Notes from Upper Rio Grande Basin Water Operations Review Interdisciplinary NEPA Team Meeting; April 10, 2003; 1:00 PM; Corps of Engineers Conference Room, Albuquerque

In Attendance:

Neal Ackerly, Dos Rios/Corps
Robert Browning III, Corps
Mike Buntjer, USFWS
Deb Callahan, USBR
Marsha Carra, USBR
Art Coykendall, USBR
Tim Darden, NMDA
Ellen Dietrich, SAIC/Corps
Darrell Eidson, Corps
Rhea Graham, ISC
Susan Goodan, SAIC/Corps
Mark Horner, Corps
Ernie Jahnke, Corps
Jon Kehmeier, SWCA/NMISC
Conrad Keyes, Jr., Consultant to the Corps
Bill Leibfried, SWCA/ISC
Clay Mathers, Corps
Jesse Roach, Sandia National Lab
Vince Tidwell, Sandia National Lab
Claudia Oakes, SWCA/NMISC
Brian Ortiz, USFWS
Chris Perez, USFWS
Valerie Provencio, EPWU
Nancy Purdy, USBR
Gail Stockton, Corps
Jack Veenhuis, USGS
Scott Waltemeyer, USGS
Jan Watts, NMDGF
Larry White, USBR
Doug Wolf, Tetra Tech/Corps

- Gail Stockton opened the meeting, started the self-introductions and asked that everyone review the notes from the last meeting.
- Don Gallegos presented information and a slide show on the development of the Planning Model and the use of URGWOM to prepare the 2003 Annual Operating Plan (AOP). A brief description of this presentation and questions asked by the team are summarized below.
  - The Planning Model rules problems discussed at the March meeting have been fixed and the model is currently undergoing testing by running in 10-year increments. New equipment being purchased will enable the full 40-year run to be completed more quickly than is now possible.
  - The Corps and the Bureau of Reclamation cooperate to develop the AOP for water operations. It is based on the NRCS forecast of spring runoff and uses URGWOM to predict flows.
    - Don made preliminary URGWOM runs to determine the effect of relinquishing credit water or not, pending agreement between Texas and New Mexico. The assumptions he used for the preliminary runs include the following:
      - April 1 forecast;
      - No shortages in the San Juan River basin would allow normal San Juan-Chama diversions;
      - Limited San Juan-Chama movement of flows until after the irrigation season;

- No carryover of Indian storage water;
- Colorado would use its credit so there would be reduced flows from Colorado.

▪ **Question:** How do you negotiate the release of Indian storage?

- **Answer:** The water managers are currently working on a new agreement for how to handle prior and paramount Indian water. When this agreement has been completed, URGWOM will be adjusted to reflect it. Indian storage is usually operated with no carryover. Enough prior and paramount water must be left in reservoirs upstream to meet Indian demand. As the year progresses, there is less need for water so some of it reverts to native Rio Grande water.

▪ **Question:** How does the flow look for the middle Rio Grande at the Central Street gage?

- **Answer:** This depends mostly on MRGCD operations. To run the model, Don did not limit irrigation diversions, so flows could dry up under this scenario at Central.

▪ **Question:** Didn't the run include the Rio Grande silvery minnow releases that were required in the Biological Opinion?

- **Answer:** Because he didn't know the release schedule, Don did not model this in these runs. About 9,000 acre-feet in Heron could be used for silvery minnow flows, if necessary.

❖ Representatives of each tech team gave an update of their activities.

➢ URGWOM Integration/Water Operations—Don Gallegos

▪ The team is waiting for completion of the Planning Model so they can run the draft alternatives and finalize the parameters of the action alternatives for the EIS.

▪ Don distributed a handout of the Draft Operational Alternatives that is also available for download from Team Link.

- He reiterated that the details of the flows and storage listed in the matrix would be more clearly stated once the scenarios are modeled. For example, the maximum storage in Abiquiu is likely to less than 180,000 acre-feet under some alternatives and the diversions to the Low Flow Conveyance Channel will most likely be more specific than the 0-2,000 cfs now included in the alternatives.
- The sediment pool at Jemez is not included in any alternative because it is already addressed in a Corps EA and cannot be operated as a sediment pool unless a contract is developed. If a water contractor were found to store sediment in Jemez Canyon Dam, another EA would be prepared to analyze the impacts.

➢ Aquatic Systems—Bill Leibfried, Ernie Jahnke

▪ The team is continuing compilation of fish community data to use in the aquatic habitat model.

▪ They plan to use the hydrology generated from model runs for the alternatives to evaluate aquatic habitat.

▪ They are working on synthesizing information to estimate the changes in reservoir littoral habitat and plan to extrapolate 5-foot contours from current 20-foot contour data to characterize the bathymetry of important reservoirs.

▪ The team is establishing commitments from members for time to do the analysis for the EIS.

- On April 8, Bill Miller gave a presentation to a group of approximately 20 people on the pilot study at Bernardo for the aquatic habitat model. A copy of the study report is available on Team Link. **Comments are invited from tech team members.** Any comments will be made in the overall report on the 8 sites that is due in August.
    - One key point that Ernie reported is that they will not be able to run the model at low flows at the Bernardo site and will be required to extrapolate the low flow conditions from the mid- and high flows.

- Water Quality—Jon Kehemeier
    - The team met April 9.
    - They discussed how to address the changes to the NMED water quality standards that are likely to be finalized before the draft EIS is published.
    - They have been coordinating with CADSWES to ensure compatibility of the total dissolved solids model that will be an enhancement to RiverWare.
    - They are coordinating with the Aquatic Habitat Tech Team to consider the effects of water quality at optimal habitat flows.
- Land Use, Socioeconomics, Agriculture, Recreation, Environmental Justice—Susan Goodan
    - No meeting has been held recently.
    - The affected environment section on agriculture has been difficult to compile but will be posted on Team Link within a week.
- Riparian and Wetlands—Art Coykendall
    - The team met on April 9.
    - They are working on completing the vegetation classification mapping with Mark Horner from the GIS Tech Team.
    - They have been discussing development of a biological resources technical report and coordination with the Aquatic Habitat Tech Team. They also have been discussing the needs from the FLO-2D model runs.
    - They must discuss Section 7 (ESA) consultation with the USFWS. The Planning Aid letters will be the basis for the Biological Assessment.
    - The team is waiting for the release of the color infrared aerial photography to use in checking their vegetation mapping. Updated boundaries have been provided by BIA and digitized to black out the pueblo lands along the Rio Grande. William DeRagon will coordinate with the ESA Collaborative Work Group to get their approval to use the photos.
- Cultural Resources—Neal Ackerly
    - The team has been discussing how to extract the number and types of sites likely to be affected by the alternatives from the larger dataset they used to characterize the affected environment. They are also planning for how to handle the gaps in recorded site data.
    - They have received no feedback from the tribal groups who have received the maximum area of effect maps generated from FLO-2D.
    - They have received no follow-on invitations from tribes that Dennis Oyenque has contacted recently.

- No responses from tribes have been received regarding information provided by the Water Quality Tech Team.

- Geomorphology, River Mechanics, and Sedimentation—Darrell Eidson
  - The team met recently and divided up the tasks for analysis.
  - They plan to work with Doug Wolf on the FLO-2D runs.
  - Robert Padilla is working on completing the affected environment section.
  - The next meeting will be held at the Corps of Engineers on April 24 at 1:00 p.m.
- Hydrology and Hydraulics—Doug Wolf
  - Doug is actively working on developing the model for the Rio Chama, from Abiquiu to the confluence with the Rio Grande using 44 cross-sections. The grid will have a 200-foot grid cell, smaller resolution than that developed for the Rio Grande. The grid and basic model should be completed within the next 2 months.
  - FLO-2D will run a series of flows to help evaluate instream flow changes. The output of the model is a shapefile that can be used by the GIS Technical Team with the digital terrain model (DTM) to evaluate the effects on islands, as requested by the Riparian and Wetlands Technical Team. The DTM data are the baseline used to develop the model grid.
  - The technical teams need to select specific periods of time to capture flow data from FLO-2D for their evaluations of impacts.
  - The output on the coordinates of isolated pools and the duration of inundation under different flows will be written to a file and can be provided to technical teams or displayed through GIS.
  - **The Rio Grande model is ready to run and Doug will demonstrate it at the May ID NEPA Team meeting.**
  - **Question:** What is the difference between the surface area and the flow area? Also define wetted perimeter.
    - **Answer:** Wetted perimeter—linear measurement of the entire bed and banks in the cross-section that is wet. Flow area—cross-section perpendicular to the bank. Surface area—total area of the water surface by reach.
- GIS Technical Team—Clay Mathers
  - The technical team has changed the regular meeting day to the Friday after the ID NEPA Team meetings, so the next meeting will be on April 11.
  - Work by the team includes digitizing and checking the vegetation mapping by the Riparian and Wetlands Technical Team, developing protocols and formats for all document maps and graphics, trying to ensure that spatial data obtained by different technical teams is compatible with other data for analysis and display.
  - The team, mainly through Clay, is also heading up the effort to scan documents used for the EIS by all the technical teams. **All technical teams must send copies or originals (which will be returned) of the documents that they use to develop their sections, especially those cited in the EIS or technical reports.** Clay will have these scanned and entered into a database to be kept for the Administrative Record.

- If a book or other source is copyrighted, technical teams should provide the title page, a brief abstract describing the content, and possibly the table of contents.
- If the document is long, technical teams should copy the pages used and the title page, along with the abstract.
- There was some question about whether documents would be duplicated in the archive if technical teams sent in their references without access to a list of documents already entered. However, it was recommended that technical teams send in their documents and the database would be checked for duplicates before scanning.

❖ Other items discussed:

➢ Most federal agencies received their budgets for this fiscal year just two weeks ago.

➢ Several outside groups have requested the vegetation mapping data. The mapping and GIS data cannot be released until the URGWOPS quality assurance/quality control steps, outlined in the QA/QC Plan, have been completed and the data are approved for release.

❖ **The next meeting of the URGWOPS Interdisciplinary NEPA Team will be held at the Corps at 1:00 p.m. on Thursday, May 8.**