#)

Certain sites were also selected to contribute to current baseline population data, monitor population trends, and determine the current distribution of SWFLs along the Middle Rio Grande. During 2023 surveys, 467 resident SWFL territories were documented in the MRG. Overall, apparent territory numbers in the Middle Rio Grande decreased slightly in 2023 compared to last year, with 607 territories documented in 2022. The next highest year was 399 territories in 2011. However, due to the incomplete surveys, these comparisons are not complete.

Similar to previous years, the San Marcial and Elephant Butte Reservoir area was the most productive with a total of 321 territories or roughly 69 percent of the total flycatchers surveyed along the Rio Grande.

Sites are required to be monitored at least every 3 years to maintain an understanding of the current population trends. Planning for 2024 surveys is undergoing to assure that all sites will be monitored as needed. A full survey is currently planned for 2024.

Threatened Western Yellow-Billed Cuckoo

[Continued from page 5...](#)

A total of 559 Western Yellow-billed Cuckoo detections were recorded during the 2023 breeding season and 145 territories were delineated from these detections. Similar to previous years, the San Marcial Reach contained the largest breeding cuckoo population with an estimated 78 breeding territories, comprising 54 percent of all Western Yellow-billed Cuckoo territories within the study area. Overall, apparent detections and territory numbers in the Middle Rio Grande increased in 2023 compared to all previous years, with the next highest year being 480 detections with 122 territories in 2022 and 428 detections with 110 territories in 2016. However, due to the incomplete surveys, these comparisons are not complete.

Sites are required to be monitored at least every 3 years to maintain an understanding of the current population trends. Planning for 2024 surveys is undergoing to assure that all sites will be monitored as needed. A full survey is currently planned for 2024. USFWS is continuing to work with a group of experts on a Species Status Assessment (SSA) that will inform the future Recovery Plan. The Species Status Assessment will be used to inform the future Recovery Plan.

Listed Species Updates Continued

Endangered New Mexico Meadow Jumping Mouse

[Continued from page 6...](#)

The Recovery Plan does not have any specific recovery actions or projects described in it; those will be included in the Recovery Implementation Strategy (RIS) currently being developed by the USFWS with our NMMJM Recovery Team. The RIS will include specific projects and actions for each population area, including the BdANWR and the rest of the MRG, that are considered necessary for recovery and eventual down/delisting. The USFWS will be working with the BdANWR and Collaborative Program as needed to develop appropriate projects and actions for NMMJM recovery within the MRG.

An assessment of NMMJM habitat potential was done for the proposed Sun Zia interstate power transmission line that will cross the MRG between the BdANWR and Sevilleta National Wildlife Refuge. Habitat conditions in a few areas of the proposed crossing action area were considered favorable for NMMJM. Track plate surveys for the NMMJM were done within those areas in 2022 and 2023. There were no detections made during the survey in 2022 nor in 2023.

The USFWS is continuing to coordinate with the Albuquerque Bernalillo County Water Utility Authority (ABCWUA) to include NMMJM habitat conditions in their planning for a new water treatment plant outflow project at their facility in the South Valley along the east bank of the MRG. The USFWS will contact the U.S. Army Corps of Engineers (USACE) to coordinate any other habitat restoration actions planned by the USACE in the vicinity of the ABCWUA project to enhance the recovery potential for this reach of the MRG for future NMMJM reintroduction or other recovery efforts. The USFWS is also communicating with the Bureau of Indian Affairs to develop an outreach effort to the Isleta and Sandia Pueblos for assessing any tribal interest in assessing riparian habitat conditions and surveying for the NMMJM on tribal lands within the MRG.