

MIDDLE RIO GRANDE ENDANGERED SPECIES COLLABORATIVE PROGRAM

Newsletter — March 2019

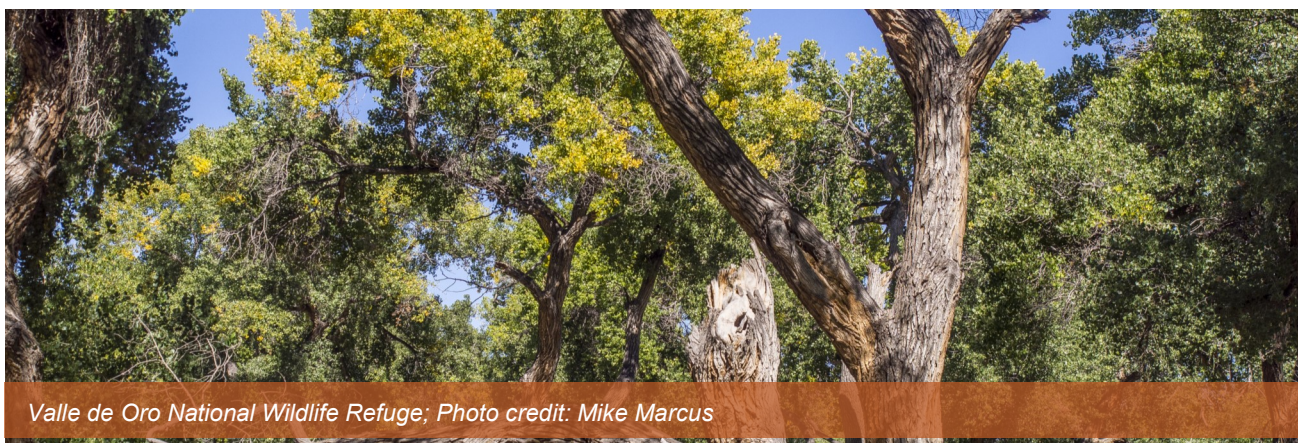


In This Issue

- Project Updates
 - 2016 MRG Biological Opinion Implementation Update
 - Program Portal Update
- List Species Activity Updates
 - Rio Grande Silvery Minnow
 - Southwestern Willow Flycatcher
 - Yellow-billed Cuckoo
 - New Mexico Meadow Jumping Mouse
- Announcements
- Upcoming Events
- Minnow Action Team Update



Snow in the Sandia Mountains; Photo credit: WEST, Inc. Staff



Valle de Oro National Wildlife Refuge; Photo credit: Mike Marcus

Implementation of the Final Biological and Conference Opinion of Bureau of Reclamation, Bureau of Indian Affairs, and Non-Federal Water Management and Maintenance Activities of the Middle Rio Grande, New Mexico

**Update provided by Brian Hobbs,
U.S. Bureau of Reclamation**

U.S. Bureau of Reclamation (Reclamation), Bureau of Indian Affairs, Middle Rio Grande Conservancy District, and New Mexico Interstate Stream Commission (NMISC) are continuing to implement requirements under the Final Biological and Conference Opinion of Bureau of Reclamation, Bureau of Indian Affairs, and Non-Federal Water Management and Maintenance Activities of the Middle Rio Grande, New Mexico (2016 MRG BO). The following is an update on the status of some ongoing and completed projects.

Progress toward fish passage at San Acacia and Isleta diversion dams continues. Work to stabilize the apron below San Acacia Diversion Dam (SADD) is almost complete. Rio Grande silvery minnow (RGSM) movements studies using PIT-tagged fish are being planned by NMISC, for the pilot project at SADD, and Reclamation, for a study in the Isleta and San Acacia reaches that will begin March 2019. Alternatives are

being evaluated for the long-term fish passage project at SADD.

Reclamation completed construction of the Rhodes Property Bank Line Habitat Project (RM 94) in early March 2019. This project was a partnership between private, non-profit, and federal entities, and helps meet habitat construction requirements in the San Acacia reach under the 2016 MRG BO. As the goal of the project is to provide shallow, low-velocity habitat for the RGSM during low flow conditions, the project begins to inundate at 300 cfs. RM94 monitoring will begin this spring.

Progress continues on vegetation removal at Bosque del Apache National Wildlife Refuge (NWR) for the pilot realignment project. Compliance is still needed before the next phase, excavation. Reclamation is hopeful that excavation can begin in 2019.

Finally, a Lower Reach Projects Plan Programmatic Planning effort is underway. This effort is led by Reclamation and aims to take a holistic look at the Lower Reach projects (Pueblo of Isleta's project is currently being formed). There will be more to come on this in 2019.

PROJECT UPDATES

Program Portal Updates

**Update provided by Lynette Gieson,
U.S. Army Corps of Engineers**

Program Portal development was delayed a couple months by the government shutdown. The U.S. Geological Survey (USGS) has proposed a new timeline and is continuing to develop the beta site for the Program to test

(<https://dev-webapps.usgs.gov/mrgescp/>). The old site can still be accessed at <https://webapps.usgs.gov/mrgescp/>. The next phase will include building the data module, and USGS anticipates completing that by early summer. Your feedback on the beta site continues to be helpful in developing this Program resource.

LISTED SPECIES ACTIVITY UPDATES

Rio Grande Silvery Minnow

**Update provided by Jennifer Bachus,
U.S. Bureau of Reclamation**

Note: The following species update was provided for the November 2018 EC newsletter; there are currently no updates to provide.

The RGSM Population Monitoring Program uses standardized seining techniques to catch RGSM along the Middle Rio Grande (MRG) during seven months of the year (Dudley et al. 2018). The preliminary data from October 2018 monitoring indicated an overall density at the 20 standard sites of 0.1 RGSM per 100 square meters (m^2). October sampling also incorpo-

rated peer review recommendations to add 10 additional sites, plus replacement sites, for any dry sites encountered. This resulted in 31 sites sampled during October, and an over all density of 0.11 RGSM per 100 m^2 . Three age classes were detected (Young-of-year, Age-1, Age-2+), similar to prior months in 2018. Mixture model estimates of density for October will be calculated for the annual report, which will be available in early 2019.

(Listed Species Activity Report continued on page 4)



(List Species Activity Reports continued from page 3)

Southwestern Willow Flycatcher

Update provided by Vicky Ryan, U.S. Fish and Wildlife Service



SWFL; Photo credit: NPS

During the summer of 2018, Reclamation conducted surveys and nest monitoring of the southwestern willow flycatcher (SWFL) in ten distinct reaches along approximately 250 miles of the Rio Grande

in New Mexico, mainly

between the southern boundary of the Isleta Pueblo and Elephant Butte Reservoir. Other areas surveyed include a 6-mile stretch just north of Cochiti Reservoir, select locations near Taos, New Mexico, as well as select locations from Caballo Reservoir to El Paso, Texas. Bosque del Apache NWR staff conducted surveys within the managed portion of the refuge to the west of the active Rio Grande floodway. Both the U.S. Army Corps of Engineers (USACE) and Hawks Aloft, Inc. conducted surveys in areas adjacent to Albuquerque, New Mexico. The Bureau of Land Management conducted surveys in the San Luis Valley of Colorado.

In 2018, 443 total SWFL territories were detected by Reclamation and others along the Rio Grande in Colorado, New Mexico, and Texas.

Though a complete survey effort did not occur in 2018, the total number of territories is presumed to be the same or similar to the 39 observed in 2017 due to the site fidelity characteristic of the species.

Similar to previous years, the San Marcial and Elephant Butte Reservoir area was the most productive, with a total of 277 territories, roughly 63 percent of the total flycatchers along the Rio Grande identified in surveys. (257 territories were found in 2017.) There was a 47 percent nest success rate in 2018 for the MRG, consisting of mainly nests in the San Marcial/Elephant Butte Reservoir area. (25 percent nest success was observed in 2017.) Overall, the results were average as compared to nest success rates observed since 1999. The increase in nest success was due to an observed 23 percent decrease in depredation from 2017. The population in the lower part of the state (south of Caballo Reservoir near Hatch, New Mexico) increased roughly 24 percent in 2018 with 84 total territories and high nesting success of 59 percent.

The tamarisk leaf beetle severely defoliated tamarisk throughout the majority of the Rio Grande this year. This defoliation took place during SWFL nesting activity but any adverse effects to nesting activities have not been determined at this time. Tamarisk defoliation is a concern to SWFL nest success because we pre-

sume that SWFL eggs and fledglings may be more susceptible to effects of temperature, humidity, weather events, or increased predation.

In October of 2018, the U.S. Department of Agriculture's (USDA) Animal and Plant Health Inspection Service issued a notice of intent to conduct a scoping process and prepare an environmental assessment associated with development of a conservation program for the SWFL and its habitat. This program may include restoration, surveying and data collection, invasive species control, and other aspects all with the overarching goal of providing benefit to the SWFL throughout its range, including the Rio Grande in New Mexico.

Yellow-billed Cuckoo

Update provided by Vicky Ryan, U.S. Fish and Wildlife Service

Since 2007, Reclamation has conducted comprehensive presence/absence surveys for the yellow-billed cuckoo (YBCU) along the MRG from Highway 380 (San Antonio, New Mexico) to Elephant Butte Reservoir. Over time, these formal surveys have expanded in effort and now extend from Belen to El Paso, Texas. In 2018, there were 138 YBCU territories (or 549 individual detections) observed by Reclamation. The majority of these (49 territories or 193 individual detections) were located in the San Marcial/Elephant Butte Reservoir area. In addition, Bosque del Apache NWR staff conducted

formal YBCU surveys in habitats west of the active floodplain of the Rio Grande and estimated that one territory (or 3 individual detections) were present during 2018.

In October 2014, the USFWS re-opened the comment period on its proposal to designate 546,335 acres of critical habitat for the YBCU in 80 separate units in Arizona, California, Colorado, Idaho, Nevada, New Mexico, Texas, Utah, and Wyoming. Eight units of the proposed critical habitat are in New Mexico. The proposed critical habitat includes a 10-mile long segment of the upper Rio Grande from Ohkay Owingeh to near Alcade, New Mexico; a 6-mile long segment near San Ildefonso Pueblo upstream to La Mesilla; and, a continuous 170-mile long segment from Elephant Butte Reservoir (at River Mile 54) upstream to Cochiti Dam. Critical habitat has not been finalized at this time and a new proposal is anticipated to be announced in the Federal Register in August 2019.

In 2018, the USFWS received a petition to delist the YBCU based on the petitioners' opinion that the original listing of the species was in error. The USFWS reviewed the petition and determined that a 12-month finding is warranted. The USFWS is now reviewing the original listing and new information available after several

(List Species Activity Reports continued from page 5)

(List Species Activity Reports continued on page 6)

years of survey data and analysis of the species to determine if listing of the species is still warranted.

New Mexico Meadow Jumping Mouse

Update provided by Vicky Ryan, U.S. Bureau of Reclamation



During June through October 2018, the Southwestern Region Division of Biological Sciences Inventory and Monitoring staff conducted photographic monitoring of the New Mexico Meadow Jumping Mouse (*Zapus hudsonius luteus*; NMMJM) on Bosque del Apache NWR. This effort used camera traps, an efficient means of collecting data over a long period with minimal labor and stress to the animals being surveyed. This is a change from previous monitoring efforts using Sherman traps, which are labor intensive, require extensive handling of the species, and are less successful.

In 2018, NMMJM were detected within 131 photographs from 22 visits (a visit is defined as the

same species photographed at a location within the same hour) taken at 12 locations along several occupied moist soil management units on Bosque del Apache NWR. With the Inventory and Monitoring Program's support, refuge staff were able to focus on NMMJM and SWFL habitat restoration efforts, use positive camera NMMJM observations to guide management actions, and allow for development of a NMMJM programmatic habitat restoration plan. In addition, USFWS has made progress in developing a standardized, streamlined monitoring protocol for this species using camera traps.

In 2018, Bosque del Apache NWR and Inventory and Monitoring staff began drafting a 5-year Jumping Mouse Plan that outlines specific goals and needs to create and restore habitat for this species. Inventory, monitoring, and habitat management activities will be conducted with support from the Service's Water Resources Division, the New Mexico Invasive Species Strike Team, and the New Mexico Ecological Services Field Office. The Jumping Mouse Plan is tied to two programmatic ESA Section 7 compliance documents that were finalized in 2018. The Plan includes cyclical restoration prescriptions and habitat creation and restoration evaluation and planning efforts for the NMMJM on Bosque del Apache NWR. The refuge will seek funding and partner matches for the Jumping Mouse Plan-based habitat efforts within the next five years. Refuge staff began some habitat restoration/creation efforts.

Minnow Action Team Update

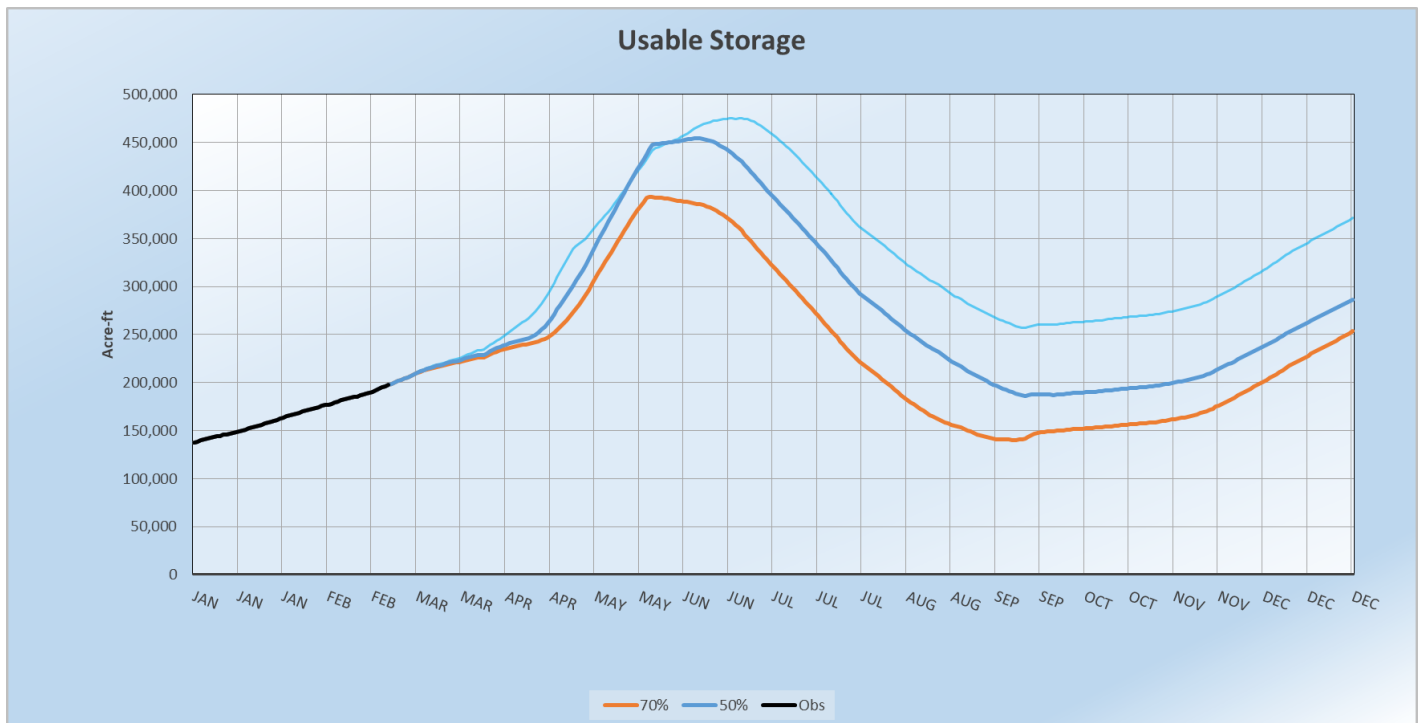
Update provided by Grace Haggerty, New Mexico Interstate Stream Commission

On February 20, 2019, a pre-irrigation season Minnow Action Team (MAT) meeting was convened to review projections for snowmelt runoff based on the February SNOTEL data (https://www.wcc.nrcs.usda.gov/snow/now_map.html).

Chris Romero (USDA Natural Resource Conservation Service) presented the February 2019 snowpack results. In stark contrast to the 2018, 2019 appears to be tracking at average to slightly above average snowpack thus far, and projections for runoff are similar. Climate model forecasts and recent temperature trends indicate that March, April, and May will range from slightly above to above average precipitation with average temperatures (available here: <https://www.cpc.ncep.noaa.gov/>).

Carolyn Donnelly (Reclamation) provided initial model runs for MRG Projected Water Operations. Rio Grande Compact Article VII restrictions are in place and allowable storage in El Vado and other post-Compact reservoirs will be limited. Current model projections indicate that there may be a brief period in May when Article VII is not in place, which would allow native water to be stored for MRG irrigation. Otherwise, native water captured in El Vado during the 2019 runoff will be Prior and Paramount and a portion of Emergency Drought Water. San Juan Chama contractors are expected to

(MAT Update continued on page 8)



Article VII Status Forecast; Source: U.S. Bureau of Reclamation

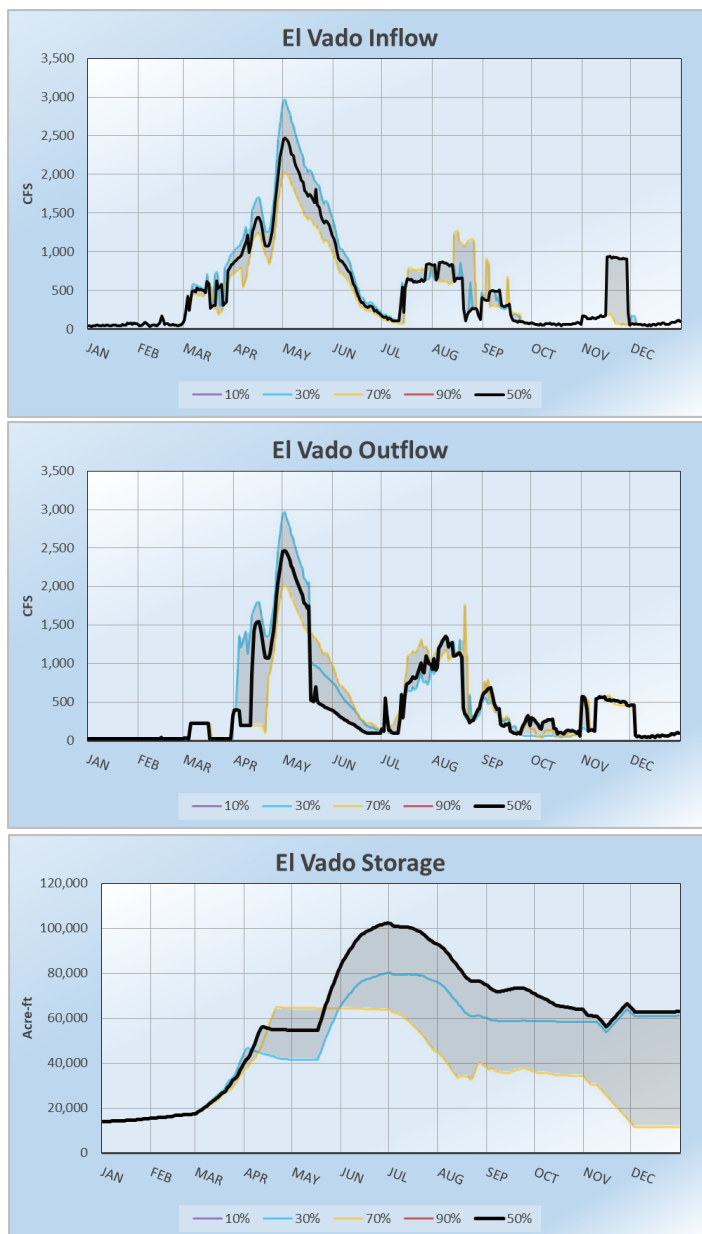
(MAT Update continued from page 7)

receive a minimum 63% of their allotments but possibly up to 100%. River discharge through the Middle Rio Grande are expected to be at, or higher, than 2,000 cfs peak flows in May for about 30 days. Reclamation emphasized that the February Annual Operating Plan is provisional and subject to change.

Rich Valdez (SWCA, Inc.), on behalf of the NMISC, presented analyses of RGSM spawning and larval rearing habitat monitoring from the past several years. Spawning success and larval survival appeared to be most dependent on the timing and duration of spring runoffs that resulted in sufficient inundation of floodplain habitats. Joel Lusk (USFWS) reported that the October catch-per-unit-effort estimate for RGSM was 0.09 fish/100 m², which was indicative of very low spawning success and survival in 2018, which was the 3rd driest year on record. The USFWS stocked about 200,000 captive-bred RGSM into the MRG after the 2018 irrigation season ended (November 2018 and February 2019).

A discussion of potential water and species operations followed the presentations. The MAT will provide a 2018 summary report to the MRGESCP and MAT participants. Additional MAT meetings will be scheduled in 2019 to discuss updated projections and forecasts and to develop monitoring and operational recommen-

dations for summer. Due to the favorable runoff forecasts, the MAT did not have any early irrigation season recommendations, but plans to meet at least once later in the spring to discuss updated hydrologic conditions. Water management agencies will continue to assess the need for potential management actions, such as an El Vado Modification.



El Vado forecasts; Source: U.S. Bureau of Reclamation

ANNOUNCEMENTS

Upcoming Event

Update provided by Julie Dickey, WEST, Inc.

The City of Albuquerque Open Space Division is extending a special invitation to the Collaborative Program to participate in a Discovery Hike at the Candelaria Nature Preserve. The hike will be guided by Matthew Peterson and Colleen Langan-McRoberts, the new Open Space Superintendent.

You will have the opportunity to meet Colleen if you do not already know her, talk more with Matthew Peterson, and weigh in on the City's management of the Preserve. Open Space is holding a series of Discovery Hikes to get public feedback, and would like to welcome input from Collaborative Program signatories as well. Colleen and Matthew will be pointing out the land's natural features and asking for feedback about how the land should be managed going forward.

The hike will be on **Friday, March 29, 2019** from **9:00 – 11:00am**.

Please RSVP to Julie Dickey at jdickey@west-inc.com or 505-362-1251.



Candelaria Nature Preserve Resource Management Plan Study Area; Source: City of Albuquerque

Upcoming Event

Update provided by Michael Porter, U.S. Army Corps of Engineers

Todd Steissberg and Billy Johnson from the U.S. Army Corps of Engineers (USACE) Hydrologic Engineering Center will be presenting, "Integrated Watershed Water Quality Modeling with USACE Software." They will

be discussing the integration of water quality libraries into RES-SIM and HEC-RAS.

The presentation will be **Monday, April, 22, 2019** from **1:30-3:30 PM** at the USGS Water Science Center (6700 Edith Blvd NE).

UPCOMING DATES

PROGRAM MEETINGS

Executive Committee

Wednesday, March 27, 2019
Location: USGS Water Science Center

Science/Habitat Restoration Work Group

Tuesday, April 9, 2019
Location: TBD

MRGESCP Brown Bag Presentation with Jose Solis, NMISC

Tuesday, April 9, 2019
Location: TBD

Population Monitoring Work Group

Tuesday, April 16, 2019
Location: TBD

OTHER EVENTS

Candelaria Nature Preserve Discovery Hike

Friday, March 29, 2019, 9-11 AM
Location: Candelaria Nature Preserve

Presentation: Integrated Watershed Water Quality Modeling with USACE Software

Monday, April 22, 2019, 1:30-3:30 PM
Location: USGS Water Science Center

THE INFORMATION IN THIS NEWSLETTER
SHOULD NOT BE ATTRIBUTED
TO THE MRGESCP OR ITS EXECUTIVE COMMITTEE,
BUT TO THE ORGANIZATION FROM WHICH
IT WAS SUBMITTED

FOR COMMENTS AND INQUIRIES, CONTACT:
WEST, Inc. | (505) 362-1251 | jdickey@west-inc.com

Scenic view of the Middle Rio Grande (Photo credit: U.S. Bureau of Reclamation)