MIDDLE RIO GRANDE ENDANGERED SPECIES COLLABORATIVE PROGRAM

October 2021 Newsletter

TAKE-AWAYS FROM THE HABITAT RESTORATION WORKSHOP

In August 2021, the Collaborative Program (or MRGESCP) hosted a Habitat Restoration (HR) Workshop to address several questions from MRGESCP participants regarding HR project design, implementation, and monitoring. The objectives of the workshop were to discuss how to define the goals of an HR project, how to document HR success, and how to choose metrics for measuring success. The workshop served as a foundation for future conversations on HR planning, coordination, and monitoring in the Middle Rio Grande (MRG).

Take-aways from the workshop can be grouped into four critical categories: HR project success, HR project design, signatory needs regarding monitoring, and challenges associated with HR in the MRG. Within these categories, the following common themes emerged:

HR Project Success — Identifying multiple metrics responsive to the intended habitat modifications so that HR success can be evaluated across a broader spectrum of conditions.

HR Project Design — Building resiliency into project design, and using a multi-faceted approach that takes into account environmental as well as species-specific factors.

Monitoring Needs — In addition to target species, measuring other biotic and abiotic responses, such as vegetation diversity and structure.

HR Challenges in the MRG — Designing project sites that are self-sustaining with minimal maintenance; matching in-house capability with HR design and monitoring; securing funding for multiple monitoring years.

FEATURED THIS ISSUE:

Admin & Science Updates

HR Workshop Take-Aways Continued...

As a result of the HR Workshop, a Science & Technical Ad Hoc Group will be formed to address some of the issues presented by attendees. Ultimately, the workshop highlighted many of the needs and questions regarding HR in the MRG. These will act as a starting point for future collaboration and discussions related to constructing and maintaining projects, selecting informative monitoring metrics, and leveraging data collection across project sites to address questions at a larger spatial scale.

Admin Updates

2021 Signatory Activity Input Form

The Collaborative Program will be collecting information on 2021 signatory activities via a Google Form. Submitted activities will be entered into the Science and Adaptive Management Information System (SAMIS) and made accessible to registered users on the SAMIS Viewer App. This process will be used to test-run data collection and data entry for the SAMIS. In addition, the information gathered on 2021 activities will help pull together the 2021 Annual Report. The 2021 Signatory Activity Input Form will be sent out November 5, 2021 and be due December 17, 2021. The Program Support Team will be available to answer any questions related to the form.

Administrative Ad Hoc Groups

All Admin Ad Hoc Group charges and member lists are now available on the Program Portal (https://webapps.usgs.gov/MRGESCP/work-groups/administrative-ad-hoc-groups). The following Admin Ad Hoc Group is currently active:

2022 Memorandum of Agreement Ad Hoc—*Formed July 28, 2021*

Science Updates

SAMIS Training Sessions

The SAMIS will soon be available to the Collaborative Program! In preparation, the Program Support Team will be conducting SAMIS training sessions. Those in attendance will be able to register for the SAMIS. We need your help getting as much information into the SAMIS as possible, so there's plenty to show during the training sessions. Look out for an invite to the SAMIS training sessions! For more information, contact Catherine Murphy (Science Coordinator, cmurphy@west-inc.com)

Science & Technical Ad Hoc Groups

All Science & Technical Ad Hoc Group charges and member lists are now available on the Program Portal (https://webapps.usgs.gov/MRGESCP/work-groups/science-technical-ad-hoc-groups). The following S&T Ad Hoc Group are currently active:

Rio Grande Silvery Minnow Population Modeling Ad Hoc—*Formed March 3, 2021*

Rio Grande Silvery Minnow Conceptual Ecological Model/Genetics Ad Hoc—*Formed April 22, 2021*

Avian Conceptual Ecological Model Refinement Ad Hoc—*Formed April 22, 2021*

50-Year Water Plan & OpenET

50-Year Water Plan

The New Mexico Interstate Stream Commission (NMISC) is leading a collaborative effort to develop a 50-Year Water Plan for the state. At this time, it is critical for New Mexico to develop a plan with more flexibility to manage water supplies and infrastructure in the face of weather extremes brought on by climate change. Below are links to informative resources:

50-Year Water Plan webinars—https://rb.gy/ficgf5

Leap Ahead Analysis Assessment and Surveys—https://rb.gy/nxfl7z

Informative Videos—https://rb.gy/nuj8do

Resilience Surveys and Climate Workshops

The NMISC is conducting 50-Year Water Plan Resilience Assessment Surveys. Survey links were sent out via email to all MRGESCP participants. Responses are due November 30, 2021. The U.S. Army Corps of Engineers is also partnering with NMISC to host Climatic Regional Impacts and Resilience Workshops on November. 3 and November 5, 2021. For more information on both of these efforts, contact Michelle Tuineau (mtuineau@west-inc.com).

Rio Grande Data Story

The YouTube video titled A Data Story in the Rio Grande highlights the collaboration of the NMISC and many other agencies as they deal with limited water resources during extreme drought. Check it out!—https://rb.gy/3akwhy

OpenET: The New Online Water Data Platform Set to Transform Water Management in the Western US

What is OpenET?

OpenET is a collaborative effort to develop an online platform for mapping evapotranspiration (ET) at the scale of individual fields. OpenET was built to fill an important data gap in water management across the western US. OpenET uses best available science and publicly available data to increase access to satellite-based ET and consumptive water use information for farmers and water managers.

Who developed OpenET?

The OpenET collaborative is led by NASA, the Desert Research Institute, and Environmental Defense Fund, with in-kind support from Google Earth Engine. The technical team brings expertise in satellite-based estimation of ET, cloud computing, and user-driven website design.

How can OpenET data be used?

Potential applications of reliable and widely available ET data at the field scale include:

- Development of water budgets and innovative management programs.
- Support for groundwater management programs.
- Support for water trading programs.
- Support for ET-based irrigation practices.

Information Links:

OpenET Home Page: https://openetdata.org/

OpenET Press Release: https://openetdata.org/press-release-10-2021/

Introduction to OpenET Video: https://rb.gy/id5vzy

OpenET FAQ Page: https://openetdata.org/faq/

Upcoming Dates & Recent Publications

Upcoming Meetings

Science and Adaptive Management Committee Meeting

November 3, 2021

8:00 AM—12:00 PM

Executive Committee Meeting

December 2021

9:00 AM—12:00 PM

Program Deadlines

2021 Signatory Activity Input Forms Due

December 17, 2021

50-Year Water Plan Resilience Surveys Due

November 30, 2021

USACE Climate Workshops

November 3 and 5, 2021

Recent Publications

Rio Grande Silvery Minnow Population Monitoring During August 2021. Dudley R.K., Platania S.P., White G.C. (2021). Report prepared for U.S. Bureau of Reclamation. https://rb.gy/nzvget

Movement of Red Shiner during a regulated, intentional surface-flow recession. Archdeacon T.P., Gonzales E.J., Thomas L.I. (2021). Ecology of Freshwater Fish, 00, 1–11. https://doi.org/10.1111/eff.12635

Hydraulic Habitat Suitability for Rio Grande Silvery Minnow at San Acacia Restoration Sites. Harris A. (2021). Prepared by U.S. Army Corps of Engineers. Prepared for U.S. Bureau of Reclamation. https://rb.gy/elpmul

Rio Grande Silvery Minnow Population Monitoring During September 2021. Dudley R.K., Platania S.P., White G.C. (2021). Report prepared for U.S. Bureau of Reclamation. https://rb.gy/td0ysj

Rio Grande Silvery Minnow Reproductive Monitoring During 2021. Dudley R.K., Robbins T.O., Platania S.P., White G.C. (2021). Report prepared for U.S. Bureau of Reclamation. https://rb.gy/ktitd7

Photo: Scenic view of the MRG; Photo Credit: Mike Marcus