# Middle Rio Grande Endangered Species Collaborative Program Habitat Restoration Workgroup Meeting

18 May 2010 –12:30pm - 3:30pm Interstate Stream Commission

#### **Recommendations and Decisions**

The HRW Charter was approved with no changes.

An additional HRW meeting to discuss output from the San Acacia Reach A&R peer review will be held on June 8, 2010 at 8:30 am.

#### **Actions**

Monika Mann will email the tentative date for an additional HRW meeting for discussion on output from the San Acacia Reach A&R peer review to workgroup members to see if they can attend.

Monika Mann will resend the DBMS request and spreadsheet to workgroup members and set a deadline for review.

Monika Mann will look for a pre-existing spreadsheet listing volunteers to read and summarize reports

## **Meeting Summary**

- The meeting was brought to order and introductions were made around the table. An update on the RM 83 report was added to the agenda. It was determined that the last hour of workgroup meetings will be reserved for workgroup business with no contractors present.
- Updated schedules and project objectives for the draft River Mile 83 (RM 83) Report were handed out. It was clarified that another version of RM 83 will be finished after comments are implemented and then the new version of RM 83 will go to external peer review.
- The workgroup discussed what next steps should be taken after a peer review. There was general agreement that output from peer reviews should be discussed and used to benefit future projects.
- Several changes will be made to the April 20, 2010 meeting minutes. It will be clarified that the first hour of meetings are reserved for workgroup business with no contractors present. The notes should read that a new draft version of RM 83 will go to external peer review. A change will be made that the Tetra Tech presentation was for channel realignment alternatives. The notes should also read that the sediment plug area will be monitored. Also, a spelling correction will be made to Cheryl Rolland's name.
- The workgroup viewed the presentation "Understanding Channel/Floodplain Relationships, A Ratio to Recovery" by Anders Lundahl. The presentation showed a comparison of channel and flood plain widths on the middle Rio Grande using aerial imagery from 1935 and 2006. Discussion on a need for variability in channel floodplain ratio followed. It was one opinion that any plan for recovery should recognize the dynamics in each river reach.
- There will be an additional Habitat Restoration workgroup (HRW) meeting to discuss output from the San Acacia Reach A&R peer review. The tentative date for the meeting is June 8, 2010 at 8:30 am. Monika Mann will email the tentative date for the additional HRW meeting to workgroup members to see if they can attend. Contractors will not be present at the meeting.
- The workgroup was informed that the Database Management System (DBMS) workgroup is requesting data for inclusion in the Program database. Monika Mann will resend the DBMS request and spreadsheet to workgroup members for review.
- The HRW Charter was approved with no changes.

- The workgroup would like to move forward with reviewing and summarizing reports for presentation at HRW meetings. Monika Mann will look for a pre-existing spreadsheet listing volunteers to read and summarize reports
- In a monitoring plan update the workgroup was told that fish have been collected at all sites visited; only a couple of sites have not been visited. High intensity monitoring and egg monitoring will begin this weekend. The latest version of the monitoring schedule was distributed.
- Scheduled for the June 15, 2010 meeting are a presentation on E-flows from Susan Kelly and a habitat restoration update from Sandia.

# **Meeting Minutes**

#### **Introductions and Changes to Proposed Agenda**

- Rick Billings brought the meeting to order.
- An update on the draft River Mile 83 (RM 83) report was added to the agenda.
- It was determined that the last hour of workgroup meetings will be reserved for workgroup business with no contractors present.

### RM 83 Update

- ScW was updated that the RM 83 project objectives have been clarified. Updated versions of the project schedule and project objectives were distributed. If there are any suggested changes for the objectives they should be emailed to Cheryl Rolland (crolland@usbr.gov).
- The current task order for RM 83 will be closed, there will be a review to make sure that the task order was fulfilled, and then there will be a new task order to implement any changes. Once those changes have been made, the RM 83 report will go to external peer review.
- The workgroup was informed that the Coordination Committee (CC) prioritized the items for peer review at their last meeting:
  - 1. Populations Estimation
  - 2. RM 83
  - 3. Population Monitoring
  - 4. Genetics
  - 5. PVA Models
  - o The Albuquerque Reach A&R will not undergo peer review.
- The RM 83 report peer review will be the same process as the San Acacia Reach A&R report peer review. When the peer review is completed there will be a presentation. It may be possible to meet with the reviewers before the presentation.
- It was asked what the Programs next steps are with peer review?
- If the Program invests in external peer review is there a formal process for how comments are incorporated?
- There is nothing that is established.
- It was thought that feedback from peer review should develop guidance for future projects in order to get the most benefit from the peer review process.

- It was thought that there would be a lot to gain from discussion of the feedback from the San Acacia Reach A&R peer review.
- A discussion on the San Acacia Reach A&R was suggest for the June 15, 2010 Habitat Restoration Workgroup (HRW) regularly scheduled meeting (*Note: The date of this discussion was changed at a later point in the meeting, An additional HRW meeting will take place on June 8, 2010 to discuss feedback from the peer review*). HRW members interested in participating in the discussion should read the San Acacia Reach A&R and its peer review.

## Approve April 20, 2010 meeting minutes

- The April 20, 2010 meeting minutes were approved with the following changes:
  - o It will be clarified that the first hour of meetings are reserved for workgroup business with no contractors present.
  - o The notes should read that a new draft version of RM 83 will go to external peer review, not the current draft version.
  - O A change will be made that the Tetra Tech presentation was for channel realignment alternatives. The notes should also read that the sediment plug area will be monitored.
  - o A spelling correction will be made to Cheryl Rolland's name.
- SWCA would like to receive HRW meeting agendas.

### Understanding Channel/Floodplain Relationships, A Ratio to Recovery

- The workgroup viewed a presentation by Anders Lundahl. The presentation showed a comparison of channel and flood plain widths on the middle Rio Grande using aerial imagery from 1935 and 2006. For specific details please see the attached presentation. Below are questions and discussion regarding the presentation.
  - o Slide: Intro
    - Aerial imagery from 1935 to 2006 was used to try to discern geometry of channel and floodplain in order to try to find a relationship.
    - Did you also look at elevations?
      - No. Aerial based LiDAR was used. It's hard to discern historic flood plain because agriculture has been around for a long time. LiDAR let's you see what the flood plain may have looked like before settlement.
  - Slide: Significant dates for Middle Rio Grande Hydrology and Geomorphology
  - o Slide: Hydrology
  - o Slide: Geomorphology
  - o Slide: Methodology
    - 1 river mile in each subreach.
  - o Slide: Image LP2DR Subreach in 1935
  - o Slide: Image LP2DR Subreach in 2006
    - Are the levees in place?
      - Yes.
  - o Slide: Image Flood Channel on LP2DR

- o Slide: Image Geo-Channel (1935)
- o Slide: Image Geo-Floodplain (1935)
- o Slide: Image Geo-Floodplain (pre-1935)
  - Along the right edge of the orange, is that a drain?
    - I think it looks like a drain. The levees were just spoils from drains. In 1935 the Rio Grande project had not occurred. This is one river mile in a sub reach in Isleta.
- o Slide: Image Geo-Channel (2006)
- Slide: Image Geo-Floodplain (2006)
- o Slide: Image Geo-Floodplain (2006 6000cfs)
  - I'm trying to attain how much river restoration we need. We don't know the answer.
  - It was suggested that what is needed for the Program is to start figuring out what type of restoration is needed. If a flood plain needs to be created, how much? There may be a more stable population if there was no floodplain. The new Biological Opinions (BOs) will come up with a population number to consider down listing the species, that number should be based on the physical realities we have.
  - It was thought that the Biological Assessments (BAs) and BOs should look at the dynamics and opportunities in each reach of the Program area; generalizations should not be made about the entire Middle Rio Grande.
  - It was asked how the BO was being approached.
    - The PVA models are being used for that.
  - It was agreed that the dynamics of each reach needs to be recognized. In Cochiti reach it is unknown if it is possible to have functioning floodplains because of lack of sediment in the flows from the dam.
    - There's some opportunity for sediment input.
    - But that won't shift the slope of the channel. The minnow in upper Cochiti reach will probably have to go to back channel to have persistence.
  - The purpose for restoration is to support recovery through increasing populations and hopefully act on population monitoring parameters. There are some questions that need to be answered; how much restoration is needed in an area and what is the population expected to maintain?
  - This comparison was done on river miles; this could be done every 100 feet. The areas don't necessarily demarcate differences in sediments. Just because there is a diversion dam it doesn't mean that upstream and downstream are different naturally. The slope changes at Isleta could be natural or it could be built up sediment from the dam.
  - Past and future trends should be measured and tracked to get a better idea of what the segments of the river are doing.
- o Slide: Channel and Floodplain
- o Visual Comparison
  - This slide is indicative of the system change. We can't go back to what existed in 1935. There needs to be focus in restoration practices to get the system to function as it is and not how it was under historic conditions.

- How did you get the historic floodplain?
  - Vegetation was used to determine the historic floodplain. Areas with that much vegetation would have to have been inundated frequently.
- Looking at function and diversity would solve more of the issues on the Rio Grande than compartmentalizing and only looking at 2 species. If the diversity and function of the river are supported then all of the species that depend on the river's diversity will be supported.
- That's the point should be voiced out of this workgroup. In an ecological system like this there are lots of subtleties that can't be measured, but if the river channel is made to be functional it encompasses all of those.
- It was thought that this point should be incorporated into the workgroup's A&Rs.
- Meetings with ScW and SWM would be beneficial.
- Habitat management needs to be taken to the forefront and not just be a secondary task to managing the river.
- o Slide: Channel Floodplain Ratios
  - The infinity in the table is from the channel narrowing significantly; within the map the floodplain went to the boundaries. I was looking for trends; if we go out today, how much flood plain has some relations to historic conditions? I found its variable. We are trying to maintain a single width channel. Some places need a bigger channel and some places need a smaller channel.
  - Can you have compact deliveries that are still affective in an ecosystem approach that's dynamic? Can we still deliver water and have greater function of the ecosystem to the channel? That balance has to be made.
- o Slide: Channel Floodplain Ratio 1935-2006 Comparison
- o Slide: Conclusions
  - Variability needs to be increased. There is too much channel and not enough floodplain. Why not create a river based on the hydrology and geomorphology it has. These have changed but the river is still being based on pre-Cochiti dam hydrology; hydrology and geomorphology have changed but the river is expected to stay the same.
  - Is this what you're looking at: what is the restoration model and how is that defined?
  - The how goes back to the BO and LTP. The target population has to be based on realities. There are concerns that the BO will not take natural variability into consideration in its creation.
  - If you look at physical parameters first and describe how segments are responding to flows and then put in scenarios, you get a picture of physical parameters. If you lay on top of that your expected biological response to the parameters, you might begin to have a carrying capacity of what the system looks like. Then you can talk about thresholds with good or bad years in water trends.
  - Which could be range of numbers in the BO?
  - I would say it could be adaptive management targets because it will always be changing and chances are it will be off. Monitoring will help hone in on targets. Then we can get to where we have a better idea on how the system is responding.
- Next month Susan Kelly will be coming to have a presentation on E-flows and Pueblo of Sandia will be giving a habitat restoration update and a brief overview of upcoming projects.

• Ondrea Hummel will be giving an Oxbow presentation in July.

#### **HRW Charter Review**

- It suggested that ecological approaches be incorporated into the HRW Charter.
- It was determined that the HRW Charter is pretty generalized and would allow for that as is.
- The HRW Charter was approved with no changes.
- A half-day meeting was proposed to discuss the San Acacia Reach A&R peer review; this meeting will be in addition to regularly scheduled HRW meetings.

**Decision**: An additional HRW meeting to discuss output from the San Acacia Reach A&R peer review will be held on June 8, 2010 at 8:30 am. Contractors should not attend the June 8<sup>th</sup> meeting.

**Action:** Monika Mann will email the tentative date for an additional HRW meeting for discussion on output from the San Acacia Reach A&R peer review to workgroup members to see if they can attend.

### **DBMS Request for Needed Information**

- There was an email request from the Database Management System (DBMS) requesting data be submitted for inclusion in the Program database. The DBMS has created a spreadsheet listing data that needs to be submitted.
- It was mentioned that contractors are listed in the DBMS spreadsheet as having data that is being requested.

**Action:** Monika Mann will resend the DBMS request and spreadsheet to workgroup members and set a deadline for review.

 It was asked if there was an update on the HRW spreadsheet listing volunteers to read and summarize reports.

**Action:** Monika Mann will look for a pre-existing spreadsheet listing volunteers to read and summarize reports.

- It was suggested that the Program database could be used to follow up on past projects. It was thought that project summaries might be able to be included in the Program database. The project summaries would have to be compatible with the database.
- It was mentioned that parts of the Program database will be available for testing at the end of the summer.
- If anyone has information about data that needs to be submitted to the DBMS they should list themselves as a point of contact for that data.
- It was expressed that there should be standardized input to the subject lines of emails sent to the HRW workgroup, in particular if there is a deadline for a task.

## **Next Meeting and Agenda Items**

- Susan Kelly will give a talk on E-flows
- There will be a habitat restoration update from Pueblo of Sandia

#### **Announcements (ALL)**

• The HRW was given a monitoring plan update. Monitoring is occurring at 20 sites and fish have been found at all sites that have been visited so far. Right now low intensity monitoring is occurring, high flow will be starting this weekend and high intensity monitoring will begin. At the end of May low intensity monitoring will resume. There will be monitoring for eggs beginning this weekend and into next week.

The latest version of the monitoring schedule was distributed. It was though that data from the monitoring could be presented in a joint meeting with ScW in June or July.

- o It was asked if there are plans to look at the flood plain once it has dried to look at vegetative components.
- o This will happen at the end of the summer.

# **Program Update**

- A Program update was emailed out by Monika Mann prior to today's meeting. Key points from Monika's update were highlighted at the meeting:
  - o The final list of priority 1 Long Term Plan (LTP) Future Activities is due May 21, 2010.
  - o Additional priority 2 and 3 Future Activity summaries are due tomorrow (May 19) at noon.

## **Long Term Plan Update**

• A draft of the LTP will be out fairly soon.

# Habitat Restoration Work Group Meeting 18 May 2010 Meeting Attendees

NAME	POSITION	AFFILIATION	PHONE NUMBER	EMAIL ADDRESS
Colin Lee		KeWa (Santo Domingo) Tribe	465-0055	clee@sdutilities.com
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Rick Billings	HR Chair	ABCWUA	796-2527	rbillings@abcwua.org
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