Executive Committee Meeting November 28, 2018

Meeting Materials:

Meeting Agenda

Meeting Minutes

Interim Long-Term Plan: Proposed Activities and Projects List

Middle Rio Grande Endangered Species Collaborative Program Newsletter November 2018 [not included]

Draft Middle Rio Grande Endangered Species Collaborative Program Scientific Guidelines [draft]

Program Science Workshop: WEST's Primary Takeaways

Presentation of "2016 Biological and Conference Opinion for the Bureau of Reclamation, Bureau of Indian Affairs, and Non-Federal Water Management and Maintenance Activities on the Middle Rio Grande, New Mexico" (2016 BO) December 2, 2016 [presentation]

U.S. Army Corps of Engineers Middle Rio Grande Projects [presentation]



Middle Rio Grande Endangered Species Collaborative Program

Est. 2000

EXECUTIVE COMMITTEE MEETING November 28, 2018 9:00 AM - 3:00 PM

Location: Pueblo of Santa Ana, Wellness Center 222 Ranchitos Rd, Bernalillo, NM 87004

Call-in Information:

Phone: 800-369-1926 **Passcode:** 19200

MEETING AGENDA

8:45 - 9:00	Arrival	
9:00 - 9:10	Welcome and IntroductionsGround rulesAgenda Review	Co-Chairs
	Decision: Approval of meeting agenda	
9:10 - 9:20	Program Manager Update	Debbie Lee
9:20 - 9:40	Past Meeting Minutes • Action items from September meeting	Co-Chairs
	Decision: Approval of September 2018 Meeting Minutes	
9:40 - 10:10	 Work Group Updates Science/Habitat Restoration (ScW/HR) November 14th Science Workshop Population Monitoring (PMWG) 	Ashley Tanner Grace Haggerty
10:10- 10:40	 Interim Long-Term Plan (I-LTP) Overview of I-LTP Goals and Objectives of this Document Next steps Decision: Approve Interim Long-Term Plan 	Debbie Lee

10:40 - 10:50	Break	
10:50 - 11:15	 Program Work Plan Review of revised work plan document Updates on items 	
11:15 - 12:00	 Praft Science Guidelines Review of draft document Discussion Next steps: How to operationalize? Decision: Approve Science Guidelines Action Item: Request WEST include specifics on how to implement 	Debbie Lee
	this in the accountability plan	
12:00 - 1:30	Lunch (on own)	
1:30 - 2:10	 Biological Opinions (BOs) Presentation 2016 Middle Rio Grande BO Bernalillo to Belen San Acacia 	TBD Mick Porter, USACE
2:10 - 2:20	Opportunities for Program Input Lower Reach PlanOthers?	Co-chairs
2:20 - 2:40	 Where Do We Go From Here? Next steps for the Collaborative Program Developing metrics for success 	Debbie Lee (facilitator)
	Action Item: By-laws Group continue revising by-laws	
2:40 - 2:50	 Announcements Request to join MRGESCP from Audubon NM ➤ Action Item: By-laws Group work on membership language Review of RGSM HBO (USU contract) report and presentation Others? 	
2:50 - 3:00	Public Comment	
3:00 - 3:10	Action Items and Next Steps	Co-Chairs
	 Decision: Next EC Meeting – January 23 (proposed) Decision: Regular schedule for future EC meetings – fourth Wednesday of every other month (proposed) 	
3:10	Adjourn	



Middle Rio Grande Endangered Species Collaborative Program

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Middle Rio Grande Endangered Species Collaborative Program (MRGESCP or Program) Executive Committee (EC) Meeting Minutes

November 28, 2018 Location: Santa Ana Pueblo Wellness Center

Decisions

- > Approval of meeting agenda
- > Approval of September 2018 EC meeting minutes with revisions
- Request for Western Ecosystems Technology, Inc. (WEST) to change the level of detail in future EC meeting minutes to a summary
- Approval of Interim Long-Term Plan (I-LTP)
- Approval of the Scientific Guidelines for the Program signatories to follow
- > Approval to reconvene the By-laws Ad Hoc Group
- Agreement of the Program's operation space to be at the landscape level (with specific language to be developed)
- > Regular EC meeting scheduled for the fourth Wednesday bi-monthly through 2019

Actions

WHO	ACTION ITEM	BY WHEN
VVEST	Send NM/AZ Wildlife Society & American Fisheries Society Joint Annual Meeting information to the Program	ASAP
WEST	Send a fiscal year 2017 (FY17) cost share report to the Program	ASAP
WEST	Revise September 2018 EC minutes	ASAP
I All Signatories	Provide additional projects/activities and identify completed activities in the I-LTP	12/3/18
By-laws Ad Hoc Group	Reconvene to continue work on the by-laws. Two tasks include: 1. Identifying how the Fiscal Planning Group (FPG) could assemble on a temporary basis to complete work on the I-LTP 2. Standardizing the Program membership requirements section	Prior to 1/15/19
(n-chairs	Send a request to Audubon New Mexico regarding providing further information in their letter of request to join the Program	ASAP
NMISC NMDGF MRGCD APA UNM	Send FY18 Cost Share to WEST	Past Due - 10/17/18

All Signatories	Send all FY18 Annual Report activities write-ups to WEST	12/14/18	
I All Signatories	Submit comments on the Utah State University (USU) draft report to Reclamation	12/14/18	
WEST	Draft new goals language for the Program	Prior to 1/15/19	
ONGOING ACTION ITEMS			
	Visit the Program Portal (formerly the database management system [DBMS]), test it, and provide feedback to U.S. Geological Survey (USGS)	Ongoing	
WEST	Draft an external communication plan	Ongoing	

Next Meeting

January 23, 2019, Location: TBD

Meeting Summary

Welcome and Introductions

Ground Rules

Agenda Review

The EC was welcomed by Brent Esplin, Federal Co-chair, who also covered the ground rules. The agenda was briefly reviewed and approved with no changes.

DECISION: Approval of November 28, 2018 Meeting Agenda

Program Manager Update

Newsletter Updates FY18 Annual Report WEST Staffing

Debbie Lee, WEST's Program Manager, made announcements regarding the newsletter, the upcoming annual report, and a WEST staffing change. It was noted that the newsletter has been useful to provide updates to the EC representatives in preparation for EC meetings. WEST informed the EC that Lana Mitchell, WEST's Project Coordinator, is no longer working at WEST and all requests and correspondence should be addressed to Debbie Lee or Julie Dickey. WEST has been working to gather FY18 Annual Report project and activity write-ups from Program signatories. They are due to Julie Dickey by Friday, December 14, 2018.

Preparation for the Science Symposium that was proposed to the EC in April 2018 will continue with an ad hoc group formed to plan the event. Since it is currently late in the year to continue planning a spring Symposium, this first event will likely be held in the late fall or early winter. WEST suggested that Program participants attend the New Mexico/Arizona Wildlife Society and American Fisheries Joint Annual Meeting. It is a good opportunity for networking, hiring, and learning about ongoing science. The dates are February 7th through 9th.

- Action Item: WEST will send NM/AZ Wildlife Society & American Fisheries Society Joint Annual Meeting information to the Program
- Action Item: Program signatories will send all FY18 Annual Report activities write-ups to WEST by December 14, 2018

Past Meeting Minutes

September 21, 2018 EC Meeting Action Items

Both September 2018 meeting minutes and related action items were reviewed with comments by the EC and signatory staff. Outstanding action items include the following:

- Action Item: Non-federal signatories will submit cost share to WEST (due 10/17/18)
 - Cost share was received by City of Albuquerque (CoA) Open Space, Albuquerque
 Bernalillo County Water Utility Authority (ABCWUA), Pueblo of Santa Ana, and Bosque
 Ecosystem Monitoring Program (BEMP)

- Action Item: U.S. Bureau of Reclamation (Reclamation) will determine what the total is for matching non-federal cost share (by 10/10/18)
 - Reclamation noted during this discussion that their FY19 amount to be matched at 25 percent by non-federal cost share is similar to FY16 and FY17 at approximately \$3.3 million
- Action Item: Reclamation will determine what other information from the USU contract can be provided to the EC at the next meeting (by 11/21/18)
 - Reclamation is still working to gather more information beyond what was provided to share with the EC
 - o Any Program comments on the draft USU report are due by December 14, 2018

September 21, 2018 Meeting Minutes

Some edits were requested regarding the September 21, 2018 EC meeting minutes. After discussion on the level of detailed content in the September 21, 2018 meeting minutes, the EC made the request that for EC meetings, WEST should provide a summary of minutes rather than a detailed account of meeting discussion. WEST will continue to provide detailed minutes for the Science and Habitat Restoration Work Group (ScW/HR) and PMWG meetings.

- > DECISION: September 2018 EC Meeting Minutes approved with the requested revisions made
- DECISION: WEST will provide summary-style meeting minutes for future EC meetings

Workgroup Updates

Science/Habitat Restoration Workgroup

WEST and the ScW/HR have drafted a 2019 Work Plan, and will be refining it at the December 6, 2018 meeting to present for approval at the January 2019 EC meeting. The ScW/HR will be working with the Adaptive Management (AM) Work Group as the AM Plan develops. The ScW/HR intends to develop full scopes of work (SOWs) during the transition to an AM Program and to support long-term planning.

Program Science Workshop

The November 14, 2018 Program Science Workshop hosted four professionals working in other river systems with programs similar to the MRGESCP. WEST provided and discussed their Workshop takeaway's to the EC. WEST requests that Program members fill out a brief survey regarding the Workshop so that WEST can share what the Program learned, and to help WEST and the Program with future conversations.

- A signatory discussed that the Platte River representative asked the MRGESCP what our goals of recovery are. The Platte River used examples from their Program (e.g. number of acres restored habitat, number of species observed, etc.) and uses that as a metric in addition to reporting their accomplishments publicly. The signatory expressed an interest on developing recovery goals like those for the MRGESCP.
- Another signatory noted that one of their take-away's included that there are specific credentials for people who are on panels looking at science.

Population Monitoring Workgroup

A meeting attendees from the September 2018 PMWG meeting announced that the Workgroup discussed a charge, approved it, and will plan to present it to the EC. The group also discussed several analyses and spent time working with Charles Yackulic at USGS who is contracted by the ABCWUA to complete statistical modeling on population monitoring. The PMWG plans to review Charles' proposed model at the December 12, 2018 meeting, to look at peer review questions, and to disperse work for the group members. In 2019, the PMWG will work to finalize a report of their work for the EC.

Interim Long-Term Plan

Overview of the I-LTP Goals and Objectives of the Document Next Steps

The I-LTP was developed from a combination of the 2011 Long-Term Plan (LTP) activities list that was never finalized, and the SOW descriptions list that the ScW/HR developed during 2018. The I-LTP is a working document, and items can be added or subtracted from the list as needed. WEST will continue to work with the ScW/HR to revise it. Short descriptions of each listed project and a letter identifying the needed EC actions are included (see I-LTP read ahead document).

The I-LTP is meant to help the Program think about long-term future planning. It is an interim working document meant to tide the Program over through the transition to the Program developing future processes, developing a new Program structure, and developing and implementing an AM Program. As the Program works to transition the I-LTP to a full LTP, a tracking process will be implemented, and more details will be added. The EC reviewed the letter provided as a read ahead, which identified the following actions requested of the EC:

- To adopt the Proposed Activities and Projects List as an I-LTP, with the understanding that it will
 provide support for the Program's future Strategic LTP being developed under the AM
 Framework
- To request that the ScW/HR consider the Proposed Activities and Projects List in developing SOWs for Program and EC approval to move forward
- To request that the U.S. Army Corps of Engineers (USACE) undertake projects on the Proposed Activities and Projects List pursuant to their authority in support of the Program
- To request that all Program signatories provide further support to refine the I-LTP List in the following ways:
 - o Identify listed projects that have been completed or are no longer relevant.
 - Link the projects to specific legal authorities and documents (e.g. recovery plans, biological opinions)

The USACE has requested that the EC determine the projects proposed to be undertaken by the USACE will provide planning or administrative assistance to the Program, with the understanding that USACE participation is dependent upon existing authorities and availability of funds.

During the EC discussion, it was suggested that processes be developed to add projects to the list, to prioritize projects, and to separate the "need to know" projects from the "want to know" projects. WEST is currently working with the ScW/HR to develop a SOW process, which will tie into how projects are added and prioritized within the I-LTP. Also, several new processes will be established under the AM Program.

It was suggested that rather than calling it an "interim" LTP, a date or timeline be assigned for the transition to a full LTP. Additionally, it was noted that recovery goals for the species are laid out in recovery plans, but that the Program does not have specific goals for contributing to species recovery, and the future LTP needs to have goals that tie into species recovery.

Several EC members requested that signatories undertaking projects on the I-LTP list inform the EC, and provide project status updates to the Program, including during the SOW development and contracting processes. It was also requested that all signatories follow the SOW development process being developed by the ScW/HR.

- Action Item: All signatories will provide input to adjust the list including adding the SOW ideas
 list and identifying what is already happening, what is proposed to happen, and what has
 already happened.
- ➤ **DECISION**: The EC approves the I-LTP with the acknowledgement that it is a working document that will be revised over time and will transition to a full LTP

Program Work Plan

Review of Revised Work Plan Document

Update on Items

WEST presented the Program's Work Plan and reviewed the item updates with the EC (see Program Work Plan). Several action items came out of the review including:

- Action Item: Send the updated FY17 Cost Share Report to the EC
- Action Item: Visit the Program Portal (formerly the DBMS), test it, and provide feedback to USGS
- Action Item: Add a discussion on tribal outreach to the next EC meeting agenda
- Action Item: Complete an external communication plan

Draft Science Guidelines

Review of the Draft Document

Discussion

Next Steps: How to Operationalize?

The EC reviewed the draft Scientific Guidelines read ahead. The document was also reviewed by the technical workgroups. It is meant to be supplemental and not a replacement for a code of conduct. A signatory questioned the accountability plan and it was explained that the communication plan turned into the accountability plan. The Scientific Guidelines are easy to agree to in principle, but the question

was posed: what does it mean for signatories to follow the guidelines, and the accountability plan will be an action plan. It was recommended that signatories be mindful of the guidelines and the accountability plan, and begin to police themselves, in addition to WEST approaching signatories regarding their behavior.

DECISION: Approval of the Scientific Guidelines for the Program signatories to follow

Biological Opinion Presentations

2016 MRG BO

Reclamation and New Mexico Interstate Stream Commission (NMISC) staff presented to the EC on the 2016 Biological and Conference Opinion for the Bureau of Reclamation, Bureau of Indian Affairs, and Non-Federal Water Management and Maintenance Activities on the Middle Rio Grande, New Mexico" (2016 BO) December 2, 2016 (2016 MRG BO). The presentation slides are available for review of covered material. The following notes were made by other signatories during and after the presentation:

- Under Section 7 consultation, the agency requesting consultation presents an effects
 determination, which is then reviewed by the USFWS, and USFWS either agrees or disagrees. In
 this case, USFWS concurred with the non-jeopardy opinion after analyzing the conservation
 measures outlined by Reclamation.
- Reclamation offered to present on parts of the 2016 MRG BO in more detail if needed in the future.
- One signatory noted that the 2016 MRG BO has changed attitudes and what is done on water operations. While the 2003 MRG BO was more prescriptive and punitive in nature, the 2016 MRG BO does not punish actions, but encourages activities that benefit the species in the long-term particularly regarding the take portion. Low and medium water years have resulted in collaborative efforts as a result of the 2016 MRG BO driving a change in the approach to water management for the good of the species.

Bernalillo to Belen BO and San Acacia BO Presentation

U.S. Army Corps of Engineers (USACE) presented on their 2013 San Acacia BO (2015 Supplemental BO), and the 2018 Bernalillo to Belen Levee BO. Each of the U.S. Army Corps of Engineers (USACE) BO's presented include non-federal partners and sponsors. See the presentation slides for information.

Opportunities for Program Input

Lower Reach Plan

Others?

An action item from the September EC meeting included each signatory reading the Lower Reach Plan to determine any opportunities for Program input, and no EC members had provided input. A discussion regarding communication and accountability followed. The federal signatories have committed to being transparent and open to Program input on activities, but the Program does not follow through in providing timely input. It was asked whether the Lower Reach Plan is an appropriate venue for Program input, and then suggested that the Lower Reach Plan is out of some signatory organization's individual purview, and that email requests for input should include geographical and jurisdictional boundaries. If no responses

are received by the due dates, then the agency seeking input will move forward with their activities. If no input is given, the Program signatories will have to accept the agency's actions.

Although individual signatory organizations have their obligations, mandates, and authorities, the Program as a whole should be taking a broader view of the entire MRG. It would be helpful for the Program to collectively provide comments or an outside perspective by looking at all of the activities in the MRG. However, it is unrealistic to have every MRG-related project/activity pass through the Program; the Program needs to ascertain its identity and goals to help figure out what is possible. It was suggested that the upcoming Adaptive Management Plan and Long-Term Plan could be mechanisms to support the broader vision, and the Science Symposium could serve as a venue to provide input and information on projects. Two areas of interest to many signatories include water management and habitat restoration, and all Program signatories should be aware of how the bosque will change over the next few decades.

• Action Item: WEST offered to draft a new goal statement encompassing the Program's interest in taking a broader viewpoint than that of the individual signatory's actions

Where Do We Go From Here?

Next Steps for the Program

Developing Metrics for Success

Based on the previous discussion, it sounds like the Program needs to shift expectations. The Program cannot do everything at once; there are deadlines to adhere to; and the Program is moving beyond individual agency mandates into a higher level, broad outlook focus – the EC and the Program need to move to a landscape level rather than getting into the weeds. The Program should be a space to move beyond individual agency purviews and look at what is collectively being done at a landscape level. This needs to be done with recognition that individual signatories have regulatory obligations; that despite Program input and recommendations, the individual signatories will have the final say on what they need to do and what they spend their money on.

The Fiscal Planning Committee (FPC) is currently conceptual and needs guidance and a timeline. The group will be composed of implementing signatories (i.e. signatories with funding, signatories completing Program-related work). The transitional step to convening the FPG is prioritization of projects/activities. The ScW/HR is currently working to put a prioritization process in place, and after that the FPG will convene to discuss funding capabilities. The draft SOW process will be presented to the EC upon completion.

- Action Item: The EC directed the By-laws Ad Hoc Group to reconvene and continue work on the by-laws including identifying how the Fiscal Planning Group (FPG) could assemble on a temporary basis to complete work on the I-LTP; and revising the section on MRGESCP membership (see Audubon Request to Join the MRGESCP under Announcements)
- Action Item: All signatories will provide additional projects/activities and identify completed activities in the I-LTP comments are due by Monday, December 3, 2018

Announcements

Audubon Request to Join the MRGESCP

Audubon New Mexico sent a letter to the EC co-chairs requesting MRGESCP signatory status. It was suggested that the Program's by-laws need clarity regarding specific criteria for joining; that the process should be simple, uniform for all, and un-ambiguous. It was noted that no matter the revisions to the by-laws, Audubon should be held to the requirements in the current by-laws to be consistent with due process.

RGSM Hydrobiological Objective Report Review and Future Presentation

Reclamation has received positive feedback regarding USU's draft report and presentation. The comment period on the draft report ends on December 14, 2018. Reclamation will schedule a final presentation on the USU report in late January or early February.

Program Portal

The Program Portal is still in testing mode because of the transfer to USGS from DB Stephens. The calendar is not functional yet, but is in progress. It is requested that the Program continue to test the Portal and send comments to USGS.

ABCWUA Diversion Facility

The ABCWUA diversion facility is hosting a 10-year anniversary event at the water treatment plant and Program signatories are invited.

• Action Item: Kate Mendoza will send WEST an event announcement for the Program

Public Comment

No public comment was received.

Action Items and Next Steps

Action items are listed at the beginning and throughout the meeting summary. EC representatives agree to send their designated EC alternates and any necessary support staff members to EC meetings if they are not able to attend. Alternates and staff members will brief the EC representatives.

➤ **DECISION**: The EC will meet bi-monthly on the fourth Wednesday through 2019. The next EC meeting will be January 23, 2019.

Adjourn

Meeting Attendees

Attendee Organization

Michael Porter U.S. Army Corps of Engineers

Malia Volke New Mexico Department of Game and Fish

Matthew Wunder New Mexico Department of Game and Fish

Lynette Gieson U.S. Army Corps of Engineers

Page Pegram New Mexico Interstate Stream Commission

Joel Lusk U.S. Fish and Wildlife Service

Clint Smith U.S. Fish and Wildlife Service

Grace Haggerty New Mexico Interstate Stream Commission

Nathan Schroder Pueblo of Santa Ana

Larry Caswell U.S. Army Corps of Engineers

Josephine Axt U.S. Army Corps of Engineers

Ryan Gronewold U.S. Army Corps of Engineers

Matthew Peterson City of Albuquerque

David Campbell U.S. Fish and Wildlife Service

Kate Mendoza Albuquerque Bernalillo County Water Utility Authority

Jim Wilber U.S. Bureau of Reclamation

Vicky Ryan U.S. Fish and Wildlife Service

Kim Bannerman U.S. Bureau of Reclamation

Kim Eichhorst Bosque Ecosystem Monitoring Program

Alex Levine Bosque Ecosystem Monitoring Program

Brian Hobbs U.S. Bureau of Reclamation

Cody Walker Pueblo of Isleta

Rick Carpenter City of Santa Fe

David Gensler Middle Rio Grande Conservancy District

Mo Hobbs Albuquerque Bernalillo County Water Utility Authority

Megan Osborne University of New Mexico

Bill Grantham New Mexico Attorney General's Office

Tom Turner University of New Mexico?

Susan Millsap U.S. Fish and Wildlife Service

Chris Shaw New Mexico Interstate Stream Commission

Kyle Harwood City of Santa Fe

Julie Dickey Western Ecosystems Technology, Inc.

Debbie Lee Western Ecosystems Technology, Inc.

Ashley Tanner Western Ecosystems Technology, Inc.

Anne Marken Middle Rio Grande Conservancy District

Jennifer Faler U.S. Bureau of Reclamation

Ann Demint U.S. Bureau of Reclamation

Janet Jarratt Assessment Payers Association of the Middle Rio Grande

Conservancy District

John Longworth New Mexico Interstate Stream Commission



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INTERIM LONG-TERM PLAN PROPOSED ACTIVITIES AND PROJECTS LIST

The enclosed draft Interim Long-Term Plan Proposed Activities and Projects List (I-LTP List) is a working document for Executive Committee (EC) review and approval to move forward as a working document. It is simply the first draft of current projects and potential projects the Program may decide to undertake in the future, and will be altered and further developed as part of planning for the Adaptive Management (AM) Program. This document is meant to be a living document that will be revised based on new project ideas, gaps identified by completed projects, future peer review recommendations, and hypotheses developed under the AM Framework.

The purpose of this document is to provide planning assistance for the Program and its signatories to expend funding for Program-endorsed projects as appropriate under their authorities, secure future funding for projects, inform the development of study plans, and aid in the development of scopes of work (SOWs). Additionally, this I-LTP List will provide support for the Program's future Strategic Long-Term Plan being developed in conjunction with the AM Plan and Program.

This initial I-LTP List was developed using the list of incomplete proposed projects from the November 2011 Draft Long-Term Plan Activities, and the SOW Ideas List the Science and Habitat Restoration Work Group (ScW/HR) has been developing. This I-LTP List is a working document and is not meant to be comprehensive. Additionally, nothing on this list is guaranteed to move forward as a Program priority without first being vetted through the appropriate Program committees and workgroups. Items may be removed from this I-LTP List as priorities change or to reflect new information or study results.

Items on the I-LTP List have not been developed beyond a basic description. For the purposes of the November 28th EC meeting, only the project titles have been provided. If further discussion on a listed item is required, it is requested that EC representatives and their staff work with WEST and/or attend the associated workgroup or ad hoc meetings to address concerns and work through issues.

Following are the requested actions from the EC at the November 28, 2018 meeting:

- (1) To adopt the Proposed Activities and Projects List as an Interim Long-Term Plan, with the understanding that it will provide support for the Program's future Strategic Long-Term Plan being developed under the Adaptive Management Framework.
- (2) To request that the ScW/HR consider the Proposed Activities and Projects List in developing SOWs for Program and EC approval to move forward.
- (3) To request that the U.S. Army Corps of Engineers (USACE) undertake projects on the Proposed Activities and Projects List pursuant to their authority in support of the Collaborative Program.
- (4) To request that all Program signatories provide further support to refine the I-LTP List in the following ways:
 - a. Identify listed projects that have been completed or are no longer relevant.
 - b. Link the projects to specific legal authorities and documents (e.g. recovery plans, biological opinions).



Middle Rio Grande Endangered Species Collaborative Program

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INTERIM LONG-TERM PLAN PROPOSED ACTIVITIES AND PROJECTS LIST

Category 1: Program Management and Administration

A. Adr	ninistration and Support	
1.A.1	Ongoing attendance and support of Program-related meetings and tasks	
1.A.2	Program and Science Support (Third-Party Management)	Contracted
B. Pro	gram Portal (formally the Database Management System [DBMS])	1
1.B.1	Establish a relational Program Portal that is web-accessible, multi-disciplinary, and spatially referenced to consolidate, organize, document, store, analyze, and distribute both scientific and administrative information related to the Program	Contracted; Ongoing
1.B.2	Ongoing Program Portal administration	
1.B.3	Ongoing maintenance of database; uploading data to the database	
1.B.4	Additional DBSM enhancements annually as needed	
1.B.5	Recurring hardware and software updates as required	
GIS	Мар	
1.B.6	GIS Map – Habitat Restoration Projects Compilation Compile historic habitat restoration projects and their associated reports and data, and display on a geospatial map that will be housed on the Program Portal.	SOW approved; Contracted
1.B.7	Ongoing maintenance of the GIS Map	
C. Pro	gram Planning	
1.E.1	Develop and refine the Program's Adaptive Management (AM) Plan and Program	Ongoing
1.E.2	Develop and refine the Program's Scope of Work (SOW) process	Ongoing
D. Scie	nce Program	,
1.F.1	Plan and convene an annual Science Forum	In Planning
1.F.2	Plan and convene Peer Review/Science Advisory panels – as required	
1.F.3	Develop and draft a Program Science Process	
1.F.4	Develop formal internal and external peer review procedures and process	

Category 2: Baseline Studies and Assessments

A. Hy	drologic and Hydraulic	
2.A.1	Ground Water – Surface Water Interactions in the Riparian Zone Define the ground water-surface water interactions along a selected stretch of the Rio Grande in order to establishing baseline quality of surface and ground water.	
2.A.2	Data Collection and 2D Modeling of High-flow Channels Collection of geomorphic and hydrodynamic data, focusing on high-flow channels, and modeling of specific project features.	
B. Tei	restrial Mapping	,
2.B.1	Hink and Ohmart Vegetation Mapping Use the H&O method of vegetation mapping ot extend the geographic coverage of the existing map to include more or all of the Program area, and create a GIS compatible map of the mapped areas.	SOW developed/ approved
2.B.2	Habitat Restoration Projects Assessment Conduct a watershed-level assessment of completed restoration projects within the Program area.	
C. Wa	tershed Surveys and Assessments	
2.C.1	Develop and Implement Program-wide System Monitoring and Trend Analysis for Adaptive Management Implement a systems monitoring plan in order to document changes to the river system so as to provide context for Program activities as part of AM.	
2.C.2	Short-Interval Assessment of Whole-Stream Rio Grande Metabolism Document fine-scale patterns in Rio Grande productivity, identify terrestrial-hydrological connectivity for energy supply within the river.	
2.C.3	Watershed Topography and Geomorphology Mapping Develop a watershed map of the river and connected riparian area's topography and geomorphology using existing photography, mapping, and other resources.	
2.C.4	Conduct Presence/Absence Surveys and Habitat Assessment Studies for Listed Species in Un-Altered MRGESCP Areas Determine the presence or absence of listed species within areas of the MRG that have not been altered/recently altered, and if found, determine various population parameters.	
2.C.5	RiverEyes Data Compilation Compile existing RiverEyes data for archival on the Program Portal.	
2.C.6	Assessing temporal and spatial continuous water quality trends in the Isleta and San Acacia reaches of the Middle Rio Grande Collect long-term and high-frequency measurements of water temperature, specific conductance, DO, pH, and turbidity at four locations within the Isleta and San Acacia reaches.	

Category 3: Technical Studies

A. Rio	Grande Silvery Minnow	
3.A.1	Develop and Utilize a Decision Tool to Test the Feasibility of Re-establishing RGSM Populations at Potential Reintroduction Locations	
	Develop a criteria-based decision tool using ranked values assigned to key parameters to help with analyzing RGSM habitat reintroduction potential for all historic occupied reaches.	
3.A.2	Identify and Assess Habitat Needs, Management Activities, and Any Major Hurdles to RGSM Reintroduction into Upper and Lower Rio Grande and Pecos River Reaches	
	To aid in reintroduction planning, identify data gaps for particular river reaches that need to be resolved before further reintroduction efforts.	
3.A.3	Assess the Persistence of Stocked Silvery Minnows Ascertain the effects of the Rio Grande Silvery Minnow augmentation program.	
3.A.4	Assessment of Native and Non-native Fish Species in the Middle Rio Grande and their Relation to Rio Grande Silvery Minnow	
	Study the interactions between RGSM and native and exotic species.	
3.A.5	Thermal and Dissolved Oxygen Tolerance of RGSM (Ecotoxicity Study) Evaluate the relationship between water quality conditions and RGSM occurrence and density.	
3.A.6	Effects of Temperature Degree Days and Photoperiod on RGSM Spawning Determine the minimum threshold, optimal, and range of temperature degree days and photoperiod that will produce spawning (initiation, peak, and completion) of RGSM when subjected to an increase in flow or stage.	SOW developed/ approved
3.A.7	Continue the Development of Population Viability Analysis (PVA) Models Continue supporting the development of PVA models to assess extinction probabilities for existing and reintroduced RGSM populations.	
3.A.8	Evaluate and Quantify in Channel Habitat Diversity and Utilization for All Life Stages of RGSM Evaluate and quantify in-channel habitat diversity to determine available RGSM	
	habitat at low flow.	
3.A.9	Evaluate and Quantify Overbank Habitat Diversity and Utilization for All Life Stages of RGSM	
	Study in more depth the dynamics of the flood pulses (timing, magnitude, duration) with RGSM responses to provide scientific basis for possible water management flow modifications to improve survival of RGSM during early life stages. Develop and evaluate methods to track fish spawning behavior. Develop and evaluated methods to quantify larval fish utilization of floodplain habitats.	
3.A.10	Effects of Sediment Management to River Habitats To continue evaluating the larval fish in overbanked areas, and how the amounts of sediment with various flows may deter, or in cases be advantageous	

	to larval fishes should be determined	
RGS	M Genetics	
3.A.11	Development of High-Throughput Markers for RGSM	Contracted
3.A.12	Evaluation of Paired Spawning and Communal Spawning for Rio Grande Silvery Minnow	
	Initiate paired spawning pilot studies and compare to communal spawning methods.	
3.A.13	PIT Tagging and Genetic Characterization of Broodstock	
	Characterize genotypes of identified RGSM individuals in the captive population using available markers and new markers as they become available.	
3.A.14	Genetic Comparison of RGSM Eggs/Larvae Collected on the Floodplain to those Collected in the Main Channel	
3.A.15	Comparison of Environmental Conditions Experience by RGSM in Hatchery Facilities to those Experienced in the Middle Rio Grande	
	Compare the genetics of RGSM eggs/larvae collected in the main channel of the river to RGSM eggs/larvae collected in on the floodplain.	
3.A.16	RGSM Genetics over Time in Hatchery Facilities	
1	Follow each cohort of RGSM genetically as they arrive at the facility and over time.	
B. Avia	n Studies	
3.B.1	Water Requirements for SWFL and YBCU Habitat and Nesting	
	Better understand the effects of timing, distribution, and abundance of water on SWFL and YBCU reproduction.	
C. Hab	itat Planning	
3.C.1	Use modeling tools (e.g., FLO-2D and HEC-RAS) to estimate frequency and extent of overbank inundation and in-channel habitat in the MRG	
	Continue development and presentation of hydrologic models.	
D. Othe	er	
3.D.1	Impacts of Climate Change on MRG Water and Species Management	
	Evaluate future water management strategies in the context of projected climate change along the MRG.	
3.D.2	Using URGWOM to Evaluate Future Water Management Strategies	
	Analyze water resources and ecosystem impacts resulting from potential changes in water management along the MRG.	

Category 4: Monitoring

A. Rio Grande Silvery Minnow		
4.A.1	Conduct RGSM Monitoring At 10(j) Reintroduction Sites to evaluate stocked populations	Ongoing

	Monitor and assess wild and captive propagated RGSM genetics in order to provide critical information to minimize genetic risks of	Ongoing
4.A.3	supplementation/augmentation of RGSM from captive stocks. RGSM Spawning Monitoring Acquires spatial and temporal information on the reproductive output of RGSM in the MRG.	Contracted, Ongoing
4.A.4	Continue RGSM Population Monitoring Determine long-term and short-term trends in fish populations of the MRG using statistical approaches; Evaluate the influence of discharge timing, magnitude, and duration on fish populations; Examine spatial correlation of RGSM population dynamics over time.	Contracted, Ongoing
4.A.5	Consolidate and refine a RGSM Fish Monitoring Plan	

Category 5: Management

A. Rio	Grande Silvery Minnow	
5.A.1	Continue RGSM Augmentation and Monitoring	Contracted, Ongoing
5.A.2	Optimize Survivorship of RGSM During Transportation and Stocking For Post-Release Retention At Reintroduction and Augmentation Sites Investigate impacts of stressors to RSGM during transport and stocking efforts, and how to minimize them.	
5.A.4	Support the Annual Update to Revise Controlled Propagation and Augmentation Plans for the Rio Grande silvery minnow	Ongoing
5.A.5	RGSM Egg Collection	Contracted, Ongoing
5.A.6	RGSM Rescue/Salvage	Contracted, Ongoing
B. Avia	n	
5.B.1	Develop a Program Flycatcher and Cuckoo Habitat Management Plan	
C. Habitat Restoration		
5.C.1	Develop a Habitat Restoration/Maintenance Plan and Design	
5.C.2	Continued Support for Habitat Restoration Implementation	Ongoing
5.C.3	Habitat Restoration Maintenance and Adaptive Management Reduce the cost of habitat restoration through active monitoring and adaptive	

	management and maintenance at MRGESCP funded restoration projects	
5.C.4	Maximizing Success for Habitat Restoration Projects by Optimizing Alternatives for Active Re-vegetation, Supplemental Watering, and Other Management Activities	
	Analyze existing data and produce specific recommendations for appropriate site-specific considerations and techniques.	
5.C.5	Habitat Restoration Revegetation Techniques	
	Compare habitat restoration techniques that establish native vegetation using active planting versus allowing for natural revegetation	
5.C.6	Evaluate and apply modification to habitat management projects as necessary	
D. Fut	ture Planning	
5.D.1	Develop Options to Benefit Rio Grande Silvery Minnow Predict how different water management scenarios will affect river flows and reservoir storage to develop short-term and long-term predictions of the key	
	drivers of RGSM population dynamics.	
5.D.2	Develop Options to Benefit Southwestern Willow Flycatcher	
	Predict how different water management scenarios will affect river flows and reservoir storage to develop short-term and long-term predictions of the key drivers of SWFL population dynamics.	
E. Oth	ner	
5.E.2	Application of Rio Grande Riparian Groundwater Models to Support the Endangered Species Collaborative Program and Water Operations Assessments	

Category 6: Public Outreach

A. Planning				
6.A.1	Program Messaging and Re-Branding Help the Program with developing external communication strategies to various audiences.			
6.A.2	Develop and implement the Program's external communication plan			
B. Activities				
6.B.1	Contribute to the development of the Program's Annual Report	Ongoing		
6.B.2	Develop MRGESCP Education and Outreach Materials			

Scientific Guidelines Middle Rio Grande Endangered Species Collaborative Program

Purpose

To establish guidelines for professional scientific behavior among the Middle Rio Grande Endangered Species Collaborative Program (Program) signatories and participants that signatories and participants are expected to adhere to.

These scientific guidelines will apply to the conduct and management of scientific activities by and on behalf of the Program signatories. All Program participants—including, but not limited to, committee members, work group members, contractors, and signatory representatives—are expected to adhere to these guidelines when they: conduct Program-related studies; review reports and scientific findings; engage in discussions; and present, manage, or utilize information resulting from scientific activities.

A rigorous scientific process leads to better data, better analysis, and ultimately, better decisions. A process for pursuit of scientific knowledge that does not incorporate standards of conduct results in misunderstanding, poor analysis, and decisions based on faulty science. The scientific method by definition is a systematic set of principles and procedures that involves careful observation, rigorous skepticism, formulating and testing hypotheses (assumptions), and the development of information (data) that can be used to assess responses to various actions. It is a counter approach to embracing decisions based on intuition, beliefs or assumptions. Our goal is to create a state of learning through the collection of data to assist in developing facts and ultimately improved information to assist in decision-making. Utilizing the scientific method in a process of systematically developing knowledge based on the collection of observations, research, and experimentation carried on in order to determine the nature or principles of the area of study is critical.

This document serves to supplement, not replace, the 2010 MRGESCP Scientific Code of Conduct. This document is meant to detail the discussions of the Program's Executive Committee in September 2018, and their agreement to work towards a better culture for objective science.

Scientific Process Principles

The MRGESCP science program should be:

- Interdisciplinary
- Interagency
- Collaborative
- Evidence-based
- Transparent and open
- Management-relevant

To the best of their ability, all Program participants performing or managing scientific activities, or applying resulting information, shall foster an environment of sound scientific process. Elements of such an environment include:

- Following the communication principles adopted by the Executive Committee at the April 2017 retreat.
- Being open-minded, skeptical, and without preconceptions in the spirit of scientific inquiry.
- Having honest conversations around scientific studies and results.
- Creating a forum for civil discourse about the development, acquisition, and use of data and knowledge gained from applied and research science.
- Disagreeing in a professional manner, and when providing and receiving feedback, be mindful that critiques are not personal attacks.
- Being open to and participating in evaluation of one's work, including peer reviews.
- Questioning and understanding the assumptions underlying scientific opinions.
- Encouragement to publish in reputable scientific peer-reviewed journals.
- A common set of guidelines for all scientists in the Program.
- Transparency and openness in sharing data, results, and methodologies.
- Accountability to these principles, the Scientific Code of Conduct, and administrative deadlines and processes.

Program Science Workshop November 14th, 2018

WEST's Primary Takeaways:

- 1. The MRGESCP operates under no legal authority mandated by the Federal Advisory Committee Act or Congress, as other programs do.
- 2. Other programs emphasized the importance of distinguishing between need-to-know hypotheses and want-to-know hypotheses.
- 3. Work plans, and other significant documents, should be developed with everyone's involvement (all stakeholders).
- 4. Structured decision making tools are valuable for navigating complex decisions.
- 5. Other programs are careful to react deliberately to new information, with consideration for long-term planning.
- 6. Conceptual ecological models and effect analyses are useful to identify decision points and critical uncertainties.
- 7. Maintain separation between science and the policy makers. One group does not always necessarily agree with the other, however they continue to work together.
- 8. All hypotheses are put on equal footing.
- 9. Science communication needs to happen at all levels, to all participants, with consideration for the audience (time, detail, etc.).









PRESENTATION OF

"2016 Biological and Conference Opinion for the Bureau of Reclamation, Bureau of Indian Affairs, and Non-Federal Water Management and Maintenance Activities on the Middle Rio Grande, New Mexico" (2016 BO) December 2, 2016

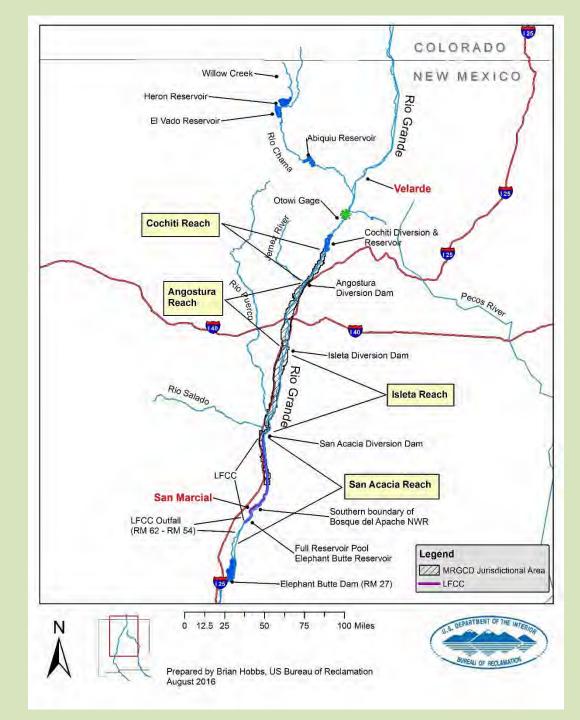
To the Middle Rio Grande Endangered Species Collaborative Program Executive Committee

November 28, 2018

Basics

- August 31, 2015 Reclamation submitted Biological Assessment to Service
- Additional materials were provided to supplement BA in 2016 along w/meetings
- BA included proposed actions of Reclamation (BOR), Bureau of Indian Affairs (BIA), State of New Mexico (OSE/ISC), and Middle Rio Grande Conservancy District (MRGCD)
- December 2, 2016: 15-Year Opinion issued
- Non-jeopardy determination

Action Area



What were the Proposed Actions?

Continuation of ongoing water management

- Operate under San Juan Chama Project contracts (BOR)
- Operate El Vado for storage and release (BOR)
- Notify Reclamation of water needs for Pueblos (BIA)
- Operate MRG Project diversion dams for agricultural deliveries; Operate drains/wasteways; and, Request El Vado operations for District (MRGCD)
- Compact-related relinquishment of NM credit water;
 Administer surface water and groundwater resources;
 and continue to issue permits for domestic, livestock,
 and temporary uses (OSC/ISC)

Proposed Actions, continued

River Maintenance (BOR, MRGCD, and State)

- River and infrastructure maintenance and restoration
- Low Flow Conveyance Channel (LFCC)
- Delta Channel of Elephant Butte Reservoir
- Support activities including roads, storage yards, etc.
- Diversion dams, conveyance channels, and facilities maintenance
- Habitat restoration projects

Offsetting/Conservation Measures

- Over 80 specific offsetting and conservation measures were provided in BA
- The Service combined both offsetting and conservation measures and analyzed the proposed action (BO Table 1) to reach the non-jeopardy decision
- Four main concerns of the Service for the silvery minnow were addressed in the measures:
 - Survival and recovery of silvery minnow
 - River connectivity
 - Large scale habitat restoration primarily within Isleta and San Acacia reaches
 - Establishment of conservation storage

Effects Determination

- The US Fish and Wildlife Service (Service)
 concurred that the proposed actions are likely to
 adversely affect the Rio Grande Silvery Minnow,
 the Southwestern Willow Flycatcher, and the
 Yellow-billed Cuckoo.
- The Service concurred that proposed actions may affect but are not likely to adversely affect the New Mexico Meadow Jumping Mouse (with conditions) and the Pecos Sunflower (with conditions).

Additional BO Elements

- Incidental Take Statement (ITS) with Terms and Conditions
- Amount or Extent of Take
- Effect of the Take
- Reasonable and Prudent Measures
- Terms and Conditions
- Conservation Recommendations
- Reinitiation Notice

Incidental Take - RGSM

Compliance >		2016 BiOp is in effect	RGSM ITS Authorized	RGSM ITS Authorized	RGSM ITS Authorized
Criteria >		<= 15 years	10	5	2
Counts >	15	2	2	0	0
<u>15</u>	<u>2030</u>				
14	2029				
13	2028				
12	2027				
11	2026				
10	2025				
9	2024				
8	2023				
7	2022				
6	2021				
5	2020				
4	2019				
3	2018				
2	2017	23.17	yes	no	no
1	2016	7.2	yes	no	no
Row Number	Year	density $(E(x))$ as fish per 100 m ²	per 100 m ² ?	fish per 100 m ² ?	$0.3 \text{ fish per } 100 \text{ m}^2$?
		Program October RGSM estimated	than or equal to 1 fish	Column C) less than 1	Column C) less than
		RGSM Population Monitoring	Column C) greater	Is the result (in	Is the result (in
		Enter below the overall result of the	Is the result (in		

Incidental Take - SWFL

		Annual territories displaced as a result	Acres of suitable SWFL
Row Number	Year	of the Proposed Action	habitat impacted
1	2016	0	0
2	2017	2	1
3	2018		
4	2019		
5	2020		
6	2021		
7	2022		
8	2023		
9	2024		
10	2025		
11	2026		
12	2027		
13	2028		
14	2029		
<u>15</u>	<u>2030</u>	_	-
Counts >	15	2	1
			≤2,071 acres over 15
Criteria		≤26 per year	years
Compliance		SWFL ITS Authorized	SWFL ITS Authorized

Incidental Take - YBCU

Row Number	Year	Annual territories displaced as a result	Acres of suitable YBCU
		of the Proposed Action	habitat impacted
1	2016	0	0
2	2017	1	0.7
3	2018		
4	2019		
5	2020		
6	2021		
7	2022		
8	2023		
9	2024		
10	2025		
11	2026		
12	2027		
13	2028		
14	2029		
<u>15</u>	<u>2030</u>	-	-
Counts >	15	1	0.7
Criteria		≤11 per year	≤2,071 acres over 15
			years
Compliance		YBCU ITS Authorized	YBCU ITS Authorized

Full Steam Ahead

- Since 2016, the BA Partners have begun implementation of projects with prioritization on projects with imposed deadlines.
 - Lower Reach Plan
 - Due and completed in June 2018
 - An annotated list of projects within Isleta and San Acacia reaches
 - Planning and Permitting initiated for a number of BO commitments and on the ground work began as early as 2017.

Projects - Water Operations

- North Boundary Hub
- Low Flow Conveyance Channel
- Pilot Native Water Leasing Program
- Socorro Main Canal South Distribution Hub
- Supplemental Water Program
- Operations of MRGCD Outfalls
- Construction of Gauging Stations
- Water Operations Calls and Coordination (MAT)

Projects - Habitat Restoration and River Maintenance

- Escondida
- Rhodes Property
- Sevilleta NWR
- San Acacia Overbank Projects
- River Mile 60
- BDA Realignment
- Delta Channel Work
- Monitoring and Maintenance of Existing Sites
- San Pasqual Fire

Projects - River Connectivity/Fish Passage

- San Acacia Diversion Dam
 - Pilot Project
 - Long Term River Connectivity
- Isleta Diversion Dam
- Angostura Diversion Dam

BO-Related Projects and Studies

- Hydrographic Data Collection and Modeling
- Species and Habitat Monitoring
- RGSM Genetics and Propagation
- RGSM Salvage
- MRGCD Outfall Monitoring
- Basin Study (not a BO requirement)

Streamlined Project Implementation

- Most of the projects/activities that are covered in the BO can be completed without going through the full BA/BO process.
 - Memo is sent to the Service
 - Does not preclude need for other permits (404, NEPA, etc)
 - Non-BO partners can also be covered if the project supports BO-related activities
- Some large-scale projects require further ESA consultation
 - Bernardo Siphon, Fort Craig to RM 60, LFCC modification

Adaptive Management

- Habitat Restoration
- River Connectivity
- River Integrated Operations (RIO)
 - Hydro-Biological Objective Analysis and Recommendations
 - Eventual integration of RIO and MRGESCP
 Adaptive Management Program

US Army Corps of Engineers Middle Rio Grande Projects

Michael Porter

Fishery Biologist Albuquerque District November 28, 2018





US Army Corps of Engineers BUILDING STRONG® and Taking Care of People!



San Acacia Levee

- Biological Opinion 2013
- Supplemental BO 2015

Table 5.4. Net change in floodway and 10%-chance floodplain area due to construction of new levee.

Reach	Reach length (mi.)	Net change in area (acres)	Type
Start (40+00) to BDANWR	28.3	+82.3	Floodway
BDANWR	11.3	-8.1	Floodway
BDANWR to 2133+00	1.5	+0.8	Floodway
Net change in floodway	41.1	+75.0	
East Side Excavation (bench)	E-	+9.3	10%-chance
Sta. 2133+00 to RR track	1.1	-1.2	floodplain
Total (net)	42.2	+83.1	





Bernalillo to Belen Levee

Biological Opinion 2018

Species	acres
Southwestern Willow Flycatcher	45
Rio Grande Silvery Minnow	110.2
Yellow-Billed Cuckoo	45
Riparian	265.8





USACE Habitat Restoration

Project	Biological Opinion / Coordination Act Report	acres
Los Lunas	2002	40
Albuq. Biopark Wetland	NA / 2003	48
Rio Grande Nature Center	2007	15
Rt. 66	2008 / 2008	121
MRG Restoration	2011 / 2010	916
Total habitat to date		1140
Sandia to Isleta	Concurrence Letter / 2018	261
San Acacia Levee	2013, 2015 / 1997	50.4
Bernalillo to Belen Levee	2018 / 2017	265.8



