

## **Middle Rio Grande Endangered Species Act Collaborative Program Species Water Management Standing Workgroup (SWM)**

03 March 2010 Meeting

**10:00 AM to 12:00 PM @ BIA**

### **Recommendations**

- It was suggested that the water quality results (oxygen sags due to storm water) and data from the continuous water quality monitoring project (joint effort between the Corps, the Service, and UNM) is provided to the PVA work group for inclusion in the PVA models.
- The SWM work group recommended the concern over lack of solid agreements between stakeholders to formalize the LTP activities responsibilities be elevated to the CC. This might also be a future LTP activity for the CC or PMT to include under the Legal/Policy section of the LTP.

### **Actions**

- Amy Louise will distribute the SWM 2009 work group accomplishments document to SWM members.
- Amy Louise will elevate SWM's concern that if storm water is contributing to the minnows viability in the basin, the storm water entities need to be invited into the Program to be actively involved.
- Page Pegram will locate the WAMs plan and White Papers regarding forbearance and agricultural issues and consult with Chris Banet to determine what has already been done regarding the MRGCD threshold analysis and to clarify specifically what he was suggesting for the future LTP activity(s).
- Amy Louise will ask Steve Harris for clarification and specific project guidance for his future SWM activity suggestion of Geomorphic Rehabilitation Projects.
- Amy Louise will update the SWM future activity list and forward to the group for review and input as soon as possible.
- Amy Louise will send out the Lessons Learned summary and PowerPoint presentation from the San Acacia Reach A&R Peer Review Presentation to SWM members.
- Chris Banet will set up a meeting room at BIA for the April 7<sup>th</sup> SWM meeting and will distribute room and call-in information to work group members.
- Chris Banet will forward an electronic copy of the March 3<sup>rd</sup> SWM meeting attendance sheet to Tetra Tech.
- Tetra Tech will make sure Cyndie Abyeta is added to the SWM email distribution list.

### **Meeting Summary**

- Chris Banet brought the meeting to order and introductions were made around the table. The agenda was reviewed and approved with the addition of a SAR Peer Review and February 17<sup>th</sup> CC/WG/PMT Long-term Plan meeting update (under agenda items 8 and 6, respectively).
- The work group approved the January 6<sup>th</sup> and February 3<sup>rd</sup> meeting notes with no changes.
- All February action items were completed.
  - Hilary Brinegar will be working with Dr. Bill Linderman, NMSU, on the soil moisture scope of work site selection. She will keep the work group updated on the progress via email. June 2<sup>nd</sup> is still an appropriate date to aim for Dr. Linderman's attendance and presentation to SWM.

- The work group then briefly discussed the SWFL recovery plan in terms of using that document to provide direction or insight for future SWM projects to include in the LTP. The discussion proceeded directly into the next agenda item, LTP future activities.
  - Attendees also discussed the need to pull the data gaps identified in the SWFL Literature Search into the future activities as well. (Data gaps briefly mentioned include: knowledge on the amount of water needed to benefit a territory; the relationship between food and water availability impacts during breeding season; benefits/impacts of moist soil versus open water; understanding the timing of water (early season or not); impact/benefits of groundwater and how much groundwater is needed to sustain and develop habitat.)
  - It would be useful to determine an optimal return interval for overbank and recruitment flows (i.e., how often overbank flow is needed to support develop of new and existing habitat. It would inform the Program on how often natural flows could be relied on versus when to supplement. This knowledge would benefit both species although there might be two different time returns and magnitudes for each.
  - The work group discussed the importance of continuing the SWFL water needs project for Isleta and expanding that work into other areas in the future.
  - It was suggested as a Science work group future activity to research what is currently understood about how the proximity to human contact impacts the SWFL nesting site selection. It was also suggested that Science could have future activities directed at determining how to correct the inverse relationship between predators and prey and cataloging transect surveys of fish usage across the river habitat.
- Amy Louise provided a brief review of the San Acacia Reach A&R Peer Review Presentation from February 24<sup>th</sup>. The peer review comments were not so much on the report but on the bigger picture of Program operations, adaptive management, how make decisions, lack of follow through, how to change management based on report findings, etc.
- Under Program Coordination updates, it was shared that the PHVA/Hydrology work group has reached a stalled point. The pre-ESA water management (a.k.a. non-front loaded) model runs needed to support the non-front loaded BA have been completed. They will not be able to proceed with runs to support the BO until more direction is provided and more is known about water commitments. Their next meeting is May 18<sup>th</sup>. The PVA work group will be meeting all day today and tomorrow morning. The RFP for the Effectiveness Monitoring Plan (EMP) is out or just about to go out. The TPEC for proposal review is scheduled for later this month.
- SWM issues to be elevated include (1) SWM's concern that if storm water is contributing to the minnows viability in the basin (ex. oxygen sags), the storm water entities need to be invited into the Program to be actively involved and (2) the lack of solid agreements between stakeholders to formalize the LTP activities responsibilities and provide certainty so that failure from one doesn't cause non-compliance for all.

**SWM Future Activities** (those already included in the LTP Table 7.0 are in black text; those activities that were suggested at today's meeting are in red text):

- 1. SWFL water needs at Isleta. *Note: this would be a continued project for Isleta but expanded to other areas in future years. Project would provide standing implications on where and when it is important to have water for the flycatcher. Understanding what the water provides such as (1) prey base (food close to nests); (2) truly just a water need; (3) predator control for better nest success, etc. could be included under this project or might develop into individual projects as necessary.*

- 2. Soil Moisture Monitoring Project;
- 3. Continue Riparian Model;
- 4. Investigate Aquifer Storage – *taken from the recovery action plans*;
- 5. Investigate Bank Storage – *taken from the recovery action plans*;
- 6. MRGCD Threshold Analysis;
- 7. Geomorphic Rehabilitation Projects – *suggested looking through LTP from 1999 or 2000 regarding geomorphic rehabilitation (will need to get the report from Robert Padilla or Drew Baird)*
- 8. Identify Supplemental Water Supplies;
- 9. Hydrologic Reality – *The SWM work group recommends this activity be removed from the LTP*;
- 10. Climate Change Input into URGWOM;
- 11. Human Population Growth Impacts on Water Availability and Resources;
- 12. Identify Overbank/Recruitment Recurrence Intervals – *including quality, timing, duration, quantity, etc. of flows.*
- 13. USGS River Gage O&M;
- 14. USGS transects;
- 15. Investigate Other Main Stem Water Management Opportunities - *other tributaries, off channel storage regulation opportunity, bank storage, etc.*
- Identity Policy and Legal Impediments to Better Water Management That Could Benefits the Listed Species;

**Possible Future Activities** or activities that might be included under an already identified project (*note: these activities were discussed during the meeting but not necessarily referenced as a future activity specifically*):

- **SWM:**
  - Determine the amount of water needed to benefit a SWFL territory;
  - Determine the relationship between food and water availability impacts during SWFL breeding season;
  - Determine the benefits/impacts of water availability type: moist soil versus open water;
  - Better understand the timing of water delivery for the SWFL (early season or not);
  - Determine the impact/benefits of groundwater and how much groundwater is needed to sustain and develop habitat;
  - Determine an optimal return interval for overbank and recruitment flows (i.e., how often overbank flow is needed to support develop of new and existing habitat. *Note: this would inform the Program on how often natural flows could be relied on versus when to supplement. This knowledge would benefit both species although there might be two different time returns and magnitudes for each.*
  - Water Quality Input into URGWOM;
  - Forbearance and Irrigation Issues. *Note: These are still conservation issues in the current BO.*
- **CC or PMT:**
  - How to get solid agreements between stakeholders to formalize the LTP activities responsibilities (*under Legal/Policy section of the LTP*).
- **ScW:**
  - Research Impacts of Proximity to Human Contact on SWFL Site Preference;
  - Determining How to Correct the Inverse Relationship between Predators and Prey;

- Cataloging Transect Surveys of Fish Usage across the River Habitat.

**Next SWM Meeting April 7<sup>th</sup>, 2010 10:00 am to 12:00 pm at BIA**

**Middle Rio Grande Endangered Species Act Collaborative Program  
Species Water Management Standing Workgroup (SWM)**

03 February 2010 Meeting

**10:00 AM to 12:00 PM @ BIA**

**MEETING NOTES**

**Introductions & Announcements**

- Chris Banet brought the meeting to order and introductions were made around the table.

**Agenda Approval**

- The agenda was reviewed and approved with the additions of a SAR Peer Review and February 17<sup>th</sup> CC/WG/PMT Long-term Plan meeting update (under agenda items 8 and 6, respectively).

**Approval of January 6<sup>th</sup> and February 3<sup>rd</sup> meeting notes**

- Both January and February meeting notes were approved with no changes.

**February Action Item Review (20 min)**

- ✓ Amy Louise will incorporate verbal changes made to the Climate Change SOW and send it to meeting attendees to ensure she captured them accurately. – *complete*;
- ✓ Amy Louise will incorporate verbal changes to the SWM work plan and submit it to the CC for approval. – *complete*;
- ✓ Amy Louise will send the draft soil salinity SOW to Hilary Brinegar. – *complete*;
- ✓ Hilary Brinegar will identify faculty at NMSU that may be able to assist SWM with the soil salinity project. She will send those faculty members the draft SOW and ask them to accompany her to the June 2, 2010 SWM meeting. – *complete*;
  - Dr. Bill Linderman at NMSU has agreed to work with the SWM work group and other department professors as needed on site selection portion of the soil salinity project. Hilary will be meeting with him in the next 5 to 6 business days.
  - She will keep the work group updated on the progress via email. June 2<sup>nd</sup> is still an appropriate date to aim for Dr. Linderman's attendance and presentation to SWM.
- ✓ Amy Louise will address the comment regarding the Low Flow Conveyance Channel on the SWM Charter. – *complete*;
  - The LLCC has been added to the charter. The charter will be submitted to the CC as a read ahead for their March 10<sup>th</sup> meeting. Hopefully the CC will recommend EC approval.
- ✓ Amy Louise will send the workgroup current snowpack. – *complete*;
- Amy Louise will review 2009 SWM meeting minutes and draft a workgroup accomplishments paragraph. She will send the paragraph to SWM members for discussion at the next meeting. – *partially complete*;
  - Amy sent the 2009 accomplishment paragraph but not all members received a copy. The 2009 accomplishments is basically the previous year's work plan with an added a column for status and progress updates.

**Action:** Amy Louise will distribute the SWM 2009 work group accomplishments document to SWM members.

- ✓ Amy Louise will send an email to the full SWM membership explaining that the LTP future activities development is the highest priority right now with SWM list due by February 17<sup>th</sup>; the email will request input and future SWM activity suggestions. – *complete*;

### **SWFL Recovery Plan Discussion**

- The work group then briefly discussed the SWFL recovery plan in terms of using that document to provide direction or insight for future SWM projects to include in the LTP. The discussion proceeded directly into the next agenda item, LTP future activities.
- There are a lot of recommended water-related elements in the plan – such as suggestions to increase water available for recovery; determining flood flow to increase marsh areas; use urban waste water to expand habit; provide instrumental flows for habitat; reactivate floodplain; etc. However, there are no specific suggestions for sources of water.

### **LTP Future Activities**

- The SWFL literature review identified data gaps (ex. amount of water area in territories, relationship between food and water availability impacts during breeding season, etc.). These data gaps need to be considered and included in the future activities.
  - While there are known water needs for the flycatcher, the type of water (moist soil vs. open water; if open water, how much for how long), the timing (early season or not), how much groundwater to sustain, etc. are all questions that need to be addressed.
- There is also the need to find reasonable sources of water if we hope to address the water recommendations in the SWFL recovery plan.
- The work group discussed the policy issues and politics that often provide limitations or restrictions. It may take determining how to overcome these policies and politics before new water sources can be explored.
- The work group also briefly discussed that while the flycatcher population appears to currently be doing okay, it is very important to have habitat available for the birds to move or expand to.
  - The population has done well along the sediment plug – there are between 15 and 20 new nests. The conditions are just right with maintaining overbanked water turning the east side into marsh.
  - It was shared that there were 13 SWFL nests noted up in Taos at a soccer field near the San Fernando Creek. (*information referenced from Deborah Hill*).
  - There was also a sighting in the restored River Edge Development and Willow Creek bosque in the Rio Rancho area. Friends of Rio Rancho Open Space does the majority of the work out there.
- One potential future activity suggested was to determine the optimal return interval for overbank flooding to create habitat (i.e., how often is overbank flow needed to support the develop of new and existing habitat?). It would inform the Program on how often natural flows could be relied on versus when intervention would be needed. This knowledge would benefit both species although there might be two different time returns and magnitudes for each.
- Attendees briefly discussed the current BO elements of low flow pumping to support existing territories.
  - While the low flow pumping can provide moist soils or even surface water we don't know which water type is most beneficial. The Water Management Elements of the current BO include D, G, K, and O.
  - The Isleta SWFL needs project was starting to get there but the work (and continuous dataset) was interrupted due to the contracting process. The 2008 work speaks to some of the needs, but there isn't the time frame to establish the longer trends and validate results.

- The work group agreed to add the Isleta SWFL project as a future activity, with the possibility of expanding that work into other areas over time in order to provide the understanding of where and when it is important to have water for the flycatcher. Part of the intent is to understand what the water provides: (1) a prey base (food close to nests?); (2) is it truly just a water need?; (3) predator control for better nest success?; etc. This work should be identified under the flycatcher category and not the multispecies category in the LTP.
- It was shared that flycatcher researchers have been instructed to not study the cow bird because the interruptions to the nest disrupts the flycatcher.
- The work group then discussed the potential for proximity to human interaction as a potential factor in suitable habitat. Experts are currently stating that it is not an issue, but it is believed that the topic has not been systematically looked at and there seem to be several conflicting indications – such as the cow bird studies disrupting nests, new nests established in soccer fields, geospatial distribution (from maps) indicates they are not nesting near access roads, etc. (*It was suggested that Darryl might have some insight*).
  - It was suggested as a Science work group future activity to research what is currently understood about how the proximity to human contact impacts the SWFL nesting site selection.
- The concern for water quality monitoring was raised. The Corps and the Service in conjunction with UNM have conducted 2 years of continuous monitoring in the Middle Rio Grande (MRG) and there are some significant results. Continuing this work is important enough that the Corps has provided additional funding to continue the monitoring for another 18 months.
  - Dave van Horn is the graduate student who lead this work and he has presented to Science in the past.
  - One interesting result is the significant oxygen sags due to storm run off and the resulting fish kills. Pharmaceuticals are also being identified in the water.
  - It was suggested that this data could be used to build the water quality portion onto URGWOM. Water quality issues and research is typically a focus of the science work group. If water quality is already included in the LTP under ScW, then it needs to be updated to be a joint effort with SWM.
    - Attendees discussed how incorporating or expanding the water quality pieces of URGWOM keeps getting pushed back by the URGWOM steering committee - probably due to lack of support for the effort. Right now, URGWOM can only do some basic water quality computations.
    - There could be resulting storm water management implications and potential for redesigns. Entities involved with storm water know about these results and are involved, but the effects could certainly happen elsewhere.
    - For the data we have now, RiverWare is the most appropriate model venue at this time although other models were considered.
      - It is not known if this data and results have been shared with the PVA work group.

**Action:** Amy Louise will elevate SWM's concern that if storm water is contributing to the minnows viability in the basin, the storm water entities need to be invited into the Program to be actively involved.

- A LTP update from the February 17<sup>th</sup> CC meeting was shared. Tom Pitt's contract has been modified to allow him to operate as the lead consultant while the majority of the administrative and editorial work has been tasked to GenQuest. Tom has provided the Program with recommended formats for both the past and future activities in order to capture

everything in the LTP. Each work group will be responsible for drafting a future activity summary for each of their suggested projects.

- The future activities table of the LTP was reviewed for the list of current SWM included activities:
  - 1. SWFL water needs at Isleta;
  - 2. Soil Moisture Monitoring Project;
  - 3. Continue Riparian Model;
  - 4. Investigate Aquifer Storage – *taken from the recovery action plans*;
  - 5. Investigate Bank Storage – *taken from the recovery action plans*;
  - 6. MRGCD Threshold Analysis;
    - Regarding the MRGCD threshold analysis – some work might have been done by SWM in the past and captured in the WAM’s plans. Hydrosphere might also have done work that addresses pieces of this as well. It will be left in as a potential future project for now.
  - 7. Geomorphic Rehabilitation Projects – *suggested looking through LTP from 1999 or 2000 regarding geomorphic rehabilitation (will need to get the report from Robert Padilla or Drew Baird)*
  - Current/existing SWM projects are the USGS River Gage O&M and the USGS transects.

**Action:** Page Pegram will locate the WAMs plan and White Papers regarding forbearance and agricultural issues and consult with Chris Banet to determine what has already been done regarding the MRGCD threshold analysis and to clarify specifically what he was suggesting for the future LTP activity(s).

**Action:** Amy Louise will ask Steve Harris for clarification and specific project guidance for his future SWM activity suggestion of Geomorphic Rehabilitation Projects.

- Additional future activities to add to the LTP:
  - 8. Identify Supplemental Water Supplies;
  - 9. Hydrologic Reality;
    - It was suggested this activity be removed from the future activities list.
  - 10. Climate Change;
    - The work group requested Climate Change Inputs to URGWOM be added to the list as a place holder for future tasks to look at the implications of the current 2010 scope.
    - Other basins are finding much bigger impacts from human population growth than from actual climate change. SWM may consider the need to address the impacts of human population growth.
      - The Service has funded a project on climate change impacts on species and a presentation to SWM should be feasible.
    - Over a 10 year period, climate change is relatively insignificant; but would have to be considered for a longer-term BO. DOI has guidance on considering the climate change.
  - 11. Human Population Growth Impacts;
  - 12. Identify Recurrence Intervals: quality, timing, duration, and quality of recruitment and overbanking flows;
- Additional potential future activities discussed included:
  - The work group discussed how forbearance and irrigation issues are still conservation issues in the current BO. The following activities were sited from RPM 3: develop a plan for acquiring water from willing leasers for species; develop an agricultural forbearance program to provide additional supplemental



- water for species; implement strategies to increase efficiency and determine how water savings could be use for species; etc.
  - While WAM has white papers on the topics, proposed projects have not been supported.
- The San Juan River is cataloging transect surveys of fish usage of the river. This could provide meaningful data especially in river drying conditions to get an idea of utilization.
  - The Service has a draft report on habitat study from 2002 to 2005.
- An inverse relationship between predators and prey has been reported in the snag report. A project to determine how to correct this situation might be beneficial.
  - It was also suggested that Science could have future activities directed at determining how to correct the inverse relationship between predators and prey and cataloging transect surveys of fish usage across the river habitat.
- Investigating other main stem water management opportunities – such as other tributaries, off channel storage regulation opportunity, bank storage, etc. – could be worthwhile.
- The work group discussed the legal and policy implications that are problematic to possible work that SWM would like to pursue.
  - There is legal and policy section included in the LTP.
  - A potential SWM activity could be to identify the policy and legal impediments to better water management that benefits listed species.
  - The SAR has work group talked about looking at the different agency authorities are – but that is just for the San Acacia reach.
  - One “stumbling block” that prevents progress is a lack of solid agreements between stakeholders in the Program. There is a need for MOA type agreements. Especially now, with the new LTP, there is a need to have agreements to formalize the LTP activities and responsibilities. Implementing the BO will be implementing this LTP plan – and we need some assurances to provide certainty so that failure from one doesn’t cause non-compliance for all.
- The work group briefly discussed how to complete the future activities summaries and whether or not an additional meeting would be needed before the due date of April 14<sup>th</sup> or if the work could be distributed and completed via email.

**Action:** Amy Louise will update the SWM future activity list and forward to the group for review and input as soon as possible.

### **Peer Review Recommendations**

- Amy Louise provided a brief review of the San Acacia Reach A&R Peer Review Presentation from February 24<sup>th</sup>. The peer review comments were not so much on the report but on the bigger picture of Program operations, adaptive management, how make decisions, lack of follow through, how to change management based on report findings, etc.
- It is important to be very specific on project details including the whys and any if/then/elses in the document management process in order to translate from results to predictions to adaptive management.
- The SA A&R was a complete and final document but future peer reviews could be on controversial methodologies before a project is even started and on other draft reports.

- The peer reviewers did suggest that the Program use the same reviewers for no more than 2 or 3 after which time biases can develop and impact results.
- Each work group was asked to supply no more than 2 suggested projects for peer review; from that list, the CC will prioritizing peer review projects for 2010.

**Action:** Amy Louise will send out the Lessons Learned summary and PowerPoint presentation from the San Acacia Reach A&R Peer Review Presentation to SWM members.

#### **Program Coordination (10 min)**

- **PHVA** – PHVA/Hydrology work group has reached a stalled point. The pre-ESA water management (a.k.a. non-front loaded) model runs needed to support the non-front loaded BA have been completed. They will not be able to proceed with runs to support the BO until more direction is provided and more is known about water commitments. Their next meeting is May 18<sup>th</sup>.
- **PVA** – The PVA work group will be meeting all day today and tomorrow morning.
- **MPT** - The RFP for the Effectiveness Monitoring Plan (EMP) is out or just about to go out. The TPEC for proposal review is scheduled for later this month.

#### **SWM Issues to be elevated –**

- (1) SWM's concern that if storm water is contributing to the minnows viability in the basin (ex. oxygen sags), the storm water entities need to be invited into the Program to be actively involved and
- (2) the lack of solid agreements between stakeholders to formalize the LTP activities responsibilities and provide certainty so that failure from one doesn't cause non-compliance for all.

#### **Agency Updates (5 min)**

- Irrigation season is starting and the ditches are being charged.
- There is a non-federal trip to DC scheduled for March 22<sup>nd</sup> and 23<sup>rd</sup>. Program individuals going include Estevan Lopez, Rolf Schmidt-Petersen, Grace Haggerty, and at least one MRGCD representative. It is hoped that some pueblo representatives will be able to attend as well.

**Action:** Chris Banet will set up a meeting room at BIA for the April 7<sup>th</sup> SWM meeting and will distribute room and call-in information to work group members.

**Action:** Chris Banet will forward an electronic copy of the March 3<sup>rd</sup> SWM meeting attendance sheet to Tetra Tech.

**Action:** Tetra Tech will make sure Cyndie Abyeta is added to the SWM email distribution list.

**Next Meeting: Wednesday, April 7<sup>th</sup> from 10:00 am to 12 noon at BIA**

<b>Species Water Management Work Group 03 March 2010 Meeting Attendees</b>					
<b>NAME</b>	<b>POSITION</b>	<b>AFFILIATION</b>	<b>PHONE NUMBER</b>	<b>EMAIL ADDRESS</b>	<b>Primary, Alternate, Other</b>
Amy Louise	PMT	ISC	383-4057	amy.louise@state.nm.us	O
Chris Banet	SWM Member	BIA	563-3403	chris.banet@bia.gov	P
Page Pegram	SWM Member	ISC	383-4041	<a href="mailto:Page.peggram@state.nm.us">Page.peggram@state.nm.us</a>	P
Andrew Lieuwen	SWM member	ABCWUA	768-2570	alieuwen@abcwua.org	P
Valda Terauds	SWM Member	Reclamation	462-3584	vteradus@usbr.gov	P
Hilary Brinegar (by phone)	SWM Member	NMDA	575-646-2642	hbrinegar@nmda.nmsu.edu	P
Cyndie Abyeta	SWM Member	FWS	761-4738	<a href="mailto:cyndie_abyeta@fws.gov">cyndie_abyeta@fws.gov</a>	P
Curtis McFadden	SWM Member	COE	342-3351	curtis.m.mcfadden@usace.army.mil	P
Marta Wood	Admin Support	Tetra Tech	259-6098	Marta.wood@tetrattech.com	O