

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

02 March 2011 Meeting

10:00 AM to 12:00 PM @ BIA

Actions

- Terina Perez will look for a copy of the MOU for the USGS GW/SW Interaction project and any amendments.
- Cyndie Abeyta will create references in her document on the history of the USGS GW/SW Interaction project for documents concerning the project and will put all information on a disc for distribution to SWM members.
- Terina Perez will ask the Coordination Committee (CC) if SWM can have two federal Co-chairs.
- Hilary Brinegar will put all suggested changes to the SWM Charter into tracked changes and distribute to the workgroup for approval.
- In regard to questions about SWM participation in TPECs, timeframes for commenting on documents, and workgroup voting procedures Terina Perez will (1) confirm that the SWM work group will be notified when a TPEC is forming and if they will be asked to recommend people to serve on TPECs for SWM projects; (2) find out if there is an official 30-day feedback timeline for Program documents; and (3) find out when voting within a workgroup is required as the SWM Charter gives procedure for voting and minority reporting but it does not indicate what would trigger a vote.
- Terina Perez will find out if USGS will be collecting data in March and will find out if Reclamation or another Program agency can do an inventory of equipment. She will also see if the software used to download data from the loggers can be acquired.
- Terina Perez will work with Dagmar Llewellyn to add the discussed options to the draft GW/SW Interaction SOW and email the revised draft to the SWM workgroup by March 9th.
- Terina Perez will find out if a contract audit to determine how the USGS GW/SW Interaction project got off its original SOW and how it was moved through various subcommittees of the Program was ever completed.
- Terina Perez will contact Grace Haggerty to setup a SWM workgroup fieldtrip to the ISC Atrisco site.
- Terina Perez will forward the abstract for Stephen Kissock's thesis presentation at the April 19th ScW/MPT/HRW meeting to the SWM workgroup.
- Terina Perez will help Dagmar Llewellyn and Ed Kandl to write an activity summary for hydrologic monitoring at habitat restoration sites.
- Terina Perez will follow up with Jericho Lewis regarding the posting of the *USGS GW/SW Interaction* report with attachments to the Program's website. *Terina spoke to Jericho and he said that he will post it; Terina will verify that it has been posted.*
- Terina Perez will follow up with Susan Kelly about a UNM representative in the SWM work group. (*Ongoing from 2/11*)

Decision

- The February 11th SWM work group meeting minutes were approved with no changes.

Meeting Summary

Introductions & Announcements - Chris Banet brought the meeting to order and introductions were made around the table. It was announced that the Rio Grande Compact Commission Annual Meeting will be on March 30th at the MCM Elegante hotel in Albuquerque at 9:00 am. There will also be a reception hosted by Middle Rio Grande Conservancy District (MRGCD) at 5:30 at the same location.

Agenda Approval – The agenda was approved with the addition of a discussion on a summary of comments from Dagmar Llewellyn regarding Upper Rio Grande Water Operations Model (URGWOM) usage of the GW/SW Interaction data.

Approval of the February 11th meeting notes – The February 11th SWM work group meeting minutes were approved with no changes.

February Action Item Review - Meeting attendees performed an action item review. All February action items are either complete, in progress, or are no longer needed (*all in progress items will be added to end of the March action items*).

- It was shared that after further compilation of the history of the USGS GW/SW Interaction Project it was found that site access and permission to install wells is through a memorandum of understanding (MOU) between MRGCD, Bureau of Reclamation (Reclamation), and U.S. Geological Survey (USGS). A copy of the MOU and any amendments are needed to see what the terms of the MOU are, especially regarding abandoning wells. It was stated that the MOU and any amendments might be archived at Reclamation but the project manager at USGS might need to be contacted in order to find a copy. Terina will look for a copy of the MOU for the USGS GW/SW Interaction project and any amendments.
- Cyndie Abeyta will create references in her document on the history of the USGS GW/SW Interaction project for documents concerning the project and will put all information on a disc for distribution to SWM members.

Non-federal, Co-chair elections – Attendees discussed that since none of the non-federal representatives are currently able to serve as Co-chair it might be possible for both Co-chairs to be from a federal agency. The work group Charter states that “*To the extent practical, one co-chair should represent a federal agency and one co-chair a non-federal agency to ensure broadest representation.*” Terina Perez will ask the Coordination Committee (CC) if SWM can have two federal Co-chairs.

Charter Review – Meeting attendees reviewed the SWM Charter. Several clarifications and minor edits were suggested; Hilary Brinegar will put all suggested changes to the SWM Charter into tracked changes and distribute to the workgroup for approval.

- Attendees discussed that the Charter indicates that the SWM work group can recommend people to serve on TPECs for SWM projects. It was asked if this is true and if SWM will be notified when a TPEC is forming and asked to recommend people.
- It’s also indicated in the charter that the SWM workgroup will review documents from other workgroups as assigned. Usually there is a 30 day feedback timeframe for providing comments to documents. It was asked if there is an official 30 day feedback timeframe for document review; it was suggested that if there is an official timeframe that it be stated in the Charter.

- It was pointed out that though the Charter gives procedure for voting and minority reporting it does not indicate what would trigger a vote and when voting is required.
- In regard to questions about SWM participation in TPECs, timeframes for commenting on documents, and workgroup voting procedures Terina will (1) confirm that the SWM work group will be notified when a TPEC is forming and if they will be asked to recommend people to serve on TPECs for SWM projects; (2) find out if there is an official 30-day feedback timeline for Program documents; and (3) find out when voting within a workgroup is required as the SWM Charter gives procedure for voting and minority reporting but it does not indicate what would trigger a vote.

USGS GW/SW Interaction Project - SWM members who attended an URGWOM tech team meeting updated attendees on feedback and recommendations received regarding the USGS GW/SW Interaction project. Currently data from the USGS GW/SW Interaction project are used to calibrate the URGWOM model. Recommendations from the tech team were that data collection and correction (and not analysis) continue, with collection being reduced to 5 sites (Alameda, Montano, Central, Rio Bravo, and I-25) with single transects at each location. The tech team also indicated that data collection could eventually be terminated but that they would like a couple more years of consistent collection at the reduced level to use for model calibration.

- Attendees discussed the importance in continuing to collect GW/SW data as it is also used by the Program riparian groundwater models, as well as a number of other Program and non Program related projects. It was also pointed out that since the data is public there may be more entities that use the data than the work group is aware of.
- It was discussed that since reports have not yet been received it's not known if the data analysis is something that the Program will utilize. If the workgroup decides to exclude data analysis from the project then the project should be put out for bid because though USGS has strengths in data analysis, other factors such as high cost, late receipt of deliverables, and compatibility issues with the posted data might make using a contractor more beneficial.
- Attendees discussed that if data collection is turned over to a contractor all equipment and liabilities associated with the wells would need to be turned over to Reclamation. As the SWM workgroup has been advised against a short IA extension for USGS to transfer the project, it was discussed that the most efficient way to deal with project transfer would be for Reclamation to accompany USGS during March data collection and inventory the equipment. However, if USGS will not be performing data collection in March then equipment turnover will be an extra expense. The software used to download the data from the data loggers will also need to be acquired. Terina will find out if USGS will be collecting data in March and will find out if Reclamation or another Program agency can do an inventory of equipment. She will also see if the software used to download data from the loggers can be acquired.
- Attendees agreed that the project should be put out for bid with several options included in the SOW so that cost estimates for each option could be compared. The following options will be included in the current draft SOW. (1) Data collection at all sites; (2) data collection at 8 sites, as currently specified in the draft SOW; and (3) data collection at 5 sites as recommended by the URGWOM tech team. It was suggested that the SOW still include monthly maintenance and manual measurements; if the loggers stray there needs to be a way to bring them back. QA/QC and data correction should also remain as part of the SOW.
 - Because the IA with USGS ends in March, meeting attendees would like to have a SOW finalized by the workgroup at the end of March. Terina Perez will work

with Dagmar Llewellyn to add the discussed options to the draft USGS GW/SW Interaction SOW and email the revised draft to the SWM workgroup by March 9th.

- A table documenting the USGS/Transect Project History indicates that in 2008 a contract audit was scheduled to determine how the project got off its original SOW and how it has moved through various subcommittees of the Program. Terina will find out if a contract audit to determine how the USGS GW/SW Interaction project got off its original SOW and how it has moved through various subcommittees of the Program was ever completed.

Planning/Confirmation of MRGCD & ISC Atrisco Project Fieldtrip - Attendees discussed a possible field trip to the Interstate Stream Commission (ISC) Atrisco Project. Terina will contact Grace Haggerty to setup a SWM workgroup fieldtrip to the ISC Atrisco site. It's preferential that the fieldtrip coincide with a regularly scheduled SWM meeting but if this is not possible potential dates can be gathered for consideration.

Program Coordination

- The LTP schedule will now follow the new schedule for the Reclamation BA; Reclamation will release a draft BA for Program review in September.
- It was announced that a new administrative assistant for the Program will be starting in March.
- A joint PHVA/PVA work group meeting to address disconnect between the PVA model needs and URGWOM will be scheduled for April.
- PHVA will be meeting on March 24th.
- Stephen Kissock will be giving a thesis presentation on April 19th at 11:00 am for the ScW/MPT/HRW meetings. Terina will forward the abstract for Stephen Kissock's thesis presentation to the SWM workgroup.
- The work group 2010 Accomplishments were reviewed by the CC and no changes were made.
- A celebration for the 1000th acre of restored habitat is currently scheduled for April.

Attendees discussed an activity that would use FLO-2D for hydrologic modeling at habitat restoration sites. It was shared that using SRH-2D might be more appropriate as it can produce more fine-tune data than FLO-2D. A model of Angostura was made by Mark Stone, a UNM professor, which might be useful to measure changes at the restoration sites. Terina will help Dagmar and Ed Kandl to write an activity summary for hydrologic modeling at habitat restoration sites.

Next Meeting: April 6, 2011

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

02 March 2011 Meeting

10:00 AM to 12:00 PM @ BIA

Meeting Minutes

Introductions & Announcements

- Chris Banet brought the meeting to order and introductions were made around the table.
- It was announced that the Rio Grande Compact Commission Annual Meeting will be on March 30th at the MCM Elegante hotel in Albuquerque at 9:00 am. There will also be a reception hosted by Middle Rio Grande Conservancy District (MRGCD) at 5:30 at the same location.

Agenda Approval

- The agenda was approved with the addition of discussion on a summary of comments from Dagmar Llewellyn regarding Upper Rio Grande Water Operations Model (URGWOM) usage of the GW/SW Interaction data.

Approval of the February 11th meeting notes

- The February 11th SWM work group meeting minutes were approved with no changes.

February Action Item Review

- **Terina Perez will follow up on Amy Louise's January 2011 actions to make sure they all get completed. *In process.***
 - It was shared that Warren Sharp is not the COTR for the USGS GW/SW Interaction project; Jericho Lewis, Bureau of Reclamation (Reclamation) CO is handling the contract without a technical representative.
 - It was shared that after further compilation of the history of the USGS GW/SW Interaction Project it was found that site access and permission to install wells is through a memorandum of understanding (MOU) and not a contract. The MOU is between MRGCD, Reclamation, and U.S. Geological Survey (USGS) and is thought to have started in 2003. Though the contract number was found an actual copy of the MOU could not be found.
 - The MOU was a request to modify an existing permit prior to Program funding. It's believed that the original permit was for a transect at Rio Bravo as part of a study by Jim Bartelino.
 - A copy of the MOU and any amendments are needed to see what the terms of the MOU are, especially regarding abandoning wells. It was stated that the MOU and any amendments might be archived at Reclamation but the project manager at USGS might need to be contacted in order to find a copy.

Action: Terina will look for a copy of the MOU for the USGS GW/SW Interaction project and any amendments.

- **Matt Martinez will circulate the documentation he has on the USGS GW/SW Interaction license to the SWM work group.**

- This action item is not longer needed as it has been determined that the project is through an MOU and not a license.
- **Terina Perez will follow up with Jericho Lewis regarding the posting of the USGS GW/SW Interaction report with attachments to the Program's website. Terina spoke to Jericho and he said that he will post it.**
 - Terina had spoken to Jericho and he said that he would post the draft report with attachments to the Program website.
 - Terina will follow up with Jericho to make sure that the draft USGS GW/SW Interaction report has been posted to the Program website.
- **Terina Perez will research the tentative dates for the joint work group meeting for the SWFL. In process; there is supposed to be an upcoming presentation on the beetle and Terina is communicating with the HR liaison to see if this will happen.**
 - Meeting attendees were updated that the Habitat Restoration Work group (HRW) is trying to schedule a leaf beetle presentation from Deb Hill for their March 15th work group meeting but this is not likely to happen. It was also clarified that it would only be a presentation on the leaf beetle and not a joint workgroup meeting for the Southwestern Willow Flycatcher (SWFL).
 - It was discussed that last summer the Executive Committee (EC) had talked about having a presentation from Deb Hill and Hira Walker regarding the leaf beetle.
 - It was shared that Kevin Gardner, the technical lead on the flycatcher at New Mexico State University (NMSU), would also be available for leaf beetle presentations and discussion.
 - It was commented that it would be good to have Kevin present for discussion on the leaf beetle as its best to get a variety of scientific views.
 - Hilary Brinegar will inform Kevin of the HR discussions.
 - It was explained that U.S. Fish and Wildlife Service (the Service) supported release of the leaf beetle in Texas but that it does not support its release in Arizona and New Mexico because of possible affects on the SWFL. A 2,000 mile radius is specified in the SWFL recovery plan however it is not scientifically justified. A release in Candelaria was the closest that a release has been to that radius. Since the beetle has done well there it is important to get updates on the leaf beetle so that flycatcher restoration sites can be prioritized.
 - Terina will help to keep the ScW Co-chairs informed if there will any leaf beetle discussion/presentations.
- **Curtis McFadden will check with Marc Sidlow and Steven Kissock to determine whether or not the Corps is interested in continuing the USGS GW/SW Interaction data collection for URGWOM. He will also confirm the Corps funding contributions to the project.**
 - Complete. The Corps is unable to fund continuation of the USGS GW/SW Interaction data collection for URGWOM.
- **Matt Martinez will recirculate the USGS GW/SW Interaction emails, consolidate all the information on the project, and will put all the information on a disc for distribution to SWM members.**

- The status of this action item is not known as Matt was unable to attend the meeting. Cyndie Abeyta updated the summary table but she is unsure if Matt was able to put the information on a disc.

Action: Cyndie Abeyta will create references in her document on the history of the USGS GW/SW Interaction project for documents concerning the project and will put all information on a disc for distribution to SWM members.

- **Terina Perez will find out when the next monthly URGWOM tech team meeting is scheduled. *The USGS GW/SW Interaction discussion is the first item on the agenda for the next URGWOM tech team meeting on 3/2; several SWM members plan to attend before the SWM meeting.***
 - Complete.
- **Curtis McFadden will contact Dennis Garcia to facilitate a meeting between key URGWOM individuals (Nabil Shafike, Steven Kissock, Marc Sidlow) and SWM representatives (Chris Banet and Cyndie Abeyta).**
 - Complete.
- **Terina Perez will follow up with Susan Kelly about a UNM representative in the SWM work group. *(Ongoing from 2/11)***
 - Ongoing. It was shared that Susan Kelly plans to meet with several people at UNM but Terina has not yet heard back from her.
- **Comments on the Larval Food Availability study project scope are due by February 22**
 - Complete.

Non-federal, Co-chair elections

- Attendees discussed that since none of the non-federal representatives are currently able to serve as Co-chair it might be possible to have two federal Co-chairs. The work group Charter states that *“To the extent practical, one co-chair should represent a federal agency and one co-chair a non-federal agency to ensure broadest representation.”*

Action: Terina Perez will ask the Coordination Committee (CC) if SWM can have two federal Co-chairs.

Charter Review

- Meeting attendees reviewed the SWM Charter. Several clarifications and minor edits were suggested.

Action: Hilary Brinegar will put all suggested changes to the SWM Charter into tracked changes and distribute to the workgroup for approval.

- It was discussed that in the “Implementation of Long Term Plan (LTP) Activities via the Request For Proposal (RFP) Process” section the Charter indicates that the SWM workgroup can recommend TPEC membership. It was asked if this was true and if SWM will be notified when a TPEC is forming and asked to recommend people.
- In the “Technical Review and Coordination” section the Charter indicates that the SWM workgroup will review documents from other workgroups. It was asked if there is an official feedback timeline for reviewing contracts and SWM deliverables. Usually 30 days are given for review of documents but it was not

known if this is an official feedback timeframe. It was suggested that if there is an official timeframe that it be stated in the Charter.

- It was pointed out that though the Charter gives procedure for voting and minority reporting it does not indicate what would trigger a vote and when voting is required.

Action: In regard to questions about SWM participation in TPECs, timeframes for commenting on documents, and workgroup voting procedures Terina Perez will (1) confirm that the SWM work group will be notified when a TPEC is forming and if they will be asked to recommend people to serve on TPECs for SWM projects; (2) find out if there is an official 30-day feedback timeline for Program documents; and (3) find out when voting within a workgroup is required as the SWM Charter gives procedure for voting and minority reporting but it does not indicate what would trigger a vote.

- The CC and EC will be approving the work group charters but it's not known if they are scheduled to be on an upcoming agenda.
- Meeting attendees were updated that upcoming adaptive management sessions and a Program symposium/open house that typically occurs in the fall were added to the SWM work plan.

Updates and recommendations from the URGWOM meeting regarding the USGS GW/SW data needs

- SWM members who attended an URGWOM tech team meeting updated attendees on feedback and recommendations received regarding the USGS GW/SW Interaction project.
 - Currently data from the USGS GW/SW Interaction project is used to calibrate the URGWOM model by comparing the model output to the actual water levels. The tech team also pointed out that the USGS GW/SW Interaction data is also used for the Program riparian groundwater models.
 - Recommendations from the tech team were that data collection and correction (and not analysis) continue, with collection being reduced to 5 sites (Alameda, Montano, Central, Rio Bravo, and I-25) with single transects at each location. The tech team discussed that redundant transects would be more valuable in an academic setting and that they were not needed for URGWOM and riparian model purposes. The tech team said that there was no URGWOM funding available for the GW/SW Interaction project. The tech team also indicated that data collection could eventually be terminated but that they would like a couple more years of consistent collection at the reduced level to use for model calibration.
 - It was clarified that after data is collected it is corrected for barometric pressure and adjusted for the actual elevation of the measuring point.
 - Attendees discussed the importance in continuing to collect GW/SW data as it is also used by the Program riparian groundwater models, as well as a number of other Program and non Program related projects. It was also pointed out that since the data is public there may be more entities that use the data than the work group is aware of.
- It was briefly discussed that factors such as high cost, late receipt of deliverables, and compatibility issues with the posted data are what prompted the SWM work group to relook at the project now that the IA will soon be ending.
 - It was stated that if its agreed that the project should continue without data analysis then the project should be put out for bid because though USGS has

- strengths in data analysis since the reports have not yet been received it's not known if the data analysis is something that the Program will utilize.
- It was suggested that the project be put out for bid with several options so that costs can be compared.
 - Meeting attendees discussed a summary of comments from Dagmar Llewellyn regarding URGWOM usage of the GW/SW Interaction data.
 - It was noted that the IA with USGS was extended through March so that the quarterly data could be collected.
 - It was commented that groundwater losses in the Albuquerque reach are larger than previously predicted. Since installation of the drinking water project there has been concern about the effect of forty foot pylons on shallow ground water flow. It was stated that double transects adjacent to the drinking water project should continue to be monitored.
 - Attendees discussed whether quarterly monitoring could be reduced since the data loggers have the data storage and battery capacity to run for 10 years.
 - Since regular monitoring is also used for maintenance and to check for vandalism it was said that monitoring should be at least bi yearly.
 - Data processing time would be longer if the quarterly monitoring were reduced.
 - It was suggested that several options for data collection should be explored as a contractor might be able to do the full amount of monitoring for a reasonable cost.
 - Attendees discussed that if data collection is turned over to a contractor all equipment and liabilities associated with the wells would need to be turned over to Reclamation.
 - Attendees were reminded that at a previous SWM meeting it had discussed that none of the wells would be abandoned and plugged. Allowing the wells to remain open so that the loggers could continue to collect data would not cause a significant liability; there would also be the potential for the data to be downloaded and used in the future.
 - Since micropizometers have been added to several locations and changes have been made to the project it was suggested that USGS be accompanied to the well sites for inventory.
 - As the SWM workgroup has been advised against a short IA extension for USGS to transfer the project, it was discussed that the most efficient way to deal with project transfer would be for Reclamation to accompany USGS during March data collection and inventory the equipment. Reclamation could then transfer the project to a contractor.
 - If USGS will not be collecting data in March then equipment turnover will be an extra expense.
 - The software used to download the data from the data loggers will also need to be acquired.

Action: Terina will find out if USGS will be collecting data in March and will find out if Reclamation or another Program agency can do an inventory of equipment. She will also see if the software used to download data from the loggers can be acquired.

- Attendees agreed that the project should be put out for bid with several options included in the SOW so that cost estimates for each option could be compared. The following options will be included in the current draft SOW. (1) Data collection at all sites; (2)

data collection at 8 sites, as currently specified in the draft SOW; and (3) data collection at 5 sites as recommended by the URGWOM tech team.

- It was suggested that the SOW still include monthly maintenance and manual measurements; if the loggers stray there needs to be a way to bring them back.
- It was also suggested that QA/QC and data correction remain as part of the SOW.
- Because the IA with USGS ends in March, meeting attendees would like to have a SOW finalized by the workgroup at the end of March.

Action: Terina Perez will work with Dagmar Llewellyn to add the discussed options to the draft USGS GW/SW Interaction SOW and email the revised draft to the SWM workgroup by March 9th.

- A table documenting the USGS/Transect Project History indicates that in 2008 a contract audit was scheduled to determine how the project got off its original SOW and how it has moved through various subcommittees of the Program. It was stated that it would interesting find out if the audit was ever completed.

Action: Terina will find out if a contract audit to determine how the USGS GW/SW Interaction project got off its original SOW and how it has moved through various subcommittees of the Program was ever completed.

- Attendees discussed that if the project is awarded to a contractor the GW/SW Interaction data would need to be posted to the Program website.
 - It was suggested that data be posted quarterly.
 - It was wondered if USGS would be willing to have a page on their website that would direct people to the Program website where the data will now be stored.
- It was shared that the first report from USGS should be going for regional final approval in mid February but it's not yet known when the finalized report will become available. The second report from USGS will be beginning colleague review on March 9th.

Planning/Confirmation of MRGCD & NMISC Atrisco Project Fieldtrip

- Attendees discussed a possible field trip to the Interstate Stream Commission (ISC) Atrisco Project.
 - It's preferential that the fieldtrip coincide with a regularly scheduled SWM meeting but if this is not possible potential dates can be gathered for consideration. Meeting duration can also be extended.

Action: Terina will contact Grace Haggerty to setup a SWM workgroup fieldtrip to the ISC Atrisco site.

Program Coordination

- **LTP & AM Updates**
 - The past and future activity summaries are being compiled.
 - The LTP schedule will now follow the new schedule for the Reclamation BA; Reclamation will release a draft BA for Program review in September.
 - The Corps will release a draft BA in April or May.
 - It was announced that a new administrative assistant for the Program will be starting in March.
- **PHVA/Hydrology & PVA Updates**

- At the last EC meeting it was mandated that there be a joint PHVA/PVA workgroup meeting to discuss disconnect between the PVA needs and what the URGWOM model will be able to provide. The meeting will be scheduled for sometime in April.
- The PHVA workgroup will be meeting on March 24th.
 - Attendees were updated that the PHVA refresher that the SWM workgroup had requested information on will not be scheduled until after the Reclamation draft BA has been submitted.
- **Joint Workgroup Activities (DBMS updates; MPT updates)**
 - Stephen Kissock will be giving a thesis presentation on hydraulic monitoring at the Los Lunas site on April 19th at 11:00 am for the ScW/MPT/HRW meetings.

Action: Terina will forward the abstract for Stephen Kissock's thesis presentation to the SWM workgroup.

- **PMT Liaison Needs**
 - It was shared that the work group 2010 Accomplishments were reviewed by the CC and no changes were made.
 - The SAR work group will be modifying their floodplain encroachment study as the Corps will be funding a portion of it; a modified SOW should be available soon.
 - A celebration for the 1000th acre of restored habitat is being planned for April.
- **SWM Issues to be elevated**
 - Terina Perez will ask the CC if SWM can have two federal Co-chairs.

Attendees discussed an activity that would use FLO-2D for hydrologic modeling at habitat restoration sites.

- It was shared that using SRH-2D might be more appropriate. SRH-2D models hydraulics in the river and overbanking but at a finer tune than FLO-2D.
- A model of Angostura was made by Mark Stone, a UNM professor, which might be useful to measure changes at the restoration sites. The model was done before habitat restoration work was done and might be helpful in understanding the hydrologic impacts of restored sites as there are no control sites for comparison.

Action: Terina will help Dagmar and Ed Kandl to write an activity summary for hydrologic modeling at habitat restoration sites.

Next Meeting: April 6, 2011

**Species Water Management Work Group
11 February 2011 Meeting Attendees**

| Name | POSITION | AFFILIATION | PHONE NUMBER | EMAIL ADDRESS | PRIMARY, ALTERNATE, OTHER |
|---------------------------|------------------------|--------------------|---------------------|----------------------------------|----------------------------------|
| Page Pegram via phone | SWM Member | ISC | 383-4041 | page.pegram@state.nm.us | P |
| Terina Perez | PMT Member | Reclamation | 462-3614 | tlperez@usbr.gov | O |
| Curtis McFadden | SWM Member | USACE | 342-3351 | curtis.m.mcfadden@usace.army.mil | P |
| Hilary Brinegar via phone | SWM Member | NMSU | 575-646-2642 | hbrinegar@nmda.nmsu.edu | P |
| Dagmar Llewellyn | | Reclamation | 462-3594 | dllewellyn@usgr.gov | O |
| Ed Kandl | SWM Member | Reclamation | 462-3586 | ekandl@usbr.gov | P |
| Chris Banet | SWM Member Co-Chair | BIA | 563-3403 | chris.banet@BIA.gov | P |
| Cyndie Abeyta | SWM Member | USFWS | 761-4738 | cyndie_Abeyta@FWS.gov | P |
| Rick Billings | SWM Member | ABCWUA | 796-2527 | rbillings@abcwua.org | P |
| Christine Sanchez | Admin Support | Tetra Tech | 881-3188 ext 139 | christine.sanchez@tetrattech.com | O |