

**Notes from URGWOM Steering Committee Meeting; April 12, 2001; 10:00 AM;  
Corps of Engineers Conference Room, Albuquerque**

*In attendance:*

Cyndie Abeyta, USFWS	Bill Miller, WJM Engineering, Inc.
Ellen Dietrich, SAIC	Gail Stockton, Corps
Rhea Graham, NMISC	Leann Towne, USBR
Conrad Keyes, Jr., EWRI of ASCE	Sherry Weber, UNM
Bill Leibfried, SWCA/NMISC	Dave Wilkins, USGS/URGWOM Technical Team
Charles Lujan, San Juan Pueblo	

- ❖ The presentation on MMS by Jack Veenhuis was postponed until another meeting.
- ❖ Technical Review Committee meeting on April 26
  - A draft agenda was distributed. The formal meeting will be held from 9:30 a.m. to 12:30 p.m. The team will be available after lunch to discuss URGWOM and answer questions.
  - They will provide demonstrations in the afternoon if people would like to see the model operate.
- ❖ Technical Team activities and the status of URGWOM were discussed by Dave Wilkins. He distributed a written summary that is attached to the end of these notes. Questions and discussion are summarized below.
  - The Accounting Model was approved by the Rio Grande Compact Commissioners with two contingencies. The following will be provided:
    - Historical documentation
    - Data must be provided to the Compact states
  - A short summary of the Accounting Model was distributed at the Compact Commission meeting and will be available at the Technical Review Committee meeting.
  - The Annual Operating Plans are done. URGWOM was used by both the Corps and USBR to develop the plans.
  - It was recommended that the table of contents for the physical model documentation on the web include the appendices.
  - Bill Miller briefly discussed the calibration of consumptive use rates for URGWOM.
    - Currently, the rates are tied to diversions, which is a problem during the winter months because the model generates negative numbers. The negatives have to be set to zero.
    - Riparian ET is now called bosque ET in the documentation because the values are associated only with the Rio Grande bosque. Riparian ET includes more than bosque evapotranspiration.
    - River leakage is considered in the model as going to three possible places: bosque ET, the riverside drain, or deep percolation.

- Dave plans to use a 3-dimensional model to evaluate river leakage instead of the 2-dimensional model. He hopes that this will help him better understand the relationship between leakage and return flows.
- Data needed to populate the DSS database includes Rio Grande data through Mesilla dam and evapotranspiration rates for each type of crop.
- Conrad Keyes had recommendations for the URGWOM web site. He would like to see a **better description of the parts of URGWOM along with examples of the output from each part and an executive summary of the model documentation.**

➤ Charles Lujan, Gail Stockton, and Rhea Graham encouraged the Technical Team to use the Cultural Resource Technical Team from the Water Operations Review to provide information on URGWOM to tribes during their presentations planned for interested tribal groups.

- It will be important to distinguish between the URGWOM modeling effort and the Water Operations Review and EIS.
- Some of the slides to be developed for Gail's non-technical presentation on URGWOM could be used in the presentations to tribal groups.
- Gail stressed that this is an opportunity for the URGWOM Technical Team to get the word out about the model and its use.

➤ Rhea asked whether the Quality Assurance/Quality Control Plan addresses how to treat holes in the data used to populate the DSS database.

- The QA/QC Plan does not address this specifically but an explanation has been included in technical reports.
- The QA/QC Plan does require metafiles for every dataset, which document such information as the source, location of data collection, basic equations used, and standard deviation. It also would identify whether the data were synthesized or empirical.

➤ Conrad stressed that it is **important to clarify what data were used for which parts of the system and what data were used to generate what parts of the model. He also recommended that this information be summarized in a table in the model documentation.**

➤ Funding and budgets

- Leann Towne and Dave Wilkins told the group that their agencies have had significant budget cuts in the President's Fiscal Year 2002 budget. If they remain, there would be impacts to the URGWOM work.

➤ **The next meeting of the URGWOM Steering Committee will be on May 10 at 10:00 a.m. at the Corps of Engineers in Albuquerque.**

## April, 2001 - STATUS OF URGWOM TECH TEAM ACTIVITIES

### **Activities:**

- The Accounting Model has been approved by the Rio Grande Compact Commissioners, 4/11/01!
- Marc Sidlow has been setting up, improving, and supporting Don Gallegos with the Forecast and Water Operations Models as used to develop Annual Operating Plan runs and alternative scenarios.
- Mark Yuska and Roberta Ball are troubleshooting and fixing the monthly data generator, which works from the Accounting Model. Its data feeds the USBR monthly contractor and reservoir storage reports.
- Marc has edited and finished Dennis Romero's Forecast Model Document.
- Bill Miller assembled and provided all of the documentation, and Roberta posted it on the Website; <http://www.spa.usace.army.mil/urgwom/docintro.htm> on March 27 (30 days prior to the April 26<sup>th</sup> Tech Review Meeting). It was also printed, and a limited number of copies were made.
- Carole and Danielle have been reducing document sizes from (for example – Appendix B) unmanageable (60Mbytes) to a much more compact (8Mbytes).
- Everyone is working on presentation materials for the April 26<sup>th</sup> Tech Review.
- As a result of Bill's middle valley calibration checking, Carole set irrigation consumption rates of alfalfa, apples, grapes, and other fruit orchards for the period January 1, 1985 through September 30, 1999, to zero during non-irrigation seasons.
- Carole has begun modifying the Water Operations Model to directly represent "Bosque ET" (formerly known as "Riparian ET") in anticipation of enhancements for after the April 26<sup>th</sup> Tech review.
- Mark has been verifying the new sediment inflow prediction equations used in accounting at Abiquiu, Cochiti, and Jemez.
- Dave Wilkins ran several scenarios of the Forecast model to finish the calibration runs
- Dave completed a full-valley 2-D MODFLOW cross section model at Rio Bravo and attempted to calibrate. There were too many violations of a 2-D system and influences from outside the section boundaries to match all but piezometers very close to the river.
- Dave evaluated model needs to complete 1975-84 model runs for the complete Rio Grande system.
- Dave started populating the DSS database with 1975-84 data. Most data are already in the database.

### **Meetings:**

- Mark represented the Accounting Model at the RGCC Meeting in Alamosa March 22<sup>nd</sup>, although decision on approval was postponed until the April 11<sup>th</sup> special RGCC meeting.
- The team has been meeting with USBR Water Operations and Corps' Reservoir Control to work out Annual Operating Plans, and updating them each month. The AOP reservoir storage and outflow plots are generated using the Forecast and Water Operations Models.

- Dave and Mark met with Larry Winters, Nabil, and Rolf Schmidt-Peterson April 5<sup>th</sup> to discuss coordinating improved groundwater/surface water interactions in key areas (like San Acacia to Elephant Butte).
- Carole, Marc, and Mark are today attending the Spring Runoff Forecast Meeting in Socorro, and presenting on how forecasting is used in URGWOM.
- The regular team meetings the first and third Tuesdays of the month are useful and informative in coordinating work, particularly with part-time members Nabil and Bill.

**Issues requiring Steering Committee Considerations:**

- There are significant holes in the data from 1975 through 1984. We're not sure we can get good data to fill them. To run the models, we must either synthesize data or simplify the models, or both.
- Modeling needs change as we speak: Deviations for Abiquiu and Jemez were approved to store some Rio Grande, and our ruleset needs revising accordingly.
- The technical review meeting April 26<sup>th</sup> will be a top priority.