

# Executive Committee Meeting

*June 5, 2019*

## Meeting Materials:

Meeting Agenda

Meeting Minutes

Middle Rio Grande Endangered Species Collaborative Program Newsletter June 2019 [not included]

Southwestern Willow Flycatcher Surveys in the Belen Reach

Draft Charter for Fiscal Planning Committee of the Middle Rio Grande Endangered Species Collaborative Program [draft]

Draft Middle Rio Grande Endangered Species Collaborative Program Structure [draft]

Mission Statement for Executive Committee Consideration

Draft Middle Rio Grande Endangered Species Collaborative Program Adaptive Management Report, Section I [draft]

Middle Rio Grande Endangered Species Collaborative Program Adaptive Management Definition



# Middle Rio Grande Endangered Species Collaborative Program

Est. 2000

## **EXECUTIVE COMMITTEE MEETING June 5, 2019 9:00 AM – 1:00 PM**

**Location:** U.S. Bureau of Reclamation  
555 Broadway Blvd NE, Albuquerque, NM 87102

**Call-in Information:**  
Call-in Number: 888-603-9814 Passcode: 25799

### **MEETING AGENDA**

8:45 – 9:00	<b>Arrival</b>	
9:00 – 9:15	<b>Welcome and Introductions</b> <ul style="list-style-type: none"><li>• Ground rules</li><li>• Discussion of group dynamics</li><li>• Agenda review</li></ul> <p>➤ <b>Decision:</b> Approval of meeting agenda</p>	<i>Co-Chairs</i>
9:15 – 9:20	<b>Past Meeting Minutes</b> <ul style="list-style-type: none"><li>• Action items from the March 2019 meeting</li></ul> <p>Read-ahead:</p> <ul style="list-style-type: none"><li><input type="checkbox"/> March 2019 Meeting Summary</li></ul> <p>➤ <b>Decision:</b> Approval of March 2019 Meeting Summary</p>	<i>Co-Chairs</i>
9:20 – 9:25	<b>Program Manager Update</b> <ul style="list-style-type: none"><li>• Newsletter updates</li><li>• Project Description: Southwestern Willow Flycatcher (SWFL) Surveys in the Belen Reach</li></ul> <p>Read-aheads:</p> <ul style="list-style-type: none"><li><input type="checkbox"/> June 2019 MRGESCP Newsletter</li><li><input type="checkbox"/> Project Description: SWFL Surveys</li></ul> <p>➤ <b>Decision:</b> Direct the Science and Habitat Restoration Work Group to develop the SWFL Survey project description into a full scope of work</p>	<i>WEST</i>
9:25 – 9:35	<b>Hydrology Update</b> <p>Read-ahead:</p> <ul style="list-style-type: none"><li><input type="checkbox"/> June 2019 MRGESCP Newsletter</li></ul>	<i>Jennifer Faler, Reclamation Ryan Gronewold, USACE David Gensler, MRGCD</i>

9:35 – 9:45	<b>By-Laws Ad Hoc Group Update – Fiscal Planning Committee (FPC) Charter</b>  Read-ahead: <ul style="list-style-type: none"> <li><input type="checkbox"/> Draft FPC Charter</li> <li><input type="checkbox"/> Draft Program Structure</li> <li>➤ <b>Decision:</b> Approve the FPC charter</li> <li>➤ <b>Action Item:</b> Convene the FPC</li> </ul>	<i>WEST</i>
9:45 – 9:55	<b>Break</b>	
9:55 – 10:25	<b>By-Laws Ad Hoc Group Update – Mission Statement</b> <ul style="list-style-type: none"> <li>• Discussion on the proposed and existing mission statements</li> </ul> Read-aheads: <ul style="list-style-type: none"> <li><input type="checkbox"/> Draft Proposed Mission Statement</li> <li><input type="checkbox"/> Existing MRGESCP Mission Statement</li> <li>➤ <b>Decision:</b> Adoption of mission statement</li> </ul>	<i>Co-Chairs</i>
10:25 – 12:30	<b>Draft Section 1. Critical Elements MRGESCP Adaptive Management Implementation Plan</b> <ul style="list-style-type: none"> <li>• Introduction to the document (10:25 – 10:35)</li> <li>• Discussion and next steps (10:35 – 12:30)</li> </ul> Read-aheads: <ul style="list-style-type: none"> <li><input type="checkbox"/> Draft Section 1. Critical Elements of MRGESCP Adaptive Management Implementation Plan</li> <li><input type="checkbox"/> MRGESCP Adaptive Management definition</li> <li>➤ <b>Decision:</b> EC direction</li> </ul>	<i>Co-Chairs</i>  - <i>WEST</i> - <i>Executive Committee</i>
12:30 – 12:40	<b>Announcements</b> <ul style="list-style-type: none"> <li>• Habitat Restoration Field Trip, June 11, 2019 with New Mexico Interstate Stream Commission and Geosystems Analysis. Contact Chad (chad@gsanalysis.com) for more information and details.</li> <li>• Others?</li> </ul>	
12:40-12:50	<b>Public Comment</b>	
12:50 – 1:00	<b>Action Items and Next Steps</b> <ul style="list-style-type: none"> <li>• Action Item Review</li> <li>➤ Next proposed Executive Committee meeting: August 28, 2019</li> </ul>	<i>Co-Chairs</i>
1:00	<b>Adjourn</b>	



# Middle Rio Grande Endangered Species Collaborative Program

*Est. 2000*

## Executive Committee (EC) Meeting Minutes

**June 5, 2019; 9:00 AM – 1:00 PM**

**Location: U.S. Bureau of Reclamation; 555 Broadway Blvd NE**

### Decisions:

- ✓ Approval of June 5, 2019 EC meeting agenda
- ✓ Approval of May 27, 2019 EC meeting minutes as amended, with the exception of the summary of the Albuquerque Bernalillo County Water Utility Authority's (ABCWUA) Biological Opinion presentation
- ✓ Approval for the Science and Habitat Restoration Work Group (ScW/HR) to develop a Scope of Work (SOW) for Southwestern Willow Flycatcher (SWFL) Surveys in the Belen Reach
- ✓ Approval of the Fiscal Planning Committee (FPC) charter as amended
- ✓ Approval to adopt the proposed Middle Rio Grande Endangered Species Collaborative Program (MRGESCP or Program) mission statement with amendments

### Action Items:

WHO	ACTION ITEM	BY WHEN
ABCWUA	Provide a revision of the ABCWUA presentation summary from the May EC meeting minutes to the Program Support Team (PST)	June 14
All signatories	Send comments on the FY18 Annual Report to Julie Dickey, PST	July 17
All non-federal signatories	Send FY19 cost share information to Julie Dickey, PST	October 22
ScW/HR and PST	Develop the SWFL Surveys in the Belen Reach project description into a full SOW for EC consideration	August 28
PST	Send the EC agenda items for the first FPC meeting and convene the FPC	June/July
PST	Incorporate the new mission statement into the Program by-laws and other key Program documents	ASAP
All signatories	Submit comments on Section 1 of the Adaptive Management Framework to Debbie Lee	June 14
U.S. Fish and Wildlife Service (USFWS)	Provide language to PST regarding regulatory requirements in the Adaptive Management Framework	June 14
Adaptive Management Work Group (AMWG) and PST	Revise Section 1 of the Adaptive Management Framework, including incorporating a schedule; and develop the draft of Section 2 of the Adaptive Management Framework for EC review	Late Sept/ early October

**Next Meeting:** Wednesday, August 28, 2019, 9:00 AM to 3:00 PM; Location: TBD

## Meeting Summary

### Welcome and Introductions

*Agenda review*

*Ground rules*

*Discussion of group dynamics*

The co-chairs, Janet Jarratt, Assessment Payers Association (APA) of the Middle Rio Grande Conservancy District (MRGCD), and Jennifer Faler, U.S. Bureau of Reclamation (Reclamation), called the meeting to order, covered the ground rules, and initiated introductions.

The co-chairs led a conversation on group dynamics, noting that they have been informed that Program participants were raising concerns with the Program Support Team (PST) that were not being voiced publically at meetings. The Program is intended to be an open forum. Everyone's input is invited on how to improve open discussion. Julie Dickey, PST, stressed the importance of whole group discussions and reiterated WEST's PST role as program and science support as a neutral third party. Comments included:

- When conversations turn into arguments, people tend to retreat because the atmosphere feels unproductive
- In some situations, people want to consider issues and check facts before speaking, therefore it may be valuable to submit written comments after the fact or revisit some subjects later
- Some issues that need resolution are discussed repeatedly with no resolution made
- Sometimes people don't take the time to hear what others are saying or why there are different positions, making it difficult to communicate and move forward
- Moving toward an active listening culture would facilitate progress based on facts and background
- PST's role is to facilitate the Program's conversations
- Occasionally people express concerns to the PST, but when an opportunity to discuss the issue with group is presented, there is silence from the members who expressed the concern and no progress is made toward resolution.
- People should reach out to the co-chairs, not just the PST, with concerns

➤ **Decision:** Approval of June 5, 2019 EC meeting agenda

### Past Meeting Minutes

*Action items from the March 2019 meeting*

The co-chairs reviewed the May 2019 EC meeting minutes and related action items. Kate Mendoza, ABCWUA, expressed that ABCWUA would like to revise the summary of the ABCWUA presentation from the May meeting.

The EC agreed to clarify on page 5 of 9 that the topic of recovery plans at a future meeting is specifically for Rio Grande silvery minnow (RGSM).

- ✓ **Decision:** Approval of May 27, 2019 EC meeting minutes as amended, with the exception of the summary of the ABCWUA's Biological Opinion presentation
- ✓ **Action item:** ABCWUA will provide a revision of their presentation summary from the May EC meeting minutes to the PST

## **Program Manager Update**

### *Newsletter updates*

#### *Project Description: Southwestern Willow Flycatcher (SWFL) Surveys in the Belen Reach*

Debbie Lee, PST, announced that FY18 Annual Report comments are due by July 17<sup>th</sup> and non-federal cost share information is due by October 22<sup>nd</sup>. Debbie then introduced a project description developed by the ScW/HR to carry out SWFL surveys in the Belen reach. She noted that due to funding limitations, that area would not be surveyed in 2019, and that the scope of work (SOW) would be for 2020 and beyond. One EC representative voiced support for the SOW, noting the value of the SWFL surveys and expressed interest in finding funding for 2020 and beyond. There was a comment that the yellow-billed cuckoo (YBCU) should be included in the surveys. Addressing a question on the possibility of Animal Plant Health Inspection Service (APHIS) funding the project, Julie indicated the Fiscal Planning Committee (FPC) would discuss the issue.

- ✓ **Decision:** Approval for the ScW/HR to develop a SOW for SWFL and YBCU Surveys in the Belen Reach
  
- **Action item:** All signatories will send comments on the FY18 Annual Report to the PST
- **Action item:** All non-federal signatories will send FY19 cost share information to the PST by October 22, 2019
- **Action item:** The ScW/HR and the PST will develop the SWFL and YBCU Surveys in the Belen Reach project description into a full SOW for EC consideration

## **Hydrology Update**

Jennifer F.; Ryan Gronewold, U.S. Army Corps of Engineers (USACE); and David Gensler, MRGCD, presented the hydrology update. A handout of the “buckets” indicating reservoir storage as of June 2<sup>nd</sup> was provided to the EC. Updates included the following:

- 2019 has been an above average year in terms of snowpack runoff, but not wildly so
- Abiquiu has been in flood operations since mid-April, and will continue to be so until June 30
- More water will be stored in El Vado than planned
- It is hoped to not be in a Compact debit in 2019
- There will probably not be a need for supplemental water until August
- Depending on the monsoons, supplemental water may not be needed
- Inundation and overbanking have occurred since mid-April
- There was a levee breach at the Elephant Butte delta the end of the week of May 27<sup>th</sup> which was repaired over the weekend thanks to a joint effort by Reclamation and USFWS
- On July 1<sup>st</sup>, any flood water still in storage at Cochiti and Abiquiu will be locked in storage and cannot be used for irrigation

Grace Haggerty, New Mexico Interstate Stream Commission (NMISC), added that RGSM are responding to the flows and that larval fish were collected throughout May. Not many eggs were present for the propagation facilities at the City of Albuquerque BioPark, but there are some efforts to collect young-of-the-year or larval fish for them to use.

## **By-laws Ad Hoc Group Update – Fiscal Planning Committee (FPC) Charter**

Julie D. provided highlights on the FPC charter meeting. She noted that every signatory is invited to send representatives to FPC meetings. The FPC meeting schedule is still to be determined, but will fit with funding deadlines. Changes regarding funding and commitments from the USACE were reviewed. A suggestion was made to edit the 3<sup>rd</sup> bullet of the FPC charter to increase proactivity among EC participants regarding the agenda.

There was a brief discussion on convening the FPC. It will convene prior to the next EC meeting (which is scheduled for August). A topics list will be formed and circulated to the EC, and the EC representatives

will direct the appropriate signatory staff to participate. There was concern about the FPC's place in the Program's organizational chart and the frequency at which it should meet. Their place in the organizational structure is still to be determined, but the roles and responsibilities are set. The charter calls for the FPC to meet quarterly and then as needed. Unfunded or partially funded projects would go to this group in the priority that the EC has set.

- ✓ **Decision:** Approval of the FPC charter as amended
- **Action item:** The PST will send the EC agenda items for the first FPC meeting and will convene the FPC.

### **By-laws Ad Hoc Group Update – Mission Statement**

#### *Discussion on the proposed and existing mission statements*

Janet J. provided background on the mission, which has been modified throughout the years. The new version of the mission statement reflects what the Program has always done: it provides support to individual organizations. The following comments were made during the conversation:

- Two signatories noted a preference for the specificity of the old mission statement with regard to water rights and species/ecosystem language
  - It was stated that the newly proposed mission statement does not have to be specific, that the old language is implied, and that the mission statement can be changed in the future
- ✓ **Decision:** Approval to adopt the proposed MRGESCP mission statement with amendments
  - **Action item:** The PST will incorporate the new mission statement into the Program by-laws and other key Program documents

### **Draft Section 1. Critical Elements MRGESCP Adaptive Management Implementation Plan**

#### *Introduction to the document*

Dave Wegner, PST, began with general comments regarding Sections 1 and 2 of the Adaptive Management Implementation Plan. He noted that Section 1 serves as an executive summary while Section 2 is a more detailed document. There are areas of concern in Section 1 that need to be addressed. Once Section 1 is approved, work can proceed on Section 2. The four key areas for discussion in Section 1 are:

- Role of science in decision-making
- Authority and mission
- Organization
- Roles and responsibilities

#### *Discussion and next steps*

The discussion addressed whether the framework presented in Section I was sufficient to move forward with next steps. Several EC members commented on the need for more structure in Section 1. Specifically, individuals suggested including a calendar or schedule of milestones—such as when the plan will be updated—to drive the adaptive management cycle forward, and measurable goals and success metrics. Another member voiced the need for a fixed plan to develop Section 2. Dave W. noted that there have been efforts to lay out plans in the context of the triennial and annual work plans in Section 2. Phase 1 on page 12 of Section 1 lays out summarized proposed actions for the EC for the next 12 months.

The discussion migrated to details of the Independent Science Panel (ISP). The EC discussed the role of the ISP and its place in the Program structure. One member voiced the opinion that the ISP should be directly linked to the Adaptive Management Committee (AMC) and the EC. One member suggested that the ISP could function as an oversight committee to the AMC (i.e., the ISP would be reviewing the work

of the AMC). Another member noted a concern about the potential high cost of convening an ISP, and that it should be reserved for addressing situations the Program cannot resolve itself. In response, a few individuals informed the group that the other riverine programs (e.g., Columbia River Basin, San Juan) have fully vetted panels on retainer to consult on certain projects and where there are conflicts of interest, and that it is not onerous to solicit external review. One participant suggested that the FPC find funding for an ISP so that it would be ready when needed. A member saw a role for an ISP given the current degree of disagreement.

There was a request for more clarity on how the adaptive management process would work. One member suggested developing a scenario (either real or hypothetical) to walk through the adaptive management process. A participant informed the group that there were relatively few examples of the “learn” part of the AM cycle, but there were some conceptual models developed at the AM workshop put on by the USACE Engineer Research and Development Center (ERDC) in 2017.

One EC member observed that Section 1 is more reflective of a framework than critical elements, and suggested the document name be changed to reflect that. This signatory also said management strategies should be included in Section 1 to address the “why” in the action component, and that the management strategies should be determined before moving on to Section 2.

- **Action item:** All signatories will submit comments on Section 1 of the Adaptive Management Framework to Debbie Lee
- **Action item:** The USFWS will provide language to the PST regarding regulatory requirements in the Adaptive Management Framework
- **Action item:** The AMWG and the PST will revise Section 1 of the Adaptive Management Framework, including incorporating a schedule; and develop the draft of Section 2 of the Adaptive Management Framework for EC review

### **Announcements**

The NMISC and Geosystems Analysis are hosting a habitat restoration site tour scheduled for June 11, 2019. The van trip will feature the San Acacia Reach and focus on SWFL habitat. Contact Grace H. with questions regarding the van trip. There may be another river trip if sufficient interest is expressed.

Dale Caswell, USACE, announced that John Drake is the new Deputy District Engineer for Programs and Project Management in the Albuquerque District of the USACE.

Kim Eichhorst, Bosque Ecosystem Monitoring Program (BEMP), invited members to join monitoring field trips with BEMP during the summer.

### **Public Comment**

No public comments were provided.

### **Action Items and Next Steps**

#### *Action item review*

- Next EC meeting: August 28, 2019; 9:00 AM – 3:00 PM; location TBD

### **Adjourn**



## Meeting Participants

### Participant

### Organization

Janet Armstead	Western EcoSystems Technology, Inc.
Kim Bannerman	Department of Interior Solicitor's Office
Adele Cadenas de Malott	U.S. Environmental Protection Agency
Dave Campbell	U.S. Fish and Wildlife Service
Rick Carpenter	Buckman Direct Diversion
Larry Dale Caswell	U.S. Army Corps of Engineers
Clayton Derby	Western EcoSystems Technology, Inc.
Julie Dickey	Western EcoSystems Technology, Inc.
John Drake	U.S. Army Corps of Engineers
Kim Eichhorst	Bosque Ecosystem Monitoring Program
Jennifer Faler	U.S. Bureau of Reclamation
Danielle Galloway	U.S. Army Corps of Engineers
David Gensler	Middle Rio Grande Conservancy District
Lynette Giesen	U.S. Army Corps of Engineers
Ryan Gronewold	U.S. Army Corps of Engineers
Grace Haggerty	New Mexico Interstate Stream Commission
Kyle Harwood	Buckman Direct Diversion
Alan Hatch	Pueblo of Santa Ana
Brian Hobbs	U.S. Bureau of Reclamation
Derek Jarner	Pueblo of Isleta
Janet Jarratt	Assessment Payers Association of the Middle Rio Grande Conservancy District
Debbie Lee	Western EcoSystems Technology, Inc.
Alex Levine	Bosque Ecosystem Monitoring Program
Gabrielle Lucero	Pueblo of Isleta
Mike Marcus	Assessment Payers Association of the Middle Rio Grande Conservancy District
Anne Marken	Middle Rio Grande Conservancy District
Kate Mendoza	Albuquerque-Bernalillo County Water Utility Authority
Susan Millsap	U.S. Fish and Wildlife Service
Page Pegram	New Mexico Interstate Stream Commission
Matthew Peterson	City of Albuquerque Open Space Division
Micky Porter	U.S. Army Corps of Engineers
Chris Shaw	New Mexico Interstate Stream Commission
Ashley Tanner	Western EcoSystems Technology, Inc.
Paul Tashjian	Audubon New Mexico
Tom Turner	University of New Mexico
Rich Valdez	SWCA Environmental Consultants
Cody Walker	Pueblo of Isleta
Dave Wegner	Western EcoSystems Technology, Inc.
Jim Wilber	U.S. Bureau of Reclamation
Leann Woodruff	U.S. Bureau of Reclamation
Matthew Wunder	New Mexico Department of Game and Fish



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- ✓ **Decision:** Approval of the FPC charter as amended
- **Action item:** The PST will send the EC agenda items for the first FPC meeting and will convene the FPC.

#### **By-laws Ad Hoc Group Update – Mission Statement**

##### *Discussion on the proposed and existing mission statements*

Janet J. provided background on the mission, which has been modified throughout the years. The new version of the mission statement reflects what the Program has always done: it provides support to individual organizations. The following comments were made during the conversation:

- Two signatories noted a preference for the specificity of the old mission statement with regard to water rights and species/ecosystem language
- It was stated that the newly proposed mission statement does not have to be specific, that the old language is implied, and that the mission statement can be changed in the future

- ✓ **Decision:** Approval to adopt the proposed MRGESCP mission statement with the following amendments:
  - Replace “ESA” with “Endangered Species Act”
  - Remove an extraneous space
- **Action item:** The PST will incorporate the new mission statement into the Program by-laws and other key Program documents

## **Draft Section 1. Critical Elements MRGESCP Adaptive Management Implementation Plan**

### *Introduction to the document*

Dave Wegner, PST, began with general comments regarding Sections 1 and 2 of the Adaptive Management Implementation Plan. He noted that Section 1 serves as an executive summary while Section 2 is a more detailed document. There are areas of concern in Section 1 that need to be addressed. Once Section 1 is approved, work can proceed on Section 2. The four key areas for discussion in Section 1 are:

- Role of science in decision-making
- Authority and mission
- Organization
- Roles and responsibilities

### *Discussion and next steps*

The discussion addressed whether the framework presented in Section I was sufficient to move forward with next steps. Several EC members commented on the need for more structure in Section 1. Specifically, individuals suggested including a calendar or schedule of milestones—such as when the plan will be updated—to drive the adaptive management cycle forward, and measurable goals and success metrics. Another member voiced the need for a fixed plan to develop Section 2. Dave W. noted that there have been efforts to lay out plans in the context of the triennial and annual work plans in Section 2. Phase 1 on page 12 of Section 1 lays out summarized proposed actions for the EC for the next 12 months.

The discussion migrated to details of the Independent Science Panel (ISP). The EC discussed the role of the ISP and its place in the Program structure. One member voiced the opinion that the ISP should be directly linked to the Adaptive Management Committee (AMC) and the EC. One member suggested that the ISP could function as an oversight committee to the AMC (i.e., the ISP would be reviewing the work of the AMC). Another member noted a concern about the potential high cost of convening an ISP, and that it should be reserved for addressing situations the Program cannot resolve itself. In response, a few individuals informed the group that the other riverine programs (e.g., Columbia River Basin, San Juan) have fully vetted panels on retainer to consult on certain projects and where there are conflicts of interest, and that it is not onerous to solicit external review. One participant suggested that the FPC find funding for an ISP so that it would be ready when needed. A member saw a role for an ISP given the current degree of disagreement.

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One EC member observed that Section 1 is more reflective of a framework than critical elements, and suggested the document name be changed to reflect that. This signatory also said management strategies should be included in Section 1 to address the “why” in the action component, and that the management strategies should be determined before moving on to Section 2.

- **Action item:** All signatories will submit comments on Section 1 of the Adaptive Management Framework to Debbie Lee
- **Action item:** The USFWS will provide language to the PST regarding regulatory requirements in the Adaptive Management Framework
- **Action item:** The AMWG and the PST will revise Section 1 of the Adaptive Management Framework, including incorporating a schedule; and develop the draft of Section 2 of the Adaptive Management Framework for EC review

### **Announcements**

The NMISC and Geosystems Analysis are hosting a habitat restoration site tour scheduled for June 11, 2019. The van trip will feature the San Acacia Reach and focus on SWFL habitat. Contact Grace H. with questions regarding the van trip. There may be another river trip if sufficient interest is expressed.

Dale Caswell, USACE, announced that John Drake is the new Deputy District Engineer for Programs and Project Management in the Albuquerque District of the USACE.

Kim Eichhorst, Bosque Ecosystem Monitoring Program (BEMP), invited members to join monitoring field trips with BEMP during the summer.

### **Public Comment**

No public comments were provided.

### **Action Items and Next Steps**

#### *Action item review*

- Next EC meeting: August 28, 2019; 9:00 AM – 3:00 PM; location TBD

### **Adjourn**

## Meeting Participants

### Participant

### Organization

Janet Armstead	Western EcoSystems Technology, Inc.
Kim Bannerman	Department of Interior Solicitor's Office
Adele Cadenas de Malott	U.S. Environmental Protection Agency
Dave Campbell	U.S. Fish and Wildlife Service
Rick Carpenter	Buckman Direct Diversion
Larry Dale Caswell	U.S. Army Corps of Engineers
Clayton Derby	Western EcoSystems Technology, Inc.
Julie Dickey	Western EcoSystems Technology, Inc.
John Drake	U.S. Army Corps of Engineers
Kim Eichhorst	Bosque Ecosystem Monitoring Program
Jennifer Faler	U.S. Bureau of Reclamation
Danielle Galloway	U.S. Army Corps of Engineers
David Gensler	Middle Rio Grande Conservancy District
Lynette Giesen	U.S. Army Corps of Engineers
Ryan Gronewold	U.S. Army Corps of Engineers
Grace Haggerty	New Mexico Interstate Stream Commission
Kyle Harwood	Buckman Direct Diversion
Alan Hatch	Pueblo of Santa Ana
Brian Hobbs	U.S. Bureau of Reclamation
Derek Jarner	Pueblo of Isleta
Janet Jarratt	Assessment Payers Association of the Middle Rio Grande Conservancy District
Debbie Lee	Western EcoSystems Technology, Inc.
Alex Levine	Bosque Ecosystem Monitoring Program
Gabrielle Lucero	Pueblo of Isleta
Mike Marcus	Assessment Payers Association of the Middle Rio Grande Conservancy District
Anne Marken	Middle Rio Grande Conservancy District
Kate Mendoza	Albuquerque-Bernalillo County Water Utility Authority
Susan Millsap	U.S. Fish and Wildlife Service
Page Pegram	New Mexico Interstate Stream Commission
Matthew Peterson	City of Albuquerque Open Space Division
Micky Porter	U.S. Army Corps of Engineers
Chris Shaw	New Mexico Interstate Stream Commission
Ashley Tanner	Western EcoSystems Technology, Inc.
Paul Tashjian	Audubon New Mexico
Tom Turner	University of New Mexico
Rich Valdez	SWCA Environmental Consultants
Cody Walker	Pueblo of Isleta
Dave Wegner	Western EcoSystems Technology, Inc.
Jim Wilber	U.S. Bureau of Reclamation
Leann Woodruff	U.S. Bureau of Reclamation
Matthew Wunder	New Mexico Department of Game and Fish





Moore, D. and D. Ahlers. 2017. 2016 Middle Rio Grande Southwestern Willow Flycatcher Study Results – Selected Sites Along the Rio Grande from Bandelier National Monument to Elephant Butte Reservoir, New Mexico. Bureau of Reclamation, Technical Service Center, Fisheries and Wildlife Resources. Denver, CO.

Sogge, M.K., Darrell Ahlers, and S.J. Sferra. 2010. A natural history summary and survey protocol for the Southwestern Willow Flycatcher: U.S. Geological Survey Techniques and Methods 2A-10. 38 pgs.

5. Relationship to Panel Recommendations:

The 2018 GSA report (GSA 2018) contains 6 panel recommendations related to the SWFL, including:

1. What site selection and prioritization procedures contribute to the successful restoration of SWFL breeding habitats along the MRG?
2. What are the impacts of the tamarisk beetle (*Diorhabda*) on SWFLs and suitable SWFL breeding habitats in the MRG?
3. Which unoccupied and occupied suitable SWFL breeding habitats in the MRG are most threatened by *Diorhabda* in the near- and long-term?
4. What are the sizes, distributions, and trends of SWFL breeding populations along the Angustora Reach?
5. What is the connectivity among SWFL populations in the MRG?
6. How similar are the YBCU and the SWFL in their breeding habitat requirements in the MRG?

These critical scientific uncertainties are interconnected; research on one informs research on the other uncertainties (GSA 2018). More specifically, research on where SWFLs and their breeding and nesting habitats are located along the river relates, in some degree, back to the all of the scientific uncertainties (GSA 2018).

6. Compliance required?  
Yes.

**Charter for Fiscal Planning Committee  
of the  
Middle Rio Grande Endangered Species Collaborative Program**

**Overview**

The Middle Rio Grande Endangered Species Collaborative Program (Program) By-laws, adopted by the Executive Committee on [DATE] as amended, define the Program's organizational structure and discuss the functions of each organizational unit, including the Executive Committee, the Fiscal Planning Committee, Adaptive Management Committee, workgroups, and the Program Support Team. On [DATE], the Executive Committee established the Fiscal Planning Committee with the directive that it report directly to the Executive Committee. The purpose of this charter is to further define the activities, roles, and responsibilities of the Fiscal Planning Committee as outlined in the By-laws.

**Purpose**

The Fiscal Planning Committee is created for the purpose of building a diverse financial support system for priority Program activities as set forth in the Long-Term Plan.

**Composition**

The Fiscal Planning Committee comprises Program Signatory representatives appointed by Executive Committee representatives. Participation may vary to adequately achieve the objectives set forth for each meeting.

**Administration**

The Program Support Team shall serve as the meeting facilitator and the single point of contact for the Fiscal Planning Committee. Responsibilities include the following administration and support duties:

- Coordinating meetings and meeting materials;
- Documenting and distributing action items and decisions;
- Providing notice to the Signatory representatives regarding meeting topics;
- Aiding to identify potential funding streams and other resources; and
- Providing Fiscal Planning Committee updates to the Program's other committees and workgroups.

**Meetings**

The Fiscal Planning Committee will meet quarterly at minimum, with additional meetings as needed to correspond with funding and other deadlines and timelines so as to fulfill its role.

**Role and Responsibilities**

The Fiscal Planning Committee's responsibilities include the following:

- Coordinate on Signatory funding capabilities (i.e. authorities, budget restraints, interests, deadlines) to support priority Program work
- Identify and pursue additional funding sources (i.e. grants, appropriations) in support of funding Program-related activities, including coordinating messaging for these efforts
- Identify other potential resources (i.e. partnerships, grants) to support Program-related project implementation
- Coordinate with other Program committees and workgroups to achieve the Fiscal Planning Committee's purpose

- Report and communicate requests to the Executive Committee on the pursuit of external funding and other resources to support Program activities

Individual signatories reserve the right to ensure appropriate use of their respective commitments consistent with applicable laws and regulations. The Fiscal Planning Committee and the Executive Committee may only make recommendations on how individual signatories allocate their respective funding, but the ultimate decision lies with the individual signatories.

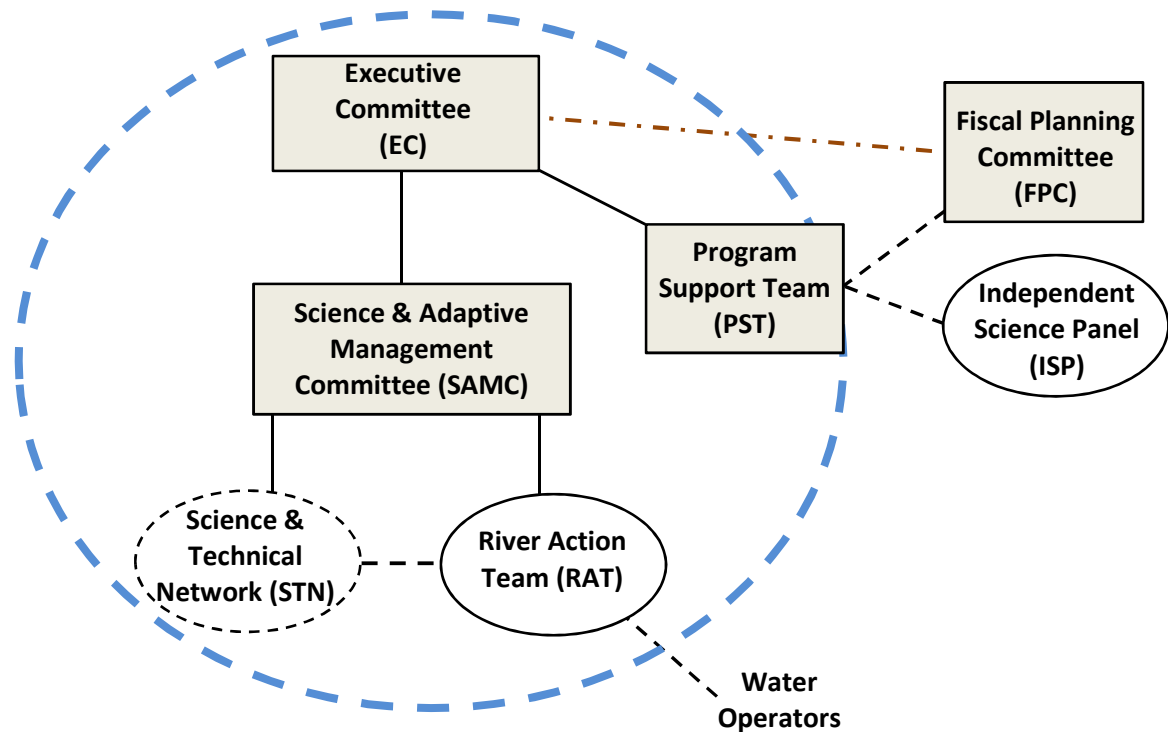
**Reporting Results and Communicating Decisions and Recommendations**

The Fiscal Planning Committee shall report to the Executive Committee the results of securing funding and other resources for priority Program activities as set forth in the Long-Term Plan, as well as the identification of any remaining funding or other resource gaps, and recommendations for opportunities to fill those gaps.

DRAFT

# MRGESCP Program Structure

The Middle Rio Grande Endangered Species Collaborative Program (MRGESCP) Executive Committee (EC) approved the following structure at the April 12, 2018 meeting. The By-laws ad hoc group was tasked with identifying the functions of and relationships between the Executive Committee (EC), Program Support Team (PST), Fiscal Planning Committee (FPC), and the Independent Science Panel (ISP). The Adaptive Management Workgroup (AMWG) was tasked with identifying the functions of and relationships between the Science & Adaptive Management Committee (SAMC), Science and Technical Network (STN), and the River Action Team (RAT).



--- PST Coordination

--- Group Communication

--- Program Recommendations

— Direct Coordination

- Direction/Requests (top-down)
- Recommendations (bottom-up)

■ Meet at regular intervals

○ Convene as needed for specialized work

○ Subgroups meet with limited charge and timeline

**Mission Statement Proposed by the By-laws ad hoc group for EC consideration**

The Middle Rio Grande Endangered Species Collaborative Program provides a collaborative forum to support scientific analysis and implementation of adaptive management to the benefit and recovery of the listed species pursuant to the ESA within the Program Area, and to protect existing and future water uses while complying with applicable state, federal and tribal laws, rules and regulations.

*To be included with the mission statement in the by-laws and other key documents:*

The Program shall not support any action that may impair state water rights or federal reserved water rights of individuals and entities; federal or other water rights of Indian nations and Indian individuals, or Indian trust assets; San Juan- Chama Project contractual rights; and the State of New Mexico's ability to comply with Rio Grande Compact delivery obligations.

**Current Mission Statement as in the By-laws**

The Program's purpose is to:

- a) prevent extinction, preserve reproductive integrity, improve habitat, support scientific analysis, and promote recovery of the Listed Species within the Program Area in a manner that benefits the ecological integrity, where feasible, of the Middle Rio Grande riverine and riparian ecosystem; and,
- b) exercise creative and flexible options so that existing uses continue and future water development proceeds in compliance with applicable federal and state laws.

## Section I.

### Critical Elements

#### Middle Rio Grande Endangered Species Collaborative Program Adaptive Management Implementation Plan

#### An Adaptive Management Work Group Product May 17, 2019

### A. INTRODUCTION

The following draft-final Implementation Strategy is separated into two sections. **Section I** is designed for the policy and decision-maker desiring an overview of the proposed adaptive management strategy. Section I introduces the primary elements and considerations concerning the structured decision-making framework for the MRGESCP adaptive management strategy, which generally describes administrative, regulatory and implementation steps. The second part of the report, **Section II** expands on topical areas in Section I with supporting documentation, background data, implementation steps, and a suggested structural organization for the MRGESCP intended to ensure the success of this adaptive management strategy for the MRG.

Terminology used throughout both sections vary depending on the aspects of adaptive management being discussed. The term *strategy* is used to reflect on the carrying out of the plan; *plan* is used to reflect on specific actions, methods and tasks necessary for implementation.

The Middle Rio Grande Endangered Species Collaborative Program (MRGESCP) was established in April 2002. The mission/purpose/goals of the MRGESCP has been captured in multiple program related documents. For this document, the defined mission follows the 2008 Memorandum of Understanding:

*The intent of the Program participants is two-fold: first, to prevent extinction, preserve reproductive integrity, improve habitat, support scientific analysis, and promote recovery of the listed species within the Program area in a manner that benefits the ecological integrity, where feasible, of the Middle Rio Grande riverine and riparian ecosystems; and second, to exercise creative and flexible options so that existing water uses continue and future water development proceeds in compliance with applicable federal and state laws.*

The Middle Rio Grande (MRG) program area is defined by the MRGESCP to include the headwaters of both the Rio Chama and the Rio Grande watersheds, including tributaries, starting at the New Mexico-Colorado state line and extending downstream to the elevation of the spillway crest of the Elephant Butte Dam (4450 feet above mean sea level).

The MRGESCP provides a forum for stakeholders to discuss direction and share information related to the management of the MRG. Stakeholders in the MRGESCP include federal and state agencies, pueblos, academic institutions, water districts, non-governmental entities, and the public. Over approximately two decades, the MRGESCP has made a significant investment in time, funding, and effort to aid water and resource managers in balancing the traditional distribution of water with environmental concerns in a changing hydrologic environment. Today's water managers face increasing uncertain challenges, including climate-altered water supplies and existing water supply infrastructure. With uncertainty comes increased risks to meeting and balancing societal demands and ecosystem needs.

To further develop and improve the MRGESCP's science-based decision-making strategy for water and resource management, the U.S. Army Corps of Engineers contracted a series of workshops in 2016 with the expressed intent to develop a science-based framework for adaptive management along the MRG (Geosystems Analysis 2018). In late 2017, the MRGESCP engaged WEST Consultants to assist the stakeholders in developing an adaptive management decision-making *strategy* with a structured and implementable plan for implementation for the MRG.

Concurrent with the MRGESCP efforts, the U.S. Fish and Wildlife Service issued a Biological Opinion (USFWS 2016) on water operations along the MRG to address Endangered Species Act (ESA) process. The action agencies (Federal and non-Federal) associated with the Biological Opinion elected to develop an independent adaptive management program. It is the intent of the MRGESCP led adaptive management effort that ongoing adaptive management programs in the MRG will be integrated, where possible.

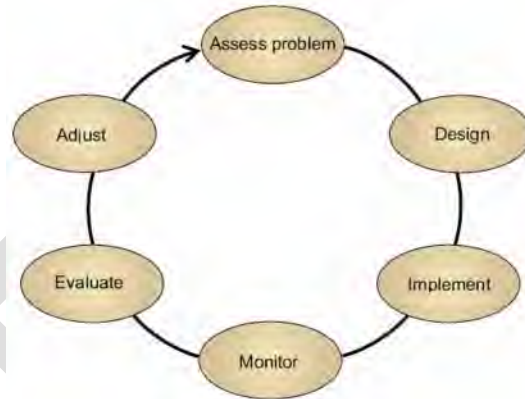
During the fall of 2017 the MRGESCP Executive Committee directed that the Adaptive Management Work Group (AMWG) be assembled from a group of stakeholder representatives to work with WEST in developing key elements of its adaptive management strategy for the MRG. On March 27, 2019, the MRGESCP directed the AMWG to prepare its *MRGESCP Adaptive Management Implementation Strategy* that reflects input and discussion from its nearly two years of work.

Both **Sections I and II** have been developed in cooperation with the *Adaptive Management Work Group*. Without their input these documents would not have been possible. As with any adaptive management program it will be a continual work in progress as new data, analyses,

driving factors, and stakeholder considerations are integrated into the science framework. Associated with this document are several recommendations for Executive Committee Consideration.

## B. Framework for the MRG Adaptive Management Strategy

Adaptive management includes a cyclic process applying the scientific method to management decisions (Figure 1) from the Department of Interiors' technical guide (Williams et al. 2009). In simple terms, adaptive management is built around planning, doing, learning. The goal for the MRG is to implement rigorous, science-based approaches to address needs for water and ESA-listed species management using hypotheses and management to identify and implement priority projects intending to reduce uncertainties and improve decision making.



**Figure 1. Adaptive management cycle**

Developing an effective MRGESCOP adaptive management plan requires (1) clear articulation of long-term management objectives, (2) defined restoration and other management actions to benefit ESA-listed species, and (3) scientific-based definitions of critical uncertainties and research priorities. Such considerations must be tempered by available funding for participating agencies, and in accordance with all applicable laws and regulations.

It should be recognized that not all tasks associated with the MRGESCOP will require a rigorous adaptive management approach. Some tasks could be simplistic such as monitoring to determine success. Other tasks may be the application of Best Available Practices (BMP's) with follow-up tracking to identify response. Adaptive management is the integration of multiple lines of inquiry and includes both technical and social (collaborative) learning.

Reviews of ongoing adaptive management programs have identified several important elements to improve the potential for success (Williams et al. 2009, Nagariar and Rauland-Rasmussen 2016, Williams and Brown 2012, Lee 1999). Assessing the status of the MRGESCOP, the following five elements are pertinent to achieving success. These five elements are discussed in more detail in Section II.

1. *A commitment to articulating authority and support* for the long-term direction and support of the MRGESCOP.



2. *A set of bylaws* that specifically defines and outlines the authorization for program implementation and work group responsibilities
3. *Approving an adaptive management strategy* that can be implemented with feedback loops to ensure it is meeting Executive Committee objectives and direction
4. *Developing a Triennial Work Plan* into which the agencies and stakeholders can integrate necessary monitoring (both regulatory compliance and effectiveness requirements), applied and targeted science tasks, and appropriate water and species management directed modeling.
5. *Integration of pertinent elements* from ongoing adaptive management programs and scientific efforts associated with either regulatory, academic or agency directed actions in the MRG.

### **C. Administrative Framework for MRG Adaptive Management**

The MRGESCP continues to be a stakeholder driven approach dependent upon collaborative agreements to coordinate and consider issues of importance concerning water management and species management in and along the MRG. There is concern in the Adaptive Management Work Group that there is not adequate clarity that supports administrative ability to implement an effective adaptive management strategy.

An adaptive management strategy has been supported by the MRGESCP to address concerns related to ESA listed species, existing and future water use, and provide outreach to stakeholders and communities of interest.

The adaptive management strategy proposed for MRGESCP encompasses four functional components of action: (1) executive decision-making, (2) adaptive management plan coordination, and (3) science, and (4) support.

*The objective of the MRGESCP Adaptive Management Strategy is effective environmental management in the face of uncertainty by integrating science and learning into effective management under changing conditions coupled with a cyclic strategy producing improved systematic understanding of needs to meet the established goals of the MRGESCP. (AMWG 2018)*

This conforms to the Long-Term objectives of the MRGESCP articulated in 2002, 2008, 2011 and captured in the 2012 and 2019 By-Laws.

A useful description of adaptive management is that it is a cyclic strategy of planning, decision-making, evaluation and feedback (Figure 1). Structurally, the application of adaptive management includes a two-phased approach that embraces both technical and social learning. The framework includes a *deliberative* or planning phase in which the critical components of adaptive decision-making are formulated, and an *iterative phase* in which the components are implemented and linked together in a sequential and structured decision strategy (Figure 2). The iterative phase builds on the products of the deliberative phase in an ongoing cycle of learning about system structure and function, and resource management based on what is learned.

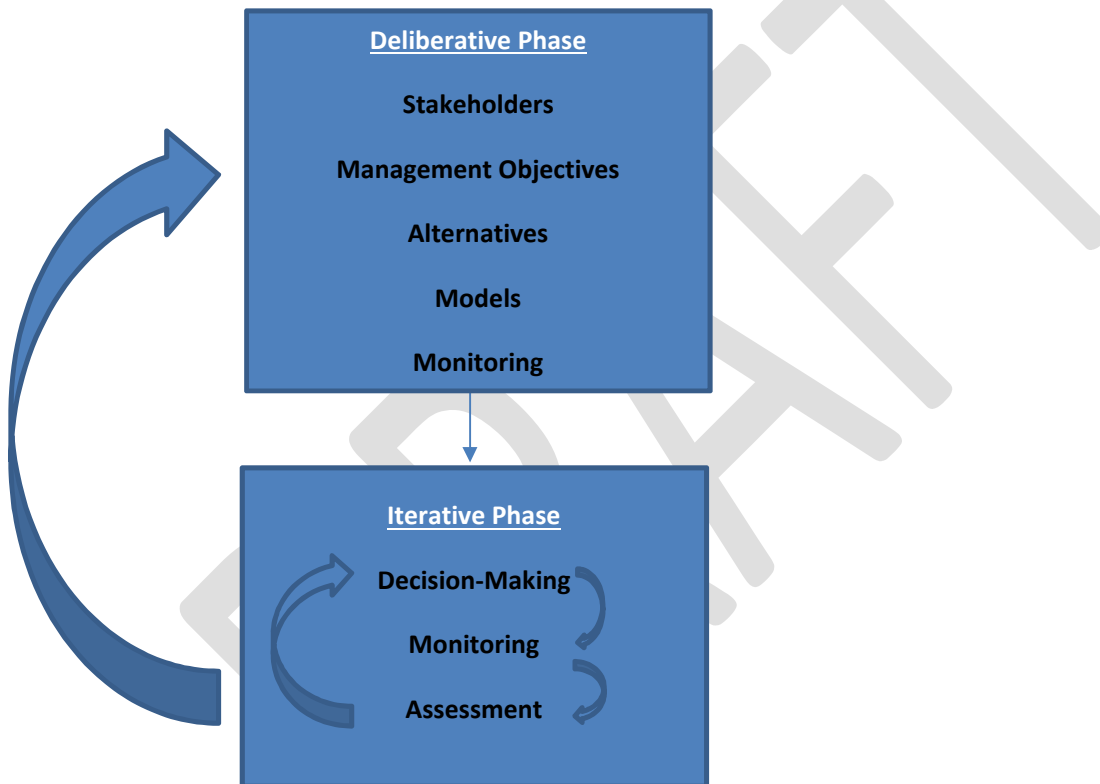


Figure 2. Deliberative and iterative phases of adaptive management (Williams and Brown 2014)

#### D. Proposed Organizational Components for MRGESCP Adaptive Management

Organization of any functioning and useful adaptive management decision strategy has common elements built around a robust and management/issue-driven, scientific-based

monitoring and applied research programs. While the names of the individual components vary among adaptive management programs, the following functional organizational elements are, at a minimum, required, for a successful MRG program. Development of the responsibilities for each Committee and Group will require stakeholder interaction and feedback. Upon determination of the functional responsibilities, the protocols for action and roles should be formalized in the **MRGESCP By-Laws** and **periodically updated** to ensure consistency with overall program objectives and to avoid conflicts of interpretation and responsibilities that emerged from the previous MRGESCP Coordination Committee.

Developing and flushing out the organizational structure traditionally is done through a coordination committee established by the governing body. In many cases this has been the initial adaptive management planning/work committee reconstituted with additional members as needed.

**MRGESCP Executive Committee.** Function: The decision-making body that provides primary leadership. This role remains unchanged from current duties with the exception that they assume ultimate responsibility for the implementation of this MRG adaptive management strategy and resulting tasks.

**Adaptive Management Committee.** Function: Performs direct oversight and serves as the arbitrator of the Science Program in the form of a standing independent MRGESCP science committee. The committee will coordinate with and make recommendations for decisions on science to the Executive Committee. The Adaptive Management Committee will oversee and ensure the integration of the science program with the annual and triennial work plan products to ensure consistency. The committee also serves as technical liaison with science peer review efforts, use of science in structured decision-making and integration of other regulatory driven adaptive management programs to ensure consistency, where possible, with the MRGESCP.

**Science Group.** Function: The existing permanent and ad hoc MRGESCP work groups may be reorganized to provide improved focus and commitment on “getting the science right.” Typically, a Science Program Manager is appointed to direct the science program and associated peer review groups and to guide the development of the annual and triennial science work plans. The Science Group’s function is to define and coordinate needed science related tasks and ensuring rigorous scientific approaches. Utilizing and building on existing work groups (example: Population Management) and coordinating with existing independent groups is intended to enable agency, stakeholder scientists and local experts who have knowledge and expertise to assist in the analysis and prediction of the potential impacts of management direction; refine that direction into scientific implementable hypotheses and studies; and establish project sequencing and priority setting to address scientific and technical objectives.

These topical areas listed below are representative of the areas of science that could benefit the MRGESCP. Each is discussed in more detail in study plan development section of Section II.

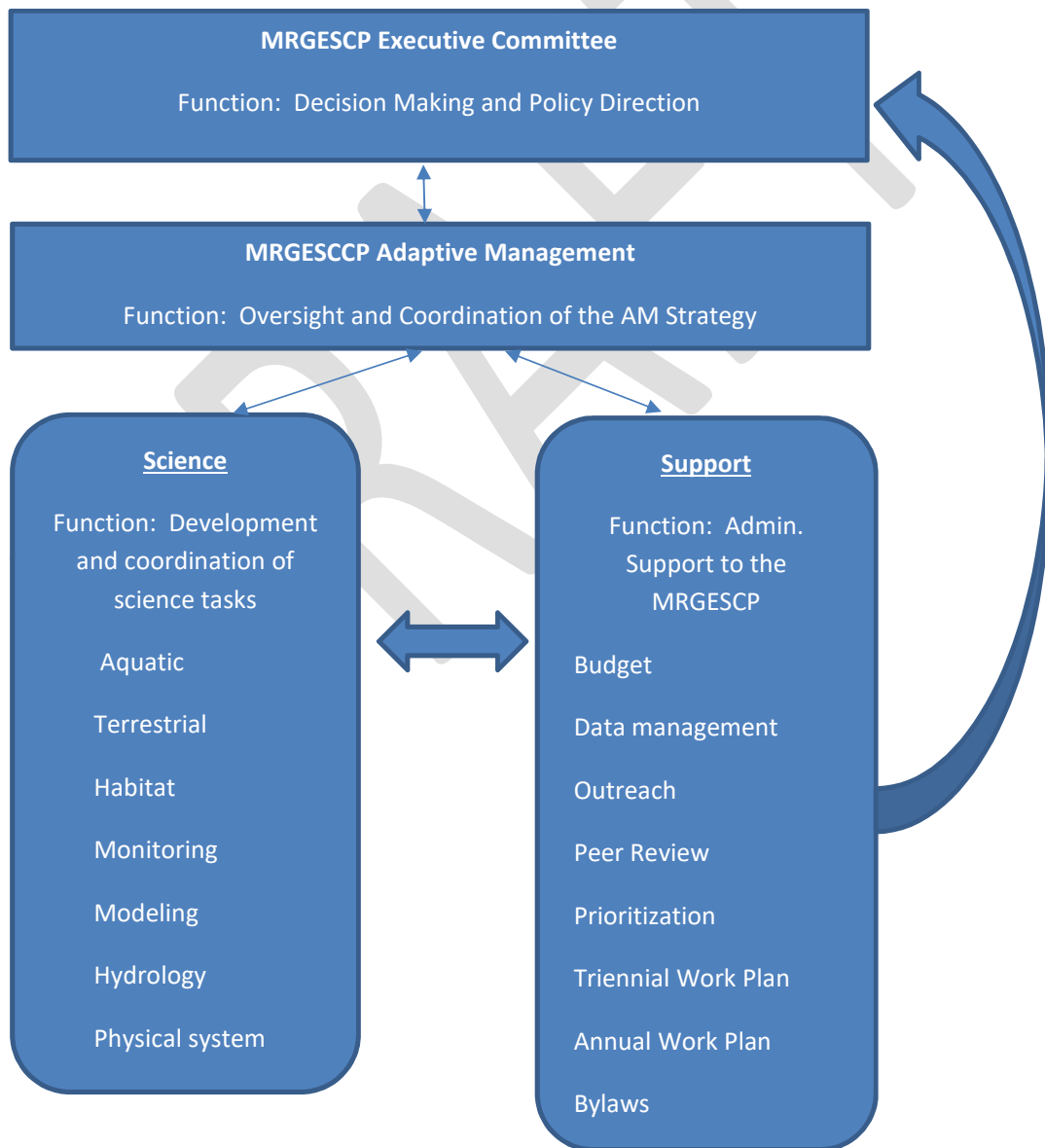
- a. Aquatic environment, a standing group to focus on uncertainties and needs for the aquatic listed species of concern along the MRG
- b. Terrestrial environment, a standing group to focus on the uncertainties and needs for terrestrial listed species of concern along the MRG
- c. Habitat restoration, an as-needed ad hoc groups to focus on creating habitat features mimicking those that historically benefited essential life-history requirements and population conditions for the listed species along the MRG
- d. Monitoring and modeling, additional ad hoc groups to help ensure the collection and analysis of high-quality data to guide management decisions
- e. Hydrology and river channel dynamics, ad hoc groups to support the standing groups on issues related to the river flow and fluvial geomorphic uncertainties affecting the listed species habitat(s) and life history.
- f. Science management focusing on identifying, prioritizing and organizing the specific scientific proposals that support the science program. This includes collating and maintaining the meta data for all MRGESCP supported information to leverage the knowledge both spatially and temporally
- g. Independent peer review program which initially should consist of 3 to 4 scientists who will advise and as necessary support the organization of review panels, science workshops, and integration of science into the structured decision-making process.

**MRGESCP Management Support Group: Function:** This group will include utilizing the Science Program Manager and agency/stakeholder technical representatives who will be responsible for administrative coordination between the science, adaptive management coordination, and the Executive Committee. The Management Support Group will not be doing science, instead they will be to serve a support function as needed. As capacity is built in the MRGESCP program and a science culture enabled, the functions for this group will likely diminish.

The MRGESCP Management Support Group will be responsible for coordinating the development of the Triennial Work Plan, the annual science work plan, program budget development, data management oversight, outreach and coordinating with the independent scientific peer review. Member participation will expand and contract as program requirements and administrative needs are generated. The membership of the administrative support group will be composed of representatives from agencies, stakeholders and tribes who can identify and speak to issues of compliance, management, policy and organizational relationships.

Figure 3 reflects the general organizational framework of the elements that are necessary to implement an effective adaptive management strategy. The elements depict functional tasks associated with each of the four primary elements. In the MRG program individuals may perform multiple duties and shift between decision-making, technical direction, and support. That likely will not change. To implement a culture that can support an effective adaptive management program functional responsivity need to be separated and identified. These are the minimum suggested functional groups and can be expanded as appropriate.

**Figure 3. Proposed functional components for MRGESCP Adaptive Management Strategy**



## **E. Structured Decision-Making and Adaptive Management**

By its nature, adaptive management for the MRG is a continual learning strategy. Its value depends upon establishing a Program culture that recognizes the importance of implementing a rigorous scientific approach to support improved management decision making, conducted within a framework of listening, doing (monitoring and assessing), and applying knowledge gained.

Adaptive management's usefulness to decision-makers is enhanced through using structured decision-making, identification and use of feedback loops, and ensuring that the science is acquired in a transparent, iterative and replicable hypothesis testing approach. Adaptive management, learning by doing and over time, is most effective when a structured decision-making process is developed and implemented with a strong monitoring and science-based program (Martin et al., 2009).

For the MRGESCP, the key concepts and steps include the EC making consensus-based collaborative decisions addressing specific water and listed-species management objectives. The development of the *MRG-Management Objectives* is the critical next step in the adaptive management plan implementation. An approach of how to develop the MRG-Management Objectives is laid out in Section II. Much of the initial leg-work for developing these MRG-Management Objectives has already been accomplished through expert workshops, MRGESCP dialogues and existing work group activities. What is lacking is the synthesis, refinement and approval of the management objectives by the EC. The identification, listing, prioritizing and justification for the MRG-Management Objectives will form the base for the adaptive management science program, science plan and structured decision-making.

It is essential that decisions associated with the resources of the MRG include the recognition of scientific analyses and predictions determined through the efforts of the Science Program. The structured decision process must explicitly address risk and uncertainty issues and recognize that decisions should consider societal values, including cultural and historical water uses and variable hydrologic circumstances

Implementing adaptive management and its decision elements will provide the MRGESCP with important knowledge and the capacity to guide and implement water management and species actions to help achieve the long-term goals of the Program. Linking the adaptive management plan with a structured decision-making approach will lead to better and supportable management outcomes. Taking the knowledge, whether acquired through research,

monitoring, or the use of expert workshops and reviews, and utilizing it to improve management decisions can be enhanced using a structured decision-making process.

**Structured Decision-Making.** At its core, structured decision making integrates science, policy and process to support informed management actions.

*Structured decision making is an approach for careful and organized analysis of natural resource management decisions. (Grant, E, J. Lyons and M. Runge – USGS)*

There are multiple examples of how to approach structured decision making and in Section II the key elements are described in detail. In its most simple rendition, natural resource focused structured decision making revolves around 4 primary steps:

- Step 1. Define how you plan to evaluate the options (criteria)
- Step 2. Evaluate and rank the options – typically done in a matrix format
- Step 3. Review the ranked option list and refine the criteria (if necessary)
- Step 4. Select the highest-ranking option

The structured part of the analysis is transparent and based on the data. The cyclic learning of adaptive management is accomplished and enhanced via transparent science, feedback loops, and rigorous scientific review and analysis.

## **F. Relationship of the MRG Adaptive Management Strategy to Regulatory and Agency Programs**

Along the Rio Grande the historical variability in annual hydrology has led to the development of a complex and often overlapping suite of laws, regulations, compacts, agreements and decrees that define when and how water is managed. Upstream water supply, agricultural and municipal water users, and traditional water uses contractual water deliveries determine how the water is distributed annually and seasonally in the MRG. Present water management efforts include additional requirements for tribal water settlements, environmental regulatory requirements, and river compact commitments downstream from Elephant Butte Reservoir. Water demands in the Rio Grande basin regularly exceed supply. Managing the water is becoming more difficult as multi-year droughts and seasonal hydrologic variability is influenced by watershed impacts associated with climate change.

The MRGESCP was created out of concerns that issues impacting the management of water and species needed improved coordination and cooperation. Agreement between federal, state, tribal and other stakeholders to implement a collaborative program has been accomplished without legislated, regulatory or litigation direction or structure. The adaptive management strategy is articulated within the same boundaries and hopes.

Regulatory requirements associated with and impacting the efficient implementation of the MRGESCP adaptive management strategy includes but is not limited to; the Endangered Species Act, the Clean Water Act, Tribal water settlements, and State of New Mexico requirements. In addition, agency activities associated with the management and distribution of water adds requirements to meeting water needs.

Many issues of importance to the MRGESCP adaptive management strategy are related specifically to components of formal Biological Opinions produced by the USFWS that affect water operations. One of the goals of the adaptive management is to determine how to test and evaluate the consequences of implementing the recommended actions in achieving the objectives of these Biological Opinions.

This MRGESCP adaptive management strategy will be most efficient and effective when it recognizes, collaborates and integrates, where possible, these regulatory programs and their associated tasks. The tasks cover actions ranging from water management and river maintenance activities to managing drinking water and habitat restoration. In respect to regulatory actions associated with the Endangered Species Act, it is important to know that action agencies are not bound by the findings of the FWS or its conclusion as it pertains to a proposed action. After consultation is completed between the action agency and the FWS, the final decision of whether to proceed with the action lies with the agency itself. In the case of the MRG multiple agencies have gone through consultation with the USFWS and have elected to implement conservation measures and reasonable and prudent measures identified through the consultation process to address potential impacts. Many of these agency actions identify adaptive management as an appropriate path forward.

It is the intent of this MRGESCP adaptive management strategy to identify and, where possible, integrate the technical components of identified regulatory actions into the overall program. Actions taken by the MRGESCP can help to address the effectiveness of implementing the conservation and reasonable and prudent measures and provide guidance on how jeopardy can be mitigated. The MRGESCP objectives embrace addressing the listed-species needs in addition to meeting the needs of the water community. The speed and effectiveness of this integration will be dependent upon agency support, prioritization of the actions, and a requirement to maintain the appropriate level of scientific effort, consistency and application.



## G. Executive Committee Considerations

To guide the efforts of the MRGESCP Executive Committee, several recommendations are made for consideration in implementing the MRGESCP Adaptive Management Strategy. Each of these recommendations is supported by materials presented in Section II of this document.

These summarized proposed actions fit with the tasks and responsibilities that will be needed to initiate a successful adaptive management strategy.

### Phase I. Structure and Organization (Months 1 to 12)

- (1) **Initiate the Action:** Direct the implementation of the MRGESCP adaptive management strategy
- (2) **Organization Initial Functional Structure:** Approve the initial organizational components (Figure 3).
- (3) **Adaptive Management Committee:** Designate an MRGESCP Adaptive Management Committee to work with the Management Support Group to prepare with the Bylaws Committee a charter for the Adaptive Management plan that meets program requirements and bring that charter back to the EC for review and action. In addition, the Bylaws Committee should review and develop modifications to the existing bylaws to provide administrative guidance to the proposed organization
- (4) **Develop MRG-Management Objectives:** Direct the Adaptive Management Committee to organize the development of the system “MRG-Management Objectives” that address MRGESCP Long-Term objectives. Present the MRG-Management Objectives to the Executive Committee for approval.
- (5) **Implement Triennial Work Strategy:** Direct the Adaptive Management Committee’s work with the Management Contractor and the Science and Management Support groups to develop the initial Triennial Work outline and timeline(3WP).
- (6) **Feedback and Communication Loops:** Create a reporting feedback loop from the Adaptive Management Committee to EC.
- (7) **Work Group Integration:** Implement the appropriate integration of the ongoing technical efforts and the Scientific Group into the adaptive management strategy. [for example: The Population Monitoring Work Group efforts]

## H. Summary

As the MRGESCP Adaptive Management Strategy is approved a series of actions should be undertaken, beginning with the consolidation, development and articulation of the MRG-Management Objectives. As the program engages the strategy the implementation of the *deliberative* phase of the program (Figure 2) will be the primary focus during the first year. This will require active participation between all four functional groups (Executive Committee, Adaptive Management Committee, Science and Management Support).

Stakeholder involvement is critical in all aspects of the adaptive management decision-making. Identifying the MRG-Management Objectives are essential as they set and establish the benchmarks against which to compare the potential effects of different management actions and metrics by which to evaluate the effectiveness of management strategies. Once the MRG-Management Objectives are agreed upon then the science elements of the Triennial Work Strategy and associated tasks can be implemented.

As the science program is developed, prioritized and implemented management objectives will be assessed using a variety of scientific approaches, predictive modeling and monitoring protocols. In addition to existing expertise there will likely be a need for additional expertise to be provided through workshops or structured dialogues. Data collection guided by monitoring and rigorous science protocols are necessary for both learning and evaluation of management effectiveness.

Ongoing non-MRGESCP efforts in independent scientific surveys and adaptive management, including multiple programs associated with regulatory actions, should be identified and where possible leveraged with the MRGESCP. Value-added and synergistic effects could result that would enhance achieving the overall MRGESCP goals.

Many of the tasks described in the MRGESCP Adaptive Management Strategy can and should be implemented concurrently to save time and effort. The “learning” component of the Adaptive management will be engaged as the *iterative* portion of the strategy is implemented, namely the decision-making, follow-up monitoring and assessment of management actions. The iterative component of the strategy, if done correctly, will be where the science and management can be merged into an effective structured decision-making tool for the stakeholders, agencies, tribes, pueblos and the public to assess the future options for the resources of the Rio Grande.

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**Adaptive Management Definition**

Adaptive management for the Middle Rio Grande Endangered Species Collaborative Program is a structured, science and experiment-based process to promote flexibility and informed decision-making in the face of natural variability and other uncertainties. Monitoring of management actions and responses will advance scientific understanding and assist stakeholders in adjusting policies and/or operations in an iterative learning process.