

## **Notes from Upper Rio Grande Basin Water Operations Review Interdisciplinary NEPA Team Meeting; September 11, 2003; 1:00 PM; Corps of Engineers Conference Room, Albuquerque**

### *In Attendance:*

Neal Ackerly, Dos Rios Consultants/Corps	Conrad Keyes, Jr., Consultant to Corps
Deb Callahan, USBR	Jon Kehmeier, SWCA/NMISC
Marsha Carra, USBR	Walt Kuhn, Tetra Tech/Corps
William DeRagon, Corps	Bill Leibfried, SWCA/NMISC
Ellen Dietrich, SAIC/Corps	Claudia Oakes, SWCA/NMISC
Darrell Eidson, Corps	Garret Ross, USBR
Joseph Fluder, SWCA/NMISC	Marc Sidlow, Corps
Susan Goodan, SAIC/Corps	Valda Terauds, USBR
Danny Hernandez, Water Assembly/AMAFCA	Jack Veenhuis, USGS
Mark Horner, Corps	Doug Wolf, Tetra Tech/Corps

- ❖ Valda Terauds chaired the meeting and started with self-introductions and a request to review the draft notes from the August meeting.
- ❖ Danny Hernandez from the Middle Rio Grande Water Assembly provided an overview of the regional water plan status using a slide show. A brief summary of the presentation is included below.
  - The Middle Rio Grande Water Assembly was formed in 1997 to develop a regional water plan for the Middle Rio Grande region.
  - The Water Assembly is trying to balance water use with renewable supply. There is a deficit between the inflow and outflow of water to the system. We are using more water than is entering the system. This is a regional problem that requires a regional solution.
  - Public meetings and community input were used to identify the issues and to help develop appropriate planning alternatives. These were developed into 5 scenarios to evaluate the options or alternatives to address the management of water in the region. The preferred alternative will become the Regional Water Plan.
  - A model developed by Sandia Laboratories is being used to predict the results of water consumption and costs under each alternative.
  - The plan will take into account regulations, policies, and increases in water demand predicted due to population increases.
  - More information is available about the regional water plan at [www.waterassembly.org](http://www.waterassembly.org).
- ❖ Marc Sidlow provided an update on the status of the URGWOM Planning Model.
  - The model is running successfully and the base run data have been generated. Roberta Ball e-mailed some sample data (for testing only) to the technical team leaders. The completed base run data should be distributed to the technical teams next week (week of September 15).

- The City of Albuquerque reviewed the model and compared it to their modeling for the drinking water EIS. As a result, they have recommended some changes in how the City's diversions and return flows are calculated. Some of the recommendations will be made and the base runs for URGWOPS will be rerun.



- **Marc requested that the technical teams check the test data files to ensure that the data provided is what is needed at the correct location. If any other data are needed or if the data request should be changed, the technical team leaders must update their requests via e-mail to Roberta Ball.**



- **Claudia Oakes suggested that the technical teams think about automating the use of the datasets, especially if more than one technical team needs the same datasets in the same format.**

- Claudia is willing to arrange for macros to be set up to process the URGWOM data, if necessary.
- Doug Wolf is processing the FLO-2D data.

- ❖ Mark Horner distributed the data quality forms completed by each technical team.

- The forms will be useful for all technical teams to use as a summary of the data available for each reach and from each team.
- There was considerable discussion about the use of the forms and the types of data that should be incorporated. The goal is to include measured data specific to the Rio Grande basin that will be used for analysis.

- Recommendations for changes to the form that were discussed include the following:

- Insert "N/A" if a field is blank or not applicable.
- Add columns to note the technical team that obtained the data, the point of contact for requesting each dataset, and the version and/or date that the dataset was collected or modified.
- Make available in a format that can be sorted and grouped by reach, technical team, or other fields.

- The GIS Technical Team will discuss the options for entering the information on the form into the administrative record or other database to enable the dataset information to be updated as needed and made available electronically on Team Link so technical teams can sort and group as needed. **The GIS Technical Team will report back on the procedures for this at the October ID NEPA Team meeting.**



- Deb Callahan discussed how the data quality information could be used to characterize the analysis in each reach from several technical teams, across several reaches for a resource, and overall data quality to inform the decision makers and the public.

- This information can be presented graphically for use by the tech teams and in the EIS, and used to compare the quality of tech team data to URGWOM data quality for each reach.
- It can help to identify data gaps.
- To facilitate the presentation of data quality, we will need to develop terms (like good, fair, poor) based on standardized definitions for use by all teams. To develop and assign the ratings, the technical specialists on each team must use their professional judgement.

- ❖ Doug Wolf updated the group on using the URGWOM base run test data as inputs to FLO-2D.
  - Base run data processed in FLO-2D so far include 1800 cfs in the Rio Chama and over 3000 cfs at Ojo Caliente using the Chama 200-foot grid model and recent terrain data. He has also run the URGWOM Planning Model output data through the 500-foot grid Reach 8 middle Rio Grande model.
  - Doug selected the years to run through the model instead of running all 40 years of Planning Model outputs. The years selected were those in which peak flows were high enough to generate overbank flooding.
  - Question: Are you ignoring the flows in tributaries?
    - Answer: We are not ignoring flows in the tributaries. The MRG FLO-2D runs supporting the review will incorporate Planning Model output for the tributaries that are included in the (Planning) model. (examples include Rio Jemez, North Diversion Channel, Albuquerque wastewater return). Results will depict overbank flooding on the RG only (with the added flow from the available tributaries).
  - Doug has been testing for threshold flows for each reach to determine when overbank flooding will occur. Overbank duration at a prescribed depth can also be provided in a shapefile for use in GIS.
  - Doug plans to provide a matrix with discharge and duration of overbank flooding for each reach under each alternative.
  - William DeRagon stated that flows from all years should be run through FLO-2D to avoid the possibility of missing some years or conveying the impression that the results have been predetermined. (*In post-meeting discussions between William, Claudia Oakes, and Doug, an understanding was reached as to the extent of FLO-2D modeling to be done for any given 40-year alternative. An analysis of the Planning Model node (gage locations) hydrographs will take place [for each year] to determine periods of time in which there is potential for overbank flow. These periods will be input and run through the FLO-2D model for each alternative.*)
  - Some tech teams may need to obtain bank erosion information from the Geomorphology Team at the areas of impact, once overbank locations have been identified. If so, the teams may need to discuss this with the Geomorphology Team because they have not been planning to provide this analysis based on earlier ID NEPA Team discussions that put a priority on sediment transport information.
-  Valda suggested that the Project Managers organize a workshop for all tech team members to evaluate model data and work together to integrate these data for impact analyses.
- ❖ The next meeting of the URGWOPS ID NEPA Team will be held on October 9 at 1:00 p.m. in the Corps of Engineers conference room.