

## **Notes from URGWOM Steering Committee Meeting; August 14, 2003; 10:00 AM; Corps of Engineers Conference Room, Albuquerque**

*In Attendance:*

Cyndie Abeyta, USFWS

Steve Bowser, USBR

Charles Braden, BIA

Chris Brown, Paso del Norte Watershed  
Council

Tim Darden, NM Department of Ag.

Ellen Dietrich, SAIC/Corps

Conrad Keyes, Jr., Consultant to Corps

Charles Lujan, Pueblo of San Juan

William J. Miller, WJM Engineering,  
Inc./Corps

D. Michael Roark, USGS

Nabil Shafike, NMISC

Gail Stockton, Corps

Jack Veenhuis, USGS

Tim J. Ward, UNM

Dave Wilkins, USGS/URGWOM Technical  
Team

- ❖ Dave Wilkins chaired the meeting and reviewed the status of URGWOM Planning Model and Tech Team activities. The items in his handout are appended to these notes. Other information and questions are summarized below.
  - Marc Sidlow has been assisting the Tech Team in completing the Water Operations and Planning Models.
  - The base run for the Planning Model has been generated.
  - The new regression equations based on historic drain and diversion data seem to generate more reasonable crop evapotranspiration values for the model. The new equations result in fewer negative values.
  - The 40-year sequence takes approximately 12 hours to completely run in the URGWOM Planning Model. A log file is generated to track problems.
  - **Question:** Is the river leakage calculated monthly?
    - **Answer:** River leakage is computed daily using an equation for each month.
  - **Question:** Will DSS work with other databases?
    - **Answer:** It should be able to work with other databases.
  - **Question:** Is USBR to update the firm yield study at Heron Reservoir and is URGWOM the appropriate tool to use for this effort?
    - **Answer:** The study is not done yet, but it may not be necessary to use URGWOM, just RiverWare. It will use 2002 data.
- ❖ Chris Brown of the Paso del Norte Watershed Council provided an update of the coordinated database project.
  - This is the first of two projects. The end date has been extended to October 1, 2003.
  - At the September 15 Watershed Council meeting, there will be a workshop to demonstrate the project, present the final report, and discuss the next steps.

- The project consists of four main steps:
  - Direct contact with agencies to obtain data.
  - Mine web sites to obtain data.
  - Get other information identified to supplement the above two sources.
  - Locate, scan, and put into electronic format any data that only exists on paper. There will be problems in obtaining data verification in time to meet the project deadline because some of the sources (like irrigation districts) are busy now during the irrigation season.
- Electronic data currently is in a mixture of formats including Excel, Access, and links to other web sites with data.
- The final deliverables include a hard copy report and a CD of the data collected.
- The second project includes developing a way to share data using an ArcIMS front end to access data with interactive maps.
- The coordinated database is not intended to be consolidated, due to the difficulty in getting the formal agreements with many agencies that would be required in order to store all data in one place.
  - Charlie Lujan suggested that the new Department of Homeland Security may be interested in providing a server to house all data in one location in the interest of water security.
- ❖ Steve Bowser provided an update on the status of HDB development by USBR.
  - Database development is progressing, due to be completed by the end of December 2003. The local USBR work to add water accounting data is underway.
  - **Question:** Three or four years ago, CADSWES was going to coordinate to facilitate data-sharing between HDB DMIs (data management interface) and URGWOM DSS (data storage system). Has this happened?
    - **Answer:** Many HDB/DSS DMIs have been completed for URGWOM and are usable for data exchange. These are located at the USBR office in Albuquerque.
- ❖ Jack Veenhuis provided an update on the development of MMS.
  - The USGS developers are interested in meeting with the URGWOM Tech Team in September to load the calibrated model on a Corps computer or at the USGS.
  - **Question:** What will it take to use MMS to forecast runoff in February for the Annual Operating Plan?
    - **Answer:** Time is needed to test the calibrated model first. Mike Roark, from the USGS and working with the URGWOM Tech Team, can load the test model at the USGS, then move to the Corps computer when it works correctly.
  - **The Steering Committee gave approval for USGS (Jack Veenhuis and Mike Roark) to test and evaluate MMS, including coordinating with the URGWOM Technical Team and developing documentation.**
- ❖ Steve Bowser told the group about a meeting at Los Alamos National Laboratory between USBR and NASA in November to discuss the use of remote sensing imagery by USBR.



- ❖ Dave Wilkins updated the group on progress in the groundwater/surface water data collection project.
  - All equipment at the Rio Bravo site has been installed and the instruments are collecting data.
  - After one month of data collection, the data will be quality checked, then posted on the USGS web site.
  - All sites for piezometers at the Rio Bravo section have been surveyed. All sections between Alameda and the I-25 bridge have been selected, as well as the piezometer locations. They are located at bridges in the Albuquerque area. At each section, there will usually be 11 piezometers and 3 surface water stage recorders. Funding by the Corps has been used to purchase the equipment.
- ❖ Charlie Lujan updated the group on recent studies of the Española basin.
- ❖ **The next meeting of the URGWOM Steering Committee will be held on September 11, 2003 at 10:00 a.m. in the Corps of Engineers' conference room in Albuquerque.**

#### **URGWOM TECH TEAM SUMMARY FOR THE 8/14/03 STEERING COMMITTEE MEETING**

- Debugging WaterOps and Planning models.
- Fixed rules for Albuquerque Diversions, Rio Grande Conservation Storage and release, Rio Grande Compact calculations, Flood Carryover storage at Abiquiu, Middle Valley drain and canal flows, iteration problem below Cochiti.
- Helped set up model (from URGWOM planning model) for USBR to conduct Firm Yield Study at Heron.
- Brad Vickers and Marc are working on reconciliation problems. These problems do not make much of a difference in the base run but they seem to be more important as some scenarios are run.
- Some compact accounting questions continue to be discussed. Bill Miller, Nabil, Don, and Marc are resolving.
- Developed regression equations relating total drain and canal flow at measured sections at the end of a reach to diversions at the beginning of a reach. Using a single years historic total drain and canal flow and diversions in the Planning Model were causing unrealistic return flows to the river over the 40 years.
- Changed the model to estimate river leakage in the San Marcial to Elephant Butte reach on the fly using monthly regression equations instead of historic leakage data.
- Mike Roark has batch processing working on the PC platform and Roberta has it working on the Corps PCs. Are now running 40 years in batch on the PCs.
- Have extracted 40 years of model data from an early "base run" to HECdss files and are checking the base run model for problems. OK with some fixes noted above.
- The routine for extracting RiverWare data and populating HECdss files will be used to supply data to URGWOP teams.
- Have been meeting with URGWOPS teams to determine, in detail, their data needs from URGWOM.
- Met with TetraTech about their specific data needs to run the Flow2D model. When we have a final base run data will be sent to them.
- Starting to think about and organize Planning Model documentation. Bill has a draft list of model assumptions. An initial list of topics has been circulated to team members.