

Science and Habitat Restoration Work Group Meeting  
*September 4, 2019*

Meeting Materials:

Meeting Agenda

Meeting Minutes

U.S. Army Corps of Engineers Projects

Using Habitat to Quantify Ecological Effects of Restoration and Water Management Alternatives  
[report, not included]

Comparing Herbaceous Plant Communities in Active and Passive Riparian Restoration [report,  
not included]



# Middle Rio Grande Endangered Species Collaborative Program

Est. 2000

## Science and Habitat Restoration Work Group (ScW/HR)

**September 4, 2019**  
**10:30 AM – 12:00 PM**

**Bureau of Reclamation**  
555 Broadway Blvd NE

**Call-In Information:** 712-451-0011; Code 141544#

### Meeting Agenda

- |               |   |                             |
|---------------|---|-----------------------------|
| 10:30 – 10:40 | <b>Welcome, Introductions, and Agenda Review</b> <ul style="list-style-type: none"><li>➤ <b>Decision:</b> Approval of September 4, 2019 meeting agenda</li></ul>  | <i>Program Support Team</i> |
| 10:40 – 10:50 | <b>Review of May 14, 2019 ScW/HR Meeting</b> <ul style="list-style-type: none"><li>• Review Action Items</li><li>➤ <b>Decision:</b> Approval of May 14, 2019 meeting minutes</li></ul>  | <i>Program Support Team</i> |
| 10:50 – 11:15 | <b>Discussion on SOWs and USACE Projects</b> <ul style="list-style-type: none"><li>• Discuss development of collaborative SOWs moving forward</li><li>• Review list of unfunded USACE Projects<ul style="list-style-type: none"><li>○ <b>Read Ahead:</b> USACE Projects.pdf</li></ul></li></ul> | <i>Group Discussion</i>     |
| 11:15-11:30   | <b>Adaptive Management Work Group Update</b>  | <i>Kate Mendoza</i>         |
| 11:30-11:50   | <b>Discussion of the ScW/HR's Direction and Path Moving Forward</b> <ul style="list-style-type: none"><li>• Development of conceptual ecological models</li><li>• Opportunities for engagement</li></ul>  | <i>Group Discussion</i>     |
| 11:50 – 12:00 | <b>Additional Items and Next Meeting Date</b> <ul style="list-style-type: none"><li>➤ <b>Action Item:</b> Determine agenda items for the next ScW/HR meeting</li><li>➤ <b>Action Item:</b> Set date(s) for future meeting(s)</li></ul>  | <i>Dana Price</i>           |
| 12:00         | <b>Adjourn</b>  |                             |



# Middle Rio Grande Endangered Species Collaborative Program

Est. 2000

## Science/Habitat Restoration Work Group (ScW/HR) September 4, 2019

**Location: U.S. Bureau of Reclamation  
555 Broadway Blvd NE, Albuquerque, NM**

### Meeting Minutes

#### Decisions

- ✓ Approved September 4, 2019 ScW/HR meeting agenda
- ✓ Approved May 14, 2019 ScW/HR meeting minutes, as amended
- ✓ Send the following projects to the EC to approve for the FPC to find funding for:
  - Rio Grande Sediment Gages
  - Continuous Water Temperature Monitoring of the MRG Basin
  - Avian Monitoring

#### Action Items

WHO	WHAT	BY WHEN
Program Support Team (PST)	Schedule the next ScW/HR meeting via doodle poll for mid-October	ASAP
John Aubuchon and Justin Reale, U.S. Army Corps of Engineers (USACE)	Compile list of sediment, water quality, and temperature gages in the Middle Rio Grande; including their funding status and the prioritization ranking	October 1
ScW/HR Co-Chairs and PST	Determine structure for conceptual model discussion at next meeting	Prior to next meeting

- Next meeting date: TBD

#### Welcome, Introductions, and Agenda Review

Ashley Tanner, PST, opened the September 4, 2019 ScW/HR meeting and reviewed the agenda.

- ✓ **Decision:** Approval of September 4, 2019 ScW/HR meeting agenda

#### Review of May 14, 2019 ScW/HR Meeting

Ashley T. then reviewed the minutes from the May 14, 2019 ScW/HR meeting.

- A participant corrected a mistake in the name of "Bosque Ecosystem Monitoring Program."
- ✓ **Decision:** Approval of May 14, 2019 ScW/HR meeting minutes, as amended

#### Discussion on Scopes of Work (SOWs) and USACE Projects

Ashley T. noted that she had reached out to most of the meeting participants prior to the meeting to discuss the SOWs in development and how to change the SOW process to ensure projects being

developed are collaborative, have signatory buy-in, and are important to the ScW/HR members. She reminded the group that the three SOWs in development were:

- Evaluate and Quantify In-Channel Habitat Diversity and Utilization for All Life Stages of RGSM
- Restoration Prioritization Strategy for the SWFL
- Habitat Restoration (HR) Revegetation Techniques

The first two SOWs were combined into a single SOW titled: Ecohydrological Model for the Middle Rio Grande as both required very similar base models and base information. Ashley T. referenced the 2015 Hickey et al. paper, "Using habitat to quantify ecological effects of restoration and water management alternative," that had been sent out along with the read aheads as an example of such a model. One participant noted that some of that work may be done by the U.S. Army Corps of Engineers in-house.

The HR SOW is to look at what factors determine whether an HR project succeeds or fails. Ashley T. informed the group she had reached out to the U.S. Geological Survey in Phoenix, AZ that had released some reports on this topic, as well as consulted the published literature ("Comparing herbaceous plant communities in active and passive riparian restoration" by Gornish et al. [2017]) to find example of projects the group may be interested in replicating in the MRG. The Gornish et al. (2017) paper was sent out as a read-ahead.

She then turned the meeting over to the ScW/HR co-chairs: Kate Mendoza, Albuquerque-Bernalillo County Water Utility Authority (ABCWUA); Dana Price, U.S. Army Corps of Engineers (USACE); and Danielle Galloway, USACE.

Dana P. noted that there were scopes still being developed, but will not be ready for the Executive Committee meeting. She then introduced a list of projects that USACE had funded in the past that it can no longer fund due to budget constraints. Lynette Giesen, USACE, then reviewed each project on the list for the group. She noted that several projects are ending and will have final reports to the Program at a later date (format to be determined).

- **Action Item:** Jonathan Aubuchon, USACE, and Justin Reale, USACE, will compile a list of the gages in the Middle Rio Grande, including funding status, and provide a priority ranking.
- ✓ **Decision:** The ScW/HR decided to send the following projects to the EC as priorities for funding:
  - Rio Grande Sediment Gages
  - Continuous Water Temperature Monitoring of the MRG Basin
  - Avian Monitoring

### **Adaptive Management Work Group (AMWG) Update**

Kate Mendoza, Albuquerque-Bernalillo County Water Utility Authority, provided an update on the efforts of the AMWG. The AMWG is currently working on goals and objectives for the Program from a species-specific perspective, and is planning to develop reachplans. There will be a presentation at the Executive Committee meeting.

The AMWG is also looking at developing conceptual ecological models (CEMs) and is hoping the ScW/HR can take on that task. CEMs are qualitative models, not quantitative, and would be used to

map relationships and uncertainties (whereas numerical models quantify the characteristics and strength of those relationships).

- **Action Item:** Co-chairs and PST think through how to structure the CEM conversation for the next ScW/HR meeting.

#### **Additional Items and Next Meeting Date**

- The 2019 Science Symposium is scheduled for December 3-4, 2019. It will be held at the USGS New Mexico Water Science Center. ScW/HR participants are encouraged to register and submit abstracts. See <https://mrgescpscienceSymposium.wordpress.com> for more information.
- **Action Item:** PST schedule the next ScW/HR meeting via doodle poll for mid-October

#### Meeting Participants

Jonathan AuBuchon	U.S. Army Corps of Engineers
Kim Eichhorst	Bosque Ecosystem Monitoring Program
Amy Erikson	Audubon New Mexico
Danielle Galloway	U.S. Army Corps of Engineers
Lynette Giesen	U.S. Army Corps of Engineers
Eric Gonzales	U.S. Bureau of Reclamation
Grace Haggerty	N.M. Interstate Stream Commission
Aubrey Harris	U.S. Army Corps of Engineers
Chuck Hayes	N.M. Department of Game & Fish
Mo Hobbs	Albuquerque-Bernalillo County Water Utility Authority
Kathy Lang	City of Albuquerque BioPark
Joel Lusk	U.S. Fish & Wildlife Service
Kate Mendoza	Albuquerque-Bernalillo County Water Utility Authority
Michael Porter	U.S. Army Corps of Engineers
Dana Price	U.S. Army Corps of Engineers
Justin Reale	U.S. Army Corps of Engineers
Nathan Schroeder	Pueblo of Santa Ana
Rich Valdez	SWCA/N.M. Interstate Stream Commission
Lori Walton	U.S. Bureau of Reclamation

#### *Program Support Team (WEST, Inc.)*

Debbie Lee  
Ashley Tanner

<b>FY20 funding status</b>	<b>Category</b>	<b>Activity</b>	<b>Signatory Lead</b>	<b>Activity Begin</b>	<b>Activity End</b>	<b>Contract Type</b>	<b>Contractor(s)</b>
No	Avian	Identifying Restoration Priorities for Threatened Tamarisk Dominated Habitat to Benefit Future Habitat for SWFL	USACE	FY18	FY19	IDIQ	Tetra Tech
No	Avian	Avian Monitoring	USACE	fy14	FY19		Hawks Aloft
Partial	Avian	Avian Monitoring	USACE		ongoing	In house	
Partial	Avian	SWFL/YBCU Surveys on the Rio Grande in the ABQ Metro Area	USACE		ongoing	In house	
No	Avian	SWFL/YBCU Surveys on the Rio Grande in the ABQ Metro Area	USACE	fy17	FY19		Tetra Tech
No	HR	Los Lunas Habitat Restoration Project Monitoring	USACE	FY00		MIPR	USBR TSC
No	RGSM	Evaluation of RGSM Population Model Alternatives	USACE	FY15	FY18	MIPR	NMSU
No	RGSM	Investigation of RGSM Mesohabitat Preferences	USACE	FY15	FY18	MIPR	USACE, USGS, USBOR
No	RGSM	RGSM and Water Quality Monitoring	USACE		ongoing	In House	USACE, USFWS, UNM
No	Sci Sup	Tamarisk Leaf Beetle Monitoring	USACE	FY00	FY19	IDIQ	
No	Sci Sup	Assessment and Quantification of Sediment and Discharge at Arroyo de los Pinos	USACE	FY17	FY19	MIPR	USBR; USGS; NM Tech
No	Sci Sup	Collaborative Aerial Data Collection and Analysis	USACE	FY16	FY18	MIPR	UNM; NM IMT; USAF; BLM; AMAFCA; SSCAFCA; BHI
No	Sci Sup	Rio Grande Sediment Gages: Rio Puerco, San Acacia, San Marcial	USACE	FY10	ongoing	MIPR	USGS

<b>FY20 funding status</b>	<b>Category</b>	<b>Activity</b>	<b>Signatory Lead</b>	<b>Activity Begin</b>	<b>Activity End</b>	<b>Contract Type</b>	<b>Contractor(s)</b>
No (it is ending)	Sci Sup	Rio Grande and Tributaries Geomorphic Characterization Study	USACE	FY11	fy20	IDIQ	Tetra Tech
No	Sci Sup	Various Mapping (aerial, LIDAR, etc)	USACE		ongoing	In House	
No	Sci Sup	Hydrologic / Sediment Modeling	USACE		ongoing	MIPR/IDIQ	ERDC, USGS, USBR, TetraTech
No	Sci Sup	Monitoring Climate Change in the MRG	USACE	FY12	ongoing	In House	
No	Water	Alameda Gage - Continuous Water Temperature Monitoring of the MRG Basin	USACE	FY13	ongoing	MIPR	USGS, UNM
Partial (in house only)	Water	Rio Grande Nature Center High Flow Channel Gage Monitoring	USACE	FY10	ongoing	MIPR/In House	USGS
No (it is ending)	Water	Water Quality Monitoring of Aquatic Refugia in the MRG	USACE	FY16	fy20	Sole Source	VanHorn
No	Water	Middle Rio Grande Groundwater Monitoring	USACE	FY18	FY20	Comp Bid	GSA
No	Water	Valle De Oro River Stage Gage	USACE	FY16	ongoing	MIPR	USGS
Yes	Sci Sup	Bosque School BEMP Site Monitoring	USACE	FY05	FY20	Sole Source	BEMP
Yes	Pro Sup	Program Portal Development & Operation	USACE	FY17	Ongoing	MIPR	USGS