

**Middle Rio Grande Endangered Species Collaborative Program
Habitat Restoration Workgroup (HRW) Meeting
20 September 2011, Tuesday
12:45-3:30 pm at Interstate Stream Commission**

Meeting Summary

Actions

- Gina Dello Russo will provide the note taker with some specific language regarding the resolution of responses to Recommendation #7 for inclusion in the September 20th HR meeting notes.
- Jericho Lewis will ask the RM83 contractor(s) for clarification on what “qualitative” means and what the qualitative analysis will entail. He will also request information on what data the contractor has available and is using.

Decisions

- The August 16th, 2011 HRW meeting notes were approved with no changes

Announcements

- October 14th, 2011 is the deadline for comments on the future activity summaries; the CC will be reviewing these at their all day working meeting on October 26th.
- The Program’s 10th Anniversary and Open House is scheduled for October 21st and 22nd at the Rio Grande Nature Center. Technical session presentations will be given all day on October 21st – work group members are encouraged to attend. Saturday, October 22nd is the Open House with activities and booths aimed at families and children.
- The PMT will be hosting a work group appreciation and award brunch on November 15th from 9:30am to 11:30am at the Open Space.
- The EC has cancelled their October meeting in order to attend the Technical presentations. They will be meeting again on November 3rd and 4th to discuss becoming a recovery program or recovery implementation program. They will be discussing the recovery criteria as well as strategies to complete goals and objectives.

HRW Meeting Summary

- Gina Dello Russo brought the meeting to order and introductions were made. The agenda was approved with no changes.
- The August 16th, 2011 HRW meeting notes were approved with no changes.
- All August action items were completed as assigned.
- Work group members were informed that wetland compliance monitoring was added to the System-wide analysis SOW. The unit costs still need to be estimated. It would be helpful to have a small subset of the work group discuss what the initial needs are in order to determine the units to be done first. After discussing options, the work group agreed that the first product to be produced should be the maps with hydrology, flycatcher data, geomorphology, vegetation, project areas (historic, recent), updated inundation mapping, etc. Gina Dello Russo, Jill Wick, and Ondrea Hummel all volunteered to discuss the details before next Friday.
- Santa Ana Pueblo then presented updates on their habitat restoration work for the flycatcher, minnow monitoring, and river monitoring (the affects of bankline reengineering) on habitat. Santa Ana is unique in that the flycatcher and minnow work is funded under a single grant.
 - After 6 years of flycatcher surveys, the pueblo was able to designate “high use” and “non-use” areas. The flycatchers have yet to breed in these areas. However, males have stayed on territory into the non-migratory period, but the females haven’t responded yet. Santa Ana is currently collecting habitat measurements that include vegetation sampling,

- temperature, relative humidity, and soil moisture measures for the high-use areas, non-use areas, and restoration sites.
- Initial results indicate that there is 3 to 5 degree temperature difference between restoration sites. As summer temperatures in the Southwest can range from 90 to 120 degrees, dense vegetation preferred by the flycatcher provides shelter and protection.
 - Regarding the humidity, the restoration sites are more similar early in the season. But those differences increase over time. Of note, it stays more humid at the confluence of the Rio Grande and Rio Jemez compared to the backwater areas.
 - The passive restoration sites are beginning to look much like the high use areas (dominated by native vegetation) while the other restoration sites continue to be dominated by coyote willows.
 - The canopy gap created with non-native vegetation removal has to be considered. The flycatcher needs dense riparian vegetation with varying heights and prefers younger vegetation. Exploring different vegetation species might need to be considered as an option to get to a solid structure in the forest in order to meet the flycatcher needs.
 - The next steps in the flycatcher work include: (1) continue surveying for flycatcher to make sure there is stop-over habitat available to detect future breeding; (2) collect baseline measurements at restoration sites; (3) collect vegetation measurements in 2012; (4) collect temperature, relative humidity, and soil moisture measurements in 2012-2013; and (5) apply the results to future restoration efforts.
- For the pueblo's minnow monitoring, it was shared that as of 2011, Santa Ana had 14 sites for seine hauls (8 in the Rio Grande, and 6 in the Rio Jemez). Kick nets are used in the 3 in the backwaters. Egg collection is done with Moore Egg Collectors at 5 sites in the Rio Grande and 2 in the Rio Jemez.
 - The schedule for monitoring is as follows:
 - March – seine hauls;
 - May – egg monitoring;
 - July – seine hauls;
 - November – seine hauls and cross sections.
 - Santa Ana staff has received training from both ASIR and the Service. In fact, the Service is in the field every time they go out. ASIR helped develop the pueblos monitoring protocol.
 - There are 15 seine hauls for each event and each habitat within that location (ex. runs, embayments, stream banks, over hanging vegetation, isolated pools, etc.) is included as much as possible. A data sheet template is filled out for each seine event making the data collected as consistent and comparable as possible.
 - Other monitoring work the pueblo is doing includes: (1) cross sections/river flow complete with flow and depth recorded at the beginning, middle, and end of each seine haul event as well as every 4 feet within the cross section; (2) river transects and elevation changes; (3) water quality and turbidity measurements; (4) longitudinal profiles to get into the thalweg to measure elevation and/or elevation change.
 - Santa Ana Pueblo has 4 Gradient Restoration Facility (grf) structures on their land. With the structures installed, the 6 miles of Rio Grande within Santa Ana boundaries has been protected from incision and it seems to be working.
 - Near one of the GRFs located close to the confluence, the river was very deep and starting to flank the facility. Full-grown cottonwoods were being lost and the

functionality of the GRF was being threatened. Reclamation used 13 subsurface, rock-line weirs and then relocated the river 50 feet to the east. It was noted that the purpose of this project was not for minnow habitat but to save the facility and bank. After the river was relocated, the Pueblo wanted to know: (1) how to monitor the affects of projects (when all the system components are constantly changing?); (2) what changed in the river channel; (3) how did it affect habitat and (4) the fish community?

- Pueblo staff liked the approach modeled after the ACOE wetland delineation process that uses different biological indicators (ex. hydrology, biology, or soil) that can be evaluated based on a standard that can be judged. In this case, the 2003 Biological Opinion criteria for the minnow were used. The Reclamation River Maintenance Project was then compared to the reference sites (the other monitoring locations). This provided a project trajectory towards a set of conditions to assess the affects and possibly answer the questions.
 - The project did have noticeable affects: (1) the deep scour filled in; (2) the shallower areas have started to inundate; (3) the thalweg moved within 2 weeks after completion and has since realigned.
 - Using the relative change of the project site compared to the other 7 monitoring sites, the initial results indicate:
 - 1. No change was seen within the habitat (runs, backwater, pools, stream margins, etc.). This might be better understood or corrected if each mesohabitat were mapped at the sites each year.
 - 2. A fall habitat pool was removed but a spring, shallow habitat area was created – it appears that the species richness and diversity at the site seems to have increased compared to the other 7 sites.
 - 3. Based on the other project sites, it appears that a rank order dominance change occurred at the site indicating a decrease in minnow dominance during the fall season after the install. Although, the CPUE remained relatively unchanged.
 - The final assessment indicated that the project did change the channel geomorphology, increased the quality of the habitat, and did not negatively affect the minnow population.
- Jericho Lewis then updated the work group on the RM83 Project status. The contractor has asked the work group to indicate where the reconnection point for the diversion is to be located. Attendees discussed the benefits of telling the contractor where the point should be versus having the contractor selecting the point based on their best knowledge, data, and expertise.
 - Concern was expressed that habitat restoration is no longer the main goal of the project even though that was the original intent. The public safety, conveyance and the sediment plug are secondary to the restoration. Ideally, the contractor would approach the project from a habitat restoration emphasis but would consider all the secondary components and how to maximum “hitting” all those objectives as efficiently as possible after the habitat restoration.
 - The work group originally suggested moving the reconnection point ½ mile downstream from the diversion to the floodplain: (1) to avoid reconnecting at a channelized drain with thick vegetation on either side thus creating a straight “shot” inflow. This option did not seem like it would increase habitat diversity or quality in the area; and (2) to move the location downstream of existing flycatcher habitat.
 - The purpose is to get an independent report that is based on best knowledge and professional opinion - if the work group dictates the location that independent piece will be lost. Having the contractor select the point puts the responsibility back on the

contractor but they should be able to justify the location based on data, knowledge, professional opinion, and expertise.

- It was pointed out that the contractor data is probably only be current through 2009 even though 2010 and 2011 data is now available. If more recent data is to be included (ex. flycatcher presence in the area now) then this information needs to be provided to the contractor. At a minimum, the work group will need to fully understand what data was used in the feasibility study in order to know the limitations.
- Attendees also discussed wanting to see the trade offs articulated in the feasibility study. For example, clearly articulate that the project may cost \$15 million but \$50 million is gained in terms of minnow habitat or \$20 million is gained in flycatcher habitat. Or the study could specify any short-term loss of habitat (ex. 7 of 10 flycatcher sites) that with time could increase to 30 flycatcher sites. Work group members want to see and understand the “bang for the buck.” The potential cost of mitigation should also be specified.
- After this discussion, the work group agreed to not provide the contractor with the location point of the diversion reconnect but to request that the contractor use their best knowledge, data, expertise, and professional opinion to determine that site.

**Middle Rio Grande Endangered Species Collaborative Program
Habitat Restoration Workgroup (HRW) Meeting
20 September 2011, Tuesday
12:45-3:30 pm at Interstate Stream Commission**

Draft Notes

Introductions/Agenda Approval

- Gina Dello Russo brought the meeting to order and introductions were made. The agenda was reviewed and approved with no changes.

Approval of August 16th, 2011 meeting notes

- The August 16th, 2011 HRW meeting notes were approved with no changes

August Action Item Review

- ✓ Gina Dello Russo will verify with Stacey from the Tamarisk Coalition that the joint presentation can be scheduled for September 20th. – *complete*;
 - It was suggested that a small subgroup of the HR work group meet to discuss steps forward on potential beetle monitoring/tracking, protocol, and training. Volunteers included Jill Wick, Ondrea Hummel, and Gina Dello Russo. Anyone interested is encouraged to participate.
- ✓ Anders Lundahl and Rick Billings will integrate the 2 draft San Acacia Diversion Dam Fish Passage statements and distribute to the HRW for review. – *complete*;
 - The combined statements have already been elevated to the CC. There has not been any feedback; however, there does appear to be some confusion on the effort regarding the San Acacia Reach A&R – specifically questions relating to Recommendation #7 and the peer review of the dam.
- ✓ Gina Dello Russo will send a draft response to Recommendation #7 to the HRW for review. – *no longer applicable*;
 - Originally, Gina had offered to write a short summary on the response to the questions on Recommendations #7 (planning). Kathy Dickinson was contacted to provide some clarification on the wording in the SADD fish passage peer review summary (compared to the language in the actual report). It is not “set in stone” that only one reach be evaluated. There is the added caveat that what HRWis promoting or pursuing is a look at the lateral connection and potential habitat diversity in the reaches.
 - Since the issue has already been elevated to the CC, members briefly discussed if there was even a need to provide a response/statement to Recommendation #7 unless the CC makes a request.

Action: Gina Dello Russo will provide the note taker with some specific language regarding the resolution of responses to Recommendation #7 for inclusion in the September 20th HR meeting notes.

- ✓ HRW comments on the future activity summaries are due to Monica Sanchez by August 25th. – Monika received 1 set of comments from 1 HRW member. – *complete*;
 - The CC will be reviewing/discussing the future activity summaries at their all-day working meeting on October 26th; thus the work group deadline for any revisions or comments on the future activity summaries is October 14th.

Draft Task List for HRW Planning

- The scope of work for the system-wide analysis project needs to be finalized soon (before next Friday). The draft version needs additional details and fine-tuning. An existing ID/IQ through the Corps will be used to accomplish these tasks. Please note that the wetland compliance monitoring has been added into the scope and will be completed within the next 2 months and then will continue all of next year. It would be helpful to discuss what the initial needs are in order to estimate the unit costs.
 - It was shared that a good initial product would be to have baseline maps produced. The maps could include: (1) information on historical flows analysis; (2) historic vegetation analysis; (3) minnow/flycatcher habitat quality information; (4) hydrologic data collection including cross section surveys, lab analysis, bed form surveys; (5) locations of wells and gages; (6) hydraulic analysis; (7) project areas; (8) monitoring areas; (9) geomorphologic information; (10) channel width/depth ratios; and (11) channel incision information, etc. The maps could start at the “global” scale and then be fine tuned to the subreach level and even mile scale.
 - Members wanted to make sure that geomorphic and vegetation information was included.
 - It was also suggested that the map development begin with the most recent information first.
 - It was also suggested that “if/then” directions could be included in the initial task. For example, if overbank flows are observed a level X, then focus on this subreach. Or - if vegetation Y is found next to Site Z, then do this...
 - Such maps would be useful in helping to determine projects and prioritization (ex. where to do plantings that would overlap with beetle presence).
- Attendees agreed that the initial project task should produce maps with hydrologic, geomorphic, vegetation data, the 2001 flycatcher data, project areas (both historic and recent), updated inundation mapping, etc.
 - It was suggested that the product could be electronic in nature (ex. ARC-GIS online) to help address the need for regular updates and allow the work group to turn layers on and off.
 - A small group of members volunteered to continue discussing the details of the scope (initial product, next steps, etc.). Volunteers included: Gina Dello Russo, Rick Billings, Ondrea Hummel, and Jason Casuga.
- Attendees briefly discussed if the initial product might be available for review at the October 18th. Ondrea volunteered to check with the contractor on the feasibility of having a product that early.
- Attendees briefly discussed that 3 HRW projects have been funded and there are 2 remaining projects that could receive funding for next year.

Draft response to Recommendation #7: It was agreed that the summary paragraph supplied to the CC from HRW on Fish Passage fulfills the requested response to Comment #7 of the San Acacia Fish Passage Peer Review summary provided to the workgroup. The summary paragraph does not outline recommendations from HRW for next steps to address Peer Review comments on improving lateral connectivity and within-reach habitat restoration priorities and opportunities.

Santa Ana Presentation: Santa Ana Pueblo then presented updates on their habitat restoration work for the flycatcher, minnow monitoring, and river monitoring (the affects of bankline reengineering) on habitat.

- In a brief project background, attendees were informed that Santa Ana has been monitoring minnow since the winter of 2006 through a grant with the Service. After several years, monitoring was funded through the Collaborative Program. Santa Ana is unique in that the

flycatcher and minnow work is funded under a single grant. There are some challenges encountered with this arrangement but overall it has been very successful (and is more competitive). The Program funding allowed the work to be expanded so there are several changes that were experienced since the beginning.

- *Flycatcher Surveys*

- Santa Ana Pueblo is located approximately 20 miles north of Albuquerque. There are 2 rivers within the pueblo boundaries - 6 miles of the Rio Grande and 12 miles of the Rio Jemez.
- The flycatcher is an insectivore and neotropical migrant (meaning it spends 3 to 4 months in breeding grounds and then migrates for the winter; traveling 1,500 to 1,800 km each way). Breeding season is a time of highest mortality and requires much energy. The flycatcher is a riparian obligate breeder and is a federally endangered subspecies. There is an immense need to identify and protect migratory corridors since the loss and modification of habitat is one reason for the species decline. The pueblo has been involved in large-scale riparian efforts along the Rio Grande since 1996. Much of the work done has been removal of invasive species as well as building and restoring habitat.
- The pueblo has utilized standardized flycatcher surveys since 2001. The flycatcher consistently uses the riparian corridors every year during migration and there are “hot spots” or preferred areas.
 - After 6 years of flycatcher surveys, the pueblo was able to designate “high use” and “non-use” areas. The flycatchers have yet to breed in these areas. However, males have stayed on territory into the non-migratory period, but the females haven’t responded yet. The flycatchers prefer younger stands for breeding. The pueblo uses active (backwater) and passive restoration (confluence).
- Habitat measurements are collected during the surveys. Measurements include: vegetation sampling, temperature, relative humidity, and soil moisture. These measurements are taken at the high-use areas, non-use areas, and restoration sites.
 - Hobo U23 probes are used to collect temperature and relative humidity at 15 minute intervals.
 - Initial results indicate that there is 3 to 5 degree temperature difference between restoration sites. As summer temperatures in the Southwest can range from 90 to 120 degrees, dense vegetation preferred by the flycatcher provides shelter and protection.
 - Regarding the humidity, the restoration sites are more similar early in the season. But those differences increase over time. Of note, it is stays more humid at the confluence of the Rio Grande and Rio Jemez compared to the backwater areas.
 - In the high-use areas, the flycatchers forage in locations dominated by native vegetation. They will use areas with a high tamarisk component as the tamarisk provides some needed structure. The back water restorations are dominated by coyote willows and the pueblo has begun adding taller cottonwoods to help compensate and provide the structural heterogeneity desired by the flycatcher. Also, the pueblo has begun moving away from the “intervention” work and is letting the river complete its own passive restoration (terracing).
 - The abundance of taller, more decadent vegetation may indicate why the flycatchers aren’t using some areas as much. However, the passive restoration sites are beginning to look much like the high use areas (dominated by native vegetation) while the other restoration sites continue to be dominated by coyote willows.

- The next steps in the flycatcher work include: (1) continue surveying for flycatcher to make sure there is stop-over habitat available to detect future breeding; (2) collect baseline measurements at restoration sites; (3) collect vegetation measurements in 2012; (4) collect temperature, relative humidity, and soil moisture measurements in 2012-2013; and (5) apply the results to future restoration efforts.
- In response to a question regarding the size of the restoration areas, it was shared that the most recent backwater was not large – maybe 2 or 3 acres. It is estimated that 10 to 15 acres is the total for all 3 sites.
- In conclusion, it was shared that the canopy gap created with non-native vegetation removal has to be considered in restoration efforts. The flycatcher needs dense riparian vegetation with varying heights and prefers younger vegetation. Exploring different vegetation species might need to be considered as an option to get to a solid structure in the forest in order to better meet the flycatcher needs (such as dense vegetation with tall perches but also openings as well as building patchwork of vegetation ages for a “mosaic” and connectivity).
- *Minnow Monitoring*
 - The majority of monitoring sites are below the Jemez Canyon Dam; although there are 2 sites above the dam.
 - As of 2011, there were 14 seine haul sites (8 in the Rio Grande; 6 in the Rio Jemez). There are 3 kick nets sites located in the backwaters. Kick nets are used in the 3 in the backwaters. Egg collection is done with Moore Egg Collectors at 5 sites in the Rio Grande and 2 in the Rio Jemez.
 - The schedule for monitoring is as follows:
 - March – seine hauls;
 - May – egg monitoring;
 - July – seine hauls;
 - November – seine hauls and cross sections.
 - Santa Ana staff has received training from both ASIR (since 2008) and the Service (since 2006). In fact, the Service is in the field every time they go out. ASIR helped develop the pueblos monitoring protocol.
 - There are 15 seine hauls for each event and each habitat within that location (ex. runs, embayments, stream banks, over hanging vegetation, isolated pools, etc.) is included as much as possible. A data sheet template is filled out for each seine event making the data collected as consistent and comparable as possible.
 - Cross section/river flow work is also being done. Flow is taken at each seine haul and cross sections are created with a Marsh McBirney FLO-Mate. The lower flows in November allows for staff to cross the entire river. Flow and depth measurements are taken at the beginning, middle, and end of each seine haul as well as every 4 feet in the cross section.
 - For river transects, permanent markers are used to mark elevation changes, depth and flow in channel, and to document the river change over time.
 - Kick netting is done in the 3 backwater area when applicable. There was no inundation this year.
 - Water quality measurements are taken with a YSI-85. A secchi disk is used to measure the turbidity.
 - Longitudinal profiling is done in the cold months when there is low flow so that staff can get into the thalweg to measure elevation or elevation change.
 - There are 4 Gradient Restoration Facilities (GRF) structures on Santa Ana land. The structures (filter fabric with gravel/stones) were built to protect the 6 miles of Rio

Grande from incision. They seem to be working. Pebble counts are done above and below each GRF.

- Moore Egg Collectors with flow meters in each are used to look for eggs twice a week during egg monitoring.
- In a response to a question regarding grazing, it was shared that all grazing has been removed from the Rio Grande and most recently the Rio Jemez as well. Now the areas are mostly a wildlife corridor (except for trespass). Most of the trespass is in the Rio Jemez and it is very easy to tell where grazing has happened.
- *River Monitoring*
 - In an attempt to model the effectiveness monitoring being employed elsewhere in the Program, Santa Ana staff made an effort to determine affects of bankline reengineering on in-stream riparian habitat for a specific project site (the Reclamation River Maintenance Project Site).
 - The site is located just below the confluence and was experiencing severe erosion and was starting to flank the GRF. Full-grown cottonwoods were being lost and the functionality of the GRF was being threatened. Reclamation used 13 subsurface, rock-line weirs and then relocated the river 50 feet to the east. It was noted that the purpose of this project was not for minnow habitat but to save the facility and bank.
 - After the river was relocated, the Pueblo wanted to know: (1) how to monitor the affects of projects (when all the system components are constantly changing?); (2) what changed in the river channel; (3) how did it affect habitat and (4) the fish community?
 - But the question remains: how do we define river habitat change? How should the affects be monitored when all the system components are constantly changing?
 - The best way to address the questions is by using reference sites in order to compare the degree of change at one location compared to other sites.
 - Pueblo staff liked the approach modeled after the ACOE wetland delineation process that uses different biological indicators (ex. hydrology, biology, or soil) that can be evaluated based on a standard that can be judged.
 - Part of the issue is that “restoration” includes non-native vegetation removal, jetty jack removal, plantings, etc. - all are counted as the same.
 - The river system end point for the Pueblo is being defined as a historical site or goal – in this case, the 2003 Biological Opinion criteria for the minnow were used because they are measurable and comparable. The reference sites are other monitoring locations within the area of the project.
 - The Reclamation River Maintenance Project was thus compared to the reference sites to provide a project trajectory towards a set of conditions to assess the affects and possibly answer the questions.
 - *Question 1: What changed in the river channel?*
 - There were physical changes that were apparent: 2,000 linear feet of bankline was changed with the moving of the river. The slope is now gradual over 50 feet in width.
 - The deep scour was filled in and the shallower areas started to inundate. The thalweg moved within 2 weeks after completion and has since corrected.
 - *Question 2: How did it affect habitat?*
 - The BiOp criteria for each of the sites allowed for a comparison of the project site to the range of the other 7 sites. The range was divided by 4 to get the quarter of that range. This method was used to try to determine 1) if there was a

- change and 2) was it in the direction that is thought to be beneficial. Remember, the comparison is all relative.
- There are seasonal changes and annual changes. It is difficult to try to determine if change at a project site was just due to nature or if the project itself was responsible. In order to be able to see change, one needs to explore the relative nature of the change compare to the rest of the system.
 - Using the relative change of the project site compared to the other 7 monitoring sites, the initial results indicated that no change was seen within the habitat (runs, backwater, pools, stream margins, etc.). This might be better understood or corrected if each mesohabitat were mapped at the sites each year.
- *Question 3: How did it affect the fish community?*
- A fall habitat pool was removed but a spring, shallow habitat area was created – it appears that the species richness and diversity at the site seems to have increased compared to the other 7 sites. A “zero” in monitoring does not necessarily mean “no fish” but more accurately is that “no fish were caught.”
 - The expected increase in spring CPUE was not seen; remember however that the project was not targeting minnow habitat specifically.
 - Based on the other project sites, it appears that a rank order dominance change occurred at the site indicating a decrease in minnow dominance during the fall season after the install. Although, the CPUE remained relatively unchanged.
- In conclusion/summary, the Pueblo wanted to know:
- 1) What were the changes in the river channel?
 - A) the river channel was shifted 50 feet to the east; and
 - B) the thalweg realigned;
 - 2) What changes occurred in the river habitat?
 - A) Flow - increased slower flow;
 - B) Sediment - increased finer sediments;
 - C) Depth – increased shallower depth;
 - D) Habitat – remained unchanged.
 - 3) How did the project affect the biology (fish community)?
 - A) Species richness – increased after install;
 - B) Specie diversity - increased after install;
 - C) CPUE - remained relatively unchanged;
 - D) Rank Order – indicated a decrease in minnow dominance during the fall after install.
 - Assessment: the project altered community dynamics and although there appears to be a negative affect in the minnow dominance due to loss of seasonal fall habitat, CPUE at the project site was unaffected.
 - The purpose of this work was to get an indication of where the project is going and the potential affects. A project site has to be compared to everything else because of all the seasonal system changes (fluctuations) that occur every year.
- **Question:** Based on the aerial photo pre-construction conditions, there appears to be a lot of sinuosity within the channel there. If straightened, what geomorphic changes might you expect? What might be the need for maintenance or similar projects up and down stream (to account for the up and down stream affects)?
 - **Response:** Straight rivers are not ideal and not natural. The sinuous nature slows water down and provides more diverse habitat. The analysis indicated that small localized projects may not have much of an impact on the species you are trying to protect as

compared to a 6 mile project. However, every project needs to consider the possible inadvertent up and downstream affects that could take place.

- **Question:** Since the reauthorization of the reservoir, what affects on the downstream of the Jemez have been seen?
 - **Response:** Very little change has been observed during the past 3 years. The cross sections don't show change at all. Most of the change occurred during the first few years after the release when substantial aggradation did occur. The Rio Jemez is a sandy river with lots of transport and movement. We expect to have fewer minnow on the Jemez just because of the substrate; that is, in fact, what has been observed.
- The work group requested the presenters thank the Pueblo Council for allowing the participation in the work group and for today's presentation.

RM83 Status and Discussion

- Jericho Lewis is now the COTR for this project. The work group was updated that in recent email communications, the contractor sought specific direction (in writing) on where the diversion reconnection should be located. Part of their concern was if the work group did not have a direct say in the choosing of the location, the final product would be rejected by the Program.
 - In taking over the contract oversight, Jericho reviewed the project history and the changes that occurred between the first and last tasks. He expressed concern that habitat restoration is no longer the main goal of the project and that the secondary goals (such as conveyance, public safety, the sediment plug) had become the priorities. He offered the perspective that the contractor was awarded this work because of their expertise, experience, and technical abilities. Therefore, they should be recommending the diversion reconnection location as based on their professional opinion and the data they've collected over the last 2 years. If the work group dictates the location to them, the product is no longer their independent, professional opinion. Part of the second task order is to fix the reports from the first task order. The original project area has been extended although the analyses done in the extended are will only be quantitative.
- Attendees discussed that realistically, a shift in location a little up or downstream probably would not matter much. The work group originally suggested moving the reconnection point ½ mile downstream from the diversion to the floodplain to (1) avoid reconnecting at a channelized drain with thick vegetation on either side thus creating a straight "shot" inflow. This option did not seem like it would increase habitat diversity or quality in the area; and (2) to move the location downstream of existing flycatcher habitat.
 - Possible long-term mitigation issues have not been brought up but should be addressed.
 - Attendees also discussed the limitations of including the newest available information in the model because of limited funds. It was pointed out that the contractor data is probably only current through 2009 even though 2010 and 2011 data is now available. If more recent data is to be included (ex. flycatcher presence in the area now) then this information needs to be provided to the contractor. At a minimum, the work group will need to fully understand what data was used (date of data) in the feasibility study in order to know the limitations.
 - It was commented that if an upstream point was selected, then if that point had to be shifted downstream for whatever reason, a lot could be inferred about the downstream affects.
 - Participants then discussed the "qualitative" analyses to be completed in the extended project area. The work group would like clarification on what "qualitative" means.

- Attendees agreed that as long as the new flycatcher locations and new wetlands information is included, then the contractor is responsible for selecting the reconnection point and justifying why that location was offered as best expert opinion.
- This feasibility study could turn into a 2-mile long project on the Rio Grande – which is huge. While the price of the feasibility study may seem steep, the project will affect the ecology including the species of concern. Attendees then discussed wanting to see the trade-offs articulated in the feasibility study. For example, clearly articulate that the project may cost \$15 million but \$50 million is gained in terms of minnow habitat or \$20 million is gained in flycatcher habitat. Or the study could specify any short-term loss of habitat (ex. 7 of 10 flycatcher sites) that with time could increase to 30 flycatcher sites. Work group members want to see and understand the “bang for the buck.” The potential cost of mitigation should also be specified.
- Some members expressed confusion over the suggested new diversion point because 18 months ago the work group decided to move the return point of the channel downstream to avoid degradation upon the return. Discussing a new diversion point off the project area is disconcerting.
 - Part of the reasoning is to avoid the pooling. The contract modification talks about extending the boundary and providing another alignment but there is no specific language.
 - Some members believe that since the contractor’s recommendation will be off the project area, it would be “cleaner” to cut off at RM83 but start the process of hydrologic modeling downstream. The concern is that their document/product would not be where the Program would spend most of money.
 - Based on the contract modification language, the project area is extended.
 - Other members cautioned that forcing a cutoff location might limit a full evaluation of options. We just discussed letting the contractor proceed with their professional opinion so we should let them make a decision.
- After this discussion, the work group agreed to not provide the contractor with the location point of the diversion reconnect but to request that the contractor use their best knowledge, data, expertise, and professional opinion to determine that site.
- Attendees returned to the discussion on the funded HR projects and the 2 that remain. Based on the financial situation to date, the 3 funded projects are: (1) ISC’s City of Rio Rancho project; (2) the NM State Lands Office project in the Albuquerque Reach; and (3) the Ohkay Owingeh project. The 2 remaining projects that may get funding for next year are: (1) Santa Ana; and (2) Santo Domingo.
 - The NM State Lands Office project is currently in legal review now due to some language on one of the forms. Once clarified, the contracting office should be able to move forward.

Action: Jericho Lewis will ask the RM83 contractor(s) for clarification on the qualitative analysis and what “qualitative” means. He will also request information on what data the contractor has available and is using.

Program Update

- The executives cancelled their October meeting in order to attend the Program’s 10th Anniversary and Open House event on October 21st and 22nd. Then in November, the EC will meet for a full day on November 3rd and half day on November 4th to implement the August 2009 Taos Retreat Decisions and address the recovery implementation program.

- Rick Billings will be presenting at the Technical Sessions on October 21st. The current draft outline will include a history of the habitat restoration work, the associated history of the funding, timelines, etc. There won't be much if any discussion on the analysis of techniques.

Next Meeting: October 18th, 2011 from 12:30 PM to 3:30 PM at ISC

- Tentative agenda items to include: 1) Santo Domingo presentation?; (2) Update on Rick's HR Presentation for Open House?; (3)

**Habitat Restoration Work Group Meeting
20 September 2011 Meeting Attendees**

NAME	POSITION	AFFILIATION	PHONE NUMBER	EMAIL ADDRESS
Rick Billings	HR Chair	ABCWUA	796-2527	rbillings@abcwua.org
Ondrea Hummel	HR Member	COE	342-3375	ondrea.c.hummel@usace.army.mil
Mark Brennan	HR Member	FWS	761-4756	mark_brennan@fws.gov
Anders Lundahl	HR Member	ISC	383-4047	anders.lundahl@state.nm.us
Gina Dello Russo	HR Member	FWS	575-835-1828	gina_dellorusso@fws.gov
Grace Haggerty		ISC	965-2053	grace.haggerty@state.nm.us
Danielle Galloway	HR Member	COE	342-3661	danielle.a.galloway@usace.army.mil
Beth Bardwell		Audubon NM	575-522-5065	bbardwell@audubon.org
Jericho Lewis	Contracting Officer	Reclamation	462-3622	jlewis@usbr.gov
Jonathan Aubuchon	Project COTR	Reclamation	462-3646	jaubuchon@usbr.gov
Nathan Holste		Reclamation	462-3627	nholste@usbr.gov
Jason M. Casuga		Reclamation	462-3631	jasuga@usbr.gov
Jen Bachus	ScW Member	FWS	761-4714	jennifer_bachus@fws.gov
Stacey Kopitsch	PMT Member	FWS	761-4734	stacey_kopitsch@fws.gov
Nathan Schroder	CC Member	Pueblo of Santa Ana	771-6719	nathan.schroeder@santaana-nsn.gov
Brian Wimberly		Pueblo of Santa Ana	771-6714	brian.wimberly@santaana-nsn.gov
Cathy Nishida		Pueblo of Santa Ana	771-6766	cathy.nishida@santaana-nsn.gov
Yasmeen Najmi	HR Member	MRGCD	247-0234	yasmeen@mrgcd.com
Jill Wick	HR Member	NMDGF	476-8091	jill.wick@state.nm.us
Eveli Abeyta		Pueblo of Santo Domingo	465-0055	eabeyta@sdutilities.com
Grace Haggerty		ISC	383-4042	grace.haggerty@state.nm.us
Marta Wood	Admin support	Tetra Tech, EMI	259-6098	marta.wood@tetrattech.com