

Notes from URGWOM Steering Committee Meeting; July 8, 2004; 10:00 AM; Corps of Engineers Conference Room, Albuquerque

In Attendance:

Chuck Braden, BIA	William Miller, WJM Engineering, Inc./Corps
Ellen Dietrich, SAIC/Corps	Mike Roark, USGS
Conrad Keyes, Jr., Consultant to Corps	Gail Stockton, Corps
Don Gallegos, Corps	Valda Terauds, USBR
Callie Gnatkowski, Sen. Domenici's office	Tim J. Ward, UNM
Steve Harris, Rio Grande Restoration	

- ❖ Gail Stockton opened the meeting. After introductions, she turned the meeting over to Bill Miller to discuss model testing plans. Bill distributed a handout with an outline of the components of the two phases of model testing.
 - The Technical Team is working on completing the Phase I testing package with the base case and 3 scenarios that combine variations of Rio Grande storage and minimum flow levels.
 - At this point, the base case and one scenario have been completed. Bill displayed graphs (also on handouts) comparing Abiquiu water surface elevations, Rio Grande storage, flow at 3 gages, and New Mexico credit water under the base case and Scenario 1.
 - The model runs use hydrology from 1995–1997, which are representative of wet, dry, and average years.
 - **Question:** Did you analyze the change in Abiquiu storage only at the end of 3 years?
 - **Answer:** As long as there is enough inflow, the model stores conservation water in Abiquiu.
 - Each tester must spend time to be familiar with the URGWOM objects, gages, and other information before beginning the testing.
 - Tim Ward recommended that Bill export the results of the scenarios for the Steering Committee to perform a QA review prior to the beginning of testing. Other recommendations for the model testing package include:
 - Plot native water and San Juan-Chama water in scenarios
 - Include the answers to anticipated questions
 - Do not consider any changes in authorization, so the current ruleset can be used. This should be stated at the start. (Phase II will consider some rules changes.)
- ❖ Mike Roark summarized Technical Team activities and model development progress. He distributed a handout that is added to the end of these notes. Questions and discussion not in his handout are briefly summarized below.
 - The improvements are related to how target flows work in URGWOM. As long as there was a full supply of water, the old methods worked. If there were shortages, there were problems with how the flows were allocated to meet demands. New methods to address this are in a development version of RiverWare, but should be in the version to be used for URGWOM testing. Mike thought that the target flow option below the Central gage should be fixed next week.

- Chuck Braden suggested that Indian prior and paramount storage at El Vado should be exempt from Compact delivery calculations in the model. Chuck would like to see the model account for prior and paramount water demands, especially on the east side above Peralta, but recognizes that the target flow improvement would be required to do this.
- CADSWES has updated the public version of the RiverWare viewer to include MMS.
- Jack Veehnhuis of the USGS will review the snowmelt-runoff data in MMS that have just been updated. Tim Ward pointed out that a UNM student ran a sensitivity analysis on the lapse rate vs. snowmelt temperature data and found that the lapse rate did not make any difference in the amount of runoff.
- **Question:** Did you determine whether URGWOM with the surface water/groundwater enhancements resulted in over-predictions of Rio Grande flows?
 - **Answer:** URGWOM with the lookup tables for surface water/groundwater interactions had greater depletions of river flows. The lookup tables generated use daily flows that are aggregated for a month. Mike will do a sensitivity analysis for the reach with the Low Flow Conveyance Channel using MODBRANCH data.
- The new lookup tables will be part of the public version for the San Acacia reach.
- ❖ Technical Review Committee
 - The meeting was tentatively scheduled for August 12. However, due to problems with URGWOM that are being addressed, the TRC meeting should be delayed to allow time to provide the required 30 days lead time for sending out documentation to the TRC.
 - The new date proposed for the TRC is October 14.
- ❖ Other items
 - Conrad Keyes distributed handouts of the notes from the July 7 Paso del Norte Watershed Council meeting that summarizes the action items and schedule for Phase II of the Coordinated Database Project. This project involves converting coverages to ArcIMS that were collected during Phase I, as well as others as they are acquired. This conversion will allow the data to be interactive on the website. The Corps is funding part of the Phase II work as it relates to data collection for developing regional river models.
 - The Council will demonstrate the database and website to Congressional staff.
 - The GIS data already collected in Phase I is available with attributes and metadata on the website.
 - Gail Stockton reported that the development of the FLO2D model between Caballo and American Dam has begun. This is a cooperative effort between the Corps and IBWC, U.S. Section to lay the foundation for river modeling, model linkages, and applications in this reach.

Technical Team Activities—Mike Roark

Target Flow improvements:

- Brad and Mark Sidlow still working on revamping the Target flows for Central, Isleta, San Acacia, and San Marcial. CADSWES has finished the model method that will allow shortages of irrigation water while meeting target flows. Mark has the target flows working to Central but is having problems with the hypothetical simulation for reaches below Central. Mark is working directly with CADSWES to solve the problem.
- Brad and Mark are continuing to put together the documentation for the rule set.

Development of the MMS Model for snowmelt-runoff:

- Mike and Jack Veenhuis are continuing to work with the USGS Denver development team. The Denver development team is having problems with the snowmelt temperature simulation and the results are not making sense. They are looking at the methods for temperature simulation to determine if there is a problem.

Model improvement of the Middle Valley Reaches:

- The calibration of the lookup table has been completed. The lookup tables have been incorporated into the sensitivity model to test the difference in the between using the lookup tables or the previous methods. The first runs were complete yesterday evening. Results of the run are currently being compared with the original sensitivity runs to see the difference made by the lookup tables. If a significant difference is seen, several scenarios for the EIS will be run using the lookup tables as soon as possible.