

## Notes from URGWOM Steering Committee Meeting; March 14, 2002; 10:00 AM; Corps of Engineers Conference Room, Albuquerque

### *In Attendance:*

Cyndie Abeyta, USFWS

Gail Stockton, Corps

Steven Bowser, USBR

Carole Thomas, USGS/URGWOM Technical Team

Ellen Dietrich, SAIC/Corps

Tim Ward, UNM

Charles Lujan, Pueblo of San Juan

Dave Wilkins, USGS/URGWOM Technical Team

Bill Miller, WJM Engineering, Inc./Corps

Mark Yuska, USBR/URGWOM Technical Team

Nabil Shafike, NMISC

☞☞ Gail Stockton opened the meeting and turned it over to Mark Yuska to review Technical Team activities. A copy of his handout is appended to the end of these notes. Additional discussion and questions are summarized below.

☞☞ The PC version of RiverWare is working well, and is especially useful for demonstrations. Mark has been able to illustrate different flows, such as having a spike above or below Caballo, which results in the model calculating reservoir adjustments so El Paso does not flood.

☞☞ Nabil Shafike and Carole Thomas have been documenting the statistics on URGWOM downstream flow daily timestep predictions and will use this information to recommend model improvements.

☞☞ Mark distributed a memorandum that proposes the Rio Grande Compact rules logic needed for the Planning Model. **A Steering Committee review of these rules and assumptions is needed by the April meeting. The group agreed to submit comments to Bill Miller by April 4 by e-mail (bill@wjmillereengineers.com) or fax (505-820-6061).** Bill will ensure that Conrad Keyes gets a copy to review.

☞☞ The Tech Team is taking the Operations Model to install at the Bureau of Reclamation in Albuquerque so it can be used regularly by water operations managers. The Tech Team has prepared instructions that are relatively easy to follow.

☞☞ Dave Wilkins has been developing new models to calculate the flow between the river and the riverside drains for the Planning Model in order to determine changes in river leakage.

☞☞ Gail pointed out that the drains are much deeper than they were in the 1930s when the data were collected, so the gradient may be different than the data would indicate. It would be useful to resurvey the elevation of the drain bottoms to improve data quality.

☞☞ The Accounting Model has been used this year to help resolve some problems in advance because water managing agencies, such as the NMISC, are using the same tool as the federal agencies.

☞☞ Technical Review Committee meeting planning

☞☞ Bill Miller reported that the draft documentation has been completed and the other rules documentation will be complete by the time of the August 22 meeting.

☞☞ **Ellen Dietrich will send an e-mail notice to people on the URGWOM list to inform them of the meeting date so they can reserve the day on their calendars.**

☞☞ Data subcommittee meeting report—Cyndie Abeyta

☞☞ The meeting was held on March 13. Participating were Cyndie, Dave, Mark, Gail, Carole, Roberta Ball, and Don Gallegos.

☞☞ Use of the data page on the web site was discussed. They asked Roberta to find out if they can get a counter of the hits on the data pages.

☞☞ There were 325 hits in February, with 2 to 5 accessing each of the metadata pages. Fourteen megabytes of data were accessed.

☞☞ Tim Ward suggested that they also keep track of the length of time for each hit.

☞☞ **The Steering Committee would like to get a monthly report of the number of hits to the data pages and the amount of data accessed.**

☞☞ Cyndie suggested that they would like to see a counter showing the total number of hits on the main data page, if possible.

☞☞ The subcommittee discussed who should further test the completed URGWOM models.

☞☞ There has been in-house testing by people within the URGWOM developing agencies. There is also a need for outside testing by cooperating agencies and designated outside review entities. Different entities might want to test different parts of URGWOM.

☞☞ Outside testing could be contracted through the state. Tim Ward suggested that graduate students conduct some testing.

☞☞ Cooperating agencies interested in testing include the USFWS, and possibly the BIA and IBWC.

☞☞ The models should be ready for outside testing by the end of the fiscal year. Models should undergo outside testing before public release.

☞☞ Requirements for testing include a commitment of the following:

?? 1 full time employee for 1 to 2 years per agency or organization. This would include time to get familiar with RiverWare.

?? The tester would take a 1 to 2 week training course, possibly through CADSWES.

?? Purchase of RiverWare.

☞☞ Once an agency provides the staff and funding for testing, they would have the expertise in-house to use URGWOM.

☞☞ Tim recommended that the testers be given standard scenarios to run during testing so the results can be compared with those from other testers.

☞☞ The Quality Control Plan should be updated to address quality assurance procedures for model data and testing.

☞☞ **A brainstorming session is needed to develop an outline of what items should be addressed in the updated plan.** Dave has arranged a meeting on April 3 at 1:00 p.m. at USFWS on Osuna in Albuquerque.

☞☞ The Quality Control subcommittee will consist of Dave Wilkins (chair), Tim Ward, Cyndie Abeyta, Conrad Keyes, Bill Miller, Gail Stockton, Don Gallegos, with Technical Team member advisers.

☞☞ Activities to be addressed include model calibration, validation, and rules testing. Data quality control should address input and output data and model test runs. A protocol to be used by outside testers should also be described.

☞☞HDB update

☞☞Steve Bowser reported that a group from CADSWES came to Albuquerque on March 5-6 to learn what should be included in a database and how it should work. From their discussions with USBR staff, they concluded that the current HDB design is inadequate to meet requirements for accounting data and URGWOM.

☞☞A work group will meet from March 20-25 in Denver to determine how to approach changing the database design to accommodate the needed requirements.

☞☞Gail pointed out that the designers of HDB should coordinate with the Paseo del Norte Watershed Council.

☞☞On March 26-27, the USGS will be training the Technical Team in the use of MMS.

☞☞**The next meeting of the URGWOM Steering Committee will be held on April 11 at 10:00 a.m. at the Corps building.**

**STATUS OF URGWOM TECH TEAM ACTIVITIES? MARK YUSKA**

**Activities:**

- ?? Calibrated and verified middle valley portion of the model. The new verification shows that daily-modeled flow for the period 1998-99 gives a mean absolute deviation of 194 cfs at San Marcial Floodway, when the model is run for all days beginning with the Cochiti release. Under a best-case scenario, running the model beginning with the flow passing San Acacia Dam and using days with no precipitation, the mean absolute deviation is 128 cfs for flow at San Marcial Floodway.
- ?? Marc Sidlow prepared draft (with Nabil and Bill) proposed assumptions for Rio Grande Compact Rules for planning model.
- ?? Adding Rio Grande Conservation account to WaterOps model and developing rules to set inflows and releases from the Rio Grande Conservation account in conjunction with inflow and outflow from the regular Rio Grande account. Should be ready by April forecast.
- ?? Started modifying Forecast model to include new slots required for new middle valley methods (accounting for river leakage and riparian CU together). Should be ready for April forecast.
- ?? Slightly modified rules for Elephant Butte and Caballo for demo. They had not been fully tested previously.
- ?? Reviewed and edited instructions to run the accounting, forecast, and water operations models. Ran each of the models following these instructions.
- ?? Used the program RIVGRID to develop MODFLOW input decks for riverside drains and the river from 1985 thru spring of 1995.
- ?? Isolated the riverside drains from interior drains in the Kernodle and McAda MODFLOW Albuquerque ground-water flow model.
- ?? Running the Kernodle and McAda MODFLOW Albuquerque ground-water flow model but the solutions are not correct.
- ?? MMS – Roberta Ball worked with Steve Markstrom (USGS) and Doug Boyle (DRI) to synchronize up the MMS models and data between here and Denver.
- ?? We may have a MMS March forecast by tomorrow or Monday.

**Meetings:**

- ?? Mark Yuska showed the Accounting Model on the PC to the Engineer Advisors at their meeting 2/21/02.
- ?? Mark and Marc Sidlow demonstrated the Water Operations Model to IBWC and USBR-El Paso 3/12.
- ?? Mark and Marc Sidlow also demonstrated the Water Operations Model to USBR-Albuquerque Managers 3/13.
- ?? The tech team will meet with Rio Chama Acequia Association representatives Willem Schreuder and his associate Hydrologist, Devraj Sharma 3/18 to discuss specifics of Accounting and Water Operations Models.

**Issues:**

- ?? Brad Vickers' contract is still not in force. There have been some processing holdups in Salt Lake City.
- ?? We hope to have the Steering Committee or contracted assistance do as much of the quality control Plan as possible.
- ?? We are installing the Water Operations Model at USBR-Albuquerque 3/15 (tomorrow).
- ?? USBR Accounting really wants Nambe Falls Reservoir added to the model soon.
- ?? FY2004 Budget for USBR is looking really thin. Development must curtail one way or another.