

Notes from Upper Rio Grande Basin Water Operations Review Interdisciplinary NEPA Team Meeting; January 9, 2003; 1:00 PM; Corps of Engineers Conference Room, Albuquerque

In Attendance:

Neal Ackerly, Dos Rios/Corps
Mike Buntjer, USFWS
Deb Callahan, USBR
William DeRagon, Corps
Ellen Dietrich, SAIC/Corps
Darrell Eidson, Corps
Don Gallegos, Corps
Susan Goodan, SAIC/Corps
Mark Horner, Corps
Ernie Jahnke, Corps
Jon Kehmeier, SWCA/NMISC

Conrad Keyes, Jr., Consultant to Corps
Colleen Logan, R.F. Weston/Corps
Jennifer Neal, Corps
Claudia Oakes, SWCA/NMISC
Brian Ortiz, USFWS
Nancy Purdy, USBR
Garret Ross, USBR
Jack Veenhuis, USGS
Scott Waltemeyer, USGS
Larry White, USBR

- ❖ Nancy Purdy chaired the meeting. After self-introductions, the group reviewed the draft notes from the last meeting and was asked to submit any changes by the end of the meeting. Nancy turned the meeting over to Claudia Oakes to discuss the goals and agenda for this meeting. Claudia represented Rhea Graham of the ISC who was unable to attend.
- ❖ The purpose of the meeting was to assess the progress of each tech team in preparing for impact analysis. The lists of outputs, methods, and models that were developed in the August and September 2002 ID Team Workshops were used as a starting point for discussion.
 - The last two pages of the August notes included a list called “Outputs Needed from Support Teams.” These lists were reviewed to identify changes and progress.
 - Riparian and Wetlands—Claudia Oakes
 - Claudia distributed a new list that was developed by the team to replace the ones from the August and September meetings, summarizing data to be collected and analyzed by the team, as well as analyses to be performed by other teams.
 - Most of the GIS analysis cannot be completed until outputs have been provided from URGWOM and FLO-2D for each alternative. The Water Operations and Geomorphology Support Teams will also be providing information and analyses needed by the Riparian and Wetlands Tech Team.
 - Mark Horner is assisting the team in digitizing the maps of riparian vegetation in reaches 5-14 that were drawn during field trips conducted by team members.
 - Members of the Riparian and Wetlands Tech Team will attend the next meeting of the Geomorphology Team scheduled for January 27 at 1:00 p.m. at the Corps to discuss data needs and assistance.

- Cultural Resources—Neal Ackerly
 - The list of outputs from the August meeting is still valid for this team, with one exception. Archaeological site data will be analyzed in 1-kilometer buffers from the centerline of the river instead of for each FLO-2D 500-foot grid cell.
 - Neal stressed that velocities of the river and the location of bank erosion will be important factors that his team needs to obtain from FLO-2D and the Geomorphology Support Team in order to determine potential effects on cultural resources in each reach for each alternative.
 - Darrell Eidson from the Geomorphology Team explained that lateral bank erosion will be addressed using a relative index that enables comparison among alternatives instead of the actual amount of bank erosion predicted at specific locations.
- Water Quality—Jon Kehmeier
 - The team determined that the bathymetric maps of the reservoirs are not important for their analysis. Stage-discharge and stage-storage curves derived from URGWOM data with the help of the Water Operations Team will be used instead.
 - Instead of the detailed depth and particle size of stream bottom deposition, the team believes that the relative aggradation and degradation of each reach would be adequate for their analysis. They expect to obtain this from the Geomorphology Team.
 - The team obtained sediment discharge data from Jemez Canyon Dam in a recent Corps EA and would like to obtain similar data for the other reservoirs.
 - They do not need the projected amount of development and impermeable surface for the planning period, or the fish and invertebrate response data they had previously requested.
 - For the period of inundation in reservoirs and the amount of change, it will be adequate to obtain the rate of fluctuation or the water surface elevation per month or per season.
- Aquatic Systems—Ernie Jahnke
 - The only item on the August list that the team has eliminated is the bathymetry of the reservoirs because it is not available. Instead, the team will address the effects on aquatic habitat qualitatively using adaptive management.
 - They expect to get the other items listed from FLO-2D and the Geomorphology Team.
 - They will coordinate some of their analyses, such as the isolated pools and floodplains from FLO-2D, with the Riparian and Wetlands Technical Team.
- Land Use, Socioeconomics, Agriculture, Recreation, Environmental Justice—Susan Goodan
 - Susan noted that the specialists working on their resources for this team have developed changes to the list. Because this team covers many topics assigned to different people, the team will need to provide a revised list for all of the resources to be addressed by the team.

- Susan noted that they no longer plan to develop detailed predictions of changes in land use and urban development. They will describe land use in each reach more generally.
- The methods and models to accomplish the analyses were discussed at the September workshop and summarized in the notes from that meeting that were distributed for reference. Updates to the list were reviewed by team and summarized below.
 - Riparian and Wetlands—Larry White
 - The team's revised list is included on the new handout distributed at the meeting.
 - Deb Callahan reminded the group that **color infrared aerial photography of the Rio Chama below Abiquiu (2-foot pixels) will be complete and available for all technical teams** within 3 weeks.
 - Cultural Resources—Neal Ackerly
 - The team has completed a preliminary characterization of the recorded sites in the basin. Two-thirds of all recorded sites occur within the reaches near Albuquerque so these reaches have the most data for analysis. They are developing a method to project sites in reaches without recorded site data.
 - The team is still trying to acquire information from the pueblos that was requested by other technical teams. They have had no response to the water quality method report that was sent to the tribes and pueblos for review on March 18, 2002.
 - Water Quality—Jon Kehmeier
 - The team has almost completed the identification of the reaches without data and has organized the water quality data by reach.
 - They scaled back their plans to use water quality models, instead planning to use methods described in a recent USGS paper and some regression equations.
 - The team selected the gages to be used for analysis.
 - Several of the pueblos are currently modifying their water quality standards. However, unless the new standards are finalized, the team will not use them.
 - Aquatic Systems—Ernie Jahnke
 - The team still plans to conduct all the analyses listed in the September notes.
 - Land Use, Socioeconomics, Agriculture, Recreation, Environmental Justice—Susan Goodan
 - Agriculture: Qualitative changes in water available for agriculture may be described for each alternative if the amount of water and the elevation of flows at diversion dams are not available. The team has not been able to obtain the location and elevation of irrigation water diversions.
 - It may be difficult to calculate the economic impacts on agriculture if the information on diversions and flows at those diversions is lacking.
 - Impacts on river and reservoir recreation will be discussed through the effects on fishing and rafting flows at key locations. No numbers are available for angler days.

- Changes in visual quality and access will be discussed but not quantified.
- Land use impacts will be discussed in general, with more specific focus on areas of potential residential flooding.
- Claudia asked the group to identify vital information or assistance that is currently lacking and may be an impediment to impact analysis. Three main items listed below were identified that should be discussed with the Project Managers.
 - Time for Clay Mathers to perform GIS analysis and to lead the GIS Support Team.
 - Locations and elevations of diversion dams. Some suggested getting the locations from the quad maps, but the elevations of the flows needed for agricultural use could not be obtained from the maps.
 - Geomorphology Technical Team leader. It was clear from the discussion at this meeting that many teams are relying on output and assistance from this team, so an active team leader is needed to prepare the narrative and support analysis by other teams.

❖ Claudia listed some reminders to technical teams.



- **Technical team meetings scheduled and notes from the meetings must be posted on Team Link.**



- **Impact analysis is currently scheduled to be completed by April 30.**



- **In order to meet the project schedule, technical teams may need to rethink their work priorities and discuss any needed changes in their study plans with the Project Managers.**

- Related to impact analysis:



- Technical teams should plan to conduct individual resource evaluations of the relative impacts of each alternative, quantitatively or qualitatively, as appropriate.
- The teams should **establish thresholds of significance**, then determine whether the significant impacts are adverse or beneficial.
- Technical teams need to think ahead and establish a threshold for their overall resource, if possible, to be used after individual resource evaluations are completed. A matrix, such as those presented by Claudia at the October 10, 2002 meeting, may be helpful to present significant impacts. Claudia reviewed two handouts displaying bar charts as examples of ways to compare impacts to single resources and across multiple resources.
- The ID NEPA Team will develop rankings or evaluation of significant impacts under each alternative.



- **Mitigation measures will be important for technical teams to describe** if possible to minimize significant adverse impacts identified.



- Technical teams should remember that an EIS is to provide information on environmental impacts to the decision makers who will develop the Records of Decision. It does not necessarily select the alternative with the fewest environmental impacts. It should **evaluate the alternatives against the future without the project actions and define changes relative to this.**

- ❖ Don Gallegos updated the group on progress in developing the Planning Model of URGWOM.
 - The contractor is working on and making progress in fixing the rules problems that were discussed at the last meeting. A new ruleset was provided but has not yet been tested.
 - At this time, a 40-year sequence cannot practically be run without the Planning Model. However, Don has been using one-year URGWOM runs to prescreen the alternatives.
- ❖ Don has been working on a preliminary evaluation to select feasible action alternatives for analysis and to document the reasons that some were eliminated from detailed analysis.
 - The alternatives matrix that documents whether components meet the project purpose and need will be completed **by January 17. Don requested input from others on the Water Operations Technical Team**, but will use what he has even if he does not receive additional input by the deadline. He will resend the information to the representatives of other agencies on his technical team and stress that they must reply by 1/17. Buy-in by the agencies that manage water operations is important so the decisions made in selecting alternatives do not have to be revisited at a later date.
- **The combined action alternatives will be ready by the February ID NEPA Team meeting.**
 - Don distributed a handout showing the historic maximum storage levels at Abiquiu Reservoir. The table shows dates, the type of year (very dry-very wet), the volume at Otowi gage, San Juan-Chama storage amounts, flood control storage, and the pool elevation. The table demonstrates that 20,000 acre-feet, 50,000 acre-feet, and 100,000 acre-feet would be feasible to store in a conservation pool in Abiquiu if enough space exists. Over 100,000 acre-feet of storage would not be feasible. It supports the recommendation that waivers through August and a conservation pool would be reasonable water management tools.
- ❖ **The next meeting of the URGWOPS ID NEPA Team will be held at the Corps on February 13 at 1:00 p.m.**