

Notes from URGWOM Steering Committee Meeting; January 11, 2001; 10:00 AM; Corps of Engineers Conference Room, Albuquerque

In attendance:

Cyndie Abeyta, USFWS

Dennis Romero, USBR

Roberta Ball, Corps

Viola Sanchez, USBR

James Cata, Pueblo of San Juan

Nabil Shafike, NMISC

Ellen Dietrich, SAIC

Marc Sidlow, Corps

Don Gallegos, Corps

Gail Stockton, Corps

Jaci Gould, USBR

Carole Thomas, USGS

William J. Miller, WJM Engineering, Inc.

Leann Towne, USBR

Ed Kandl, USBR

Jack Veenhuis, USGS

Conrad Keyes, Jr., EWRI of ASCE

Tim J. Ward, UNM

James Mermejo, Pueblo of San Juan

Dave Wilkins, USGS

Nathan Myers, USGS

Mark Yuska, USBR

Patrick Rios, Pueblo of San Juan

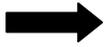
- ❖ The meeting started with a presentation by Mark Yuska, URGWOM Technical Team leader, on the Water Accounting Model, which is part of URGWOM and is intended to replace the daily programs now used by water operators at Reclamation. In order to use the Water Accounting Model instead of the daily programs, approval must be given by the Engineer Advisors of the Rio Grande Compact Commission. Following are the questions, responses, and comments that were discussed during his presentation.
 - What components make up the losses?
 - Evaporation, seepage, and any other parameters that are now included in the daily programs.
 - How is “dummy data” tracked through the system if used to fill in gaps to run the model?
 - This is up to the user. The problem is similar to what is done now with the daily programs.
 - Will the model flag bad data or must the user recognize it?
 - The operator still must recognize bad data when screening or inputting. This is a quality control issue, no matter what method is used. Automated screening is possible, but an experienced operator can do it better.
 - The model requires less data input than the old method.
 - Are dam tenders entering the data or will it be manually input from their faxes?
 - They will not run the model initially, but would e-mail or fax the data. The data should be checked for accuracy and edited before it is entered.

- Management of input data is a concern.
 - This is the same quality control issue whether or not the model is used. The issue must be addressed by the agency using the model.
 - Data to be entered is raw data, but time is saved using the model because data does not need to be reentered for each reservoir. The model moves the information through the system, so using the Water Accounting Model reduces the time to get output by one-third.
 - Are Nambe and Jemez included in the model?
 - Jemez is now included, and Nambe is planned to be added in the future.
 - How can a user find specific accounts?
 - The user can access the SCT window in the model and find data on each account.
 - How is sediment in reservoirs computed?
 - Sediment volume is based on sediment inflow. The set of sediment inflow equations is provided from a source outside the model.
 - Are lag times computed daily or hourly?
 - For San Juan-Chama water, lag times used are hourly. These lag and loss times were provided to the Technical Team.
 - What is the pan coefficient used in reservoirs?
 - The model uses 0.7 in all reservoirs because that is what the daily programs use. The team would like to use better data in the future.
 - Can the model produce paper output as reports?
 - The capability for paper reports is not good right now. This is a needed enhancement.
 - Are subsidiary programs like whole pool used the same way in the model as in the current programs?
 - Yes. Data from the database is used in the same way. Whole pool has a separate slot in URGWOM.
 - Jaci Gould commented that using URGWOM for developing the Annual Operating Plan was a great advance over previous methods.
 - What does the Water Accounting Model do at Elephant Butte?
 - Elephant Butte is included in the San Juan-Chama water accounting.
 - The presentation on the Water Accounting Model to the Engineer Advisors will take place in late February. This should include information to facilitate comparisons of the URGWOM Water Accounting Model with Compact spreadsheets generated using the old programs
- Mark provided a summary of URGWOM Technical Team activities in a handout that is attached to the end of these notes.
- An adjustment was made to the Technical Review Committee meeting schedule that is listed in the Quality Assurance/Quality Control Plan.
- This would give the Technical Team time to have the second draft of the physical model documentation ready to send out at least one month in advance, as required.



➤ Scheduling the meeting in April would also allow the Technical Team time to make the presentation on the Water Accounting Model to the Engineer Advisors in late February, and include verification results in the presentation on the Water Accounting Model to the TRC.

➤ Model verification results will be presented to the Steering Committee before the TRC meeting.



➤ **It was agreed that the TRC meeting will be held in April and will cover the second draft of the URGWOM Physical Model documentation, verification results, and a presentation on the Water Accounting Model with documentation.**



❖ **The Steering Committee discussed and approved the Quality Assurance/Quality Control Plan without the 2001 schedule.**



➤ **The QA/QC Plan will again be e-mailed to all cooperating agencies as soon as the new 2001 schedule is added.**

➤ Any changes or additions, such as the short biographies of participants, will be made by Bill Miller.

❖ In response to requests for presentations about URGWOM, Gail Stockton asked that the Technical Team help her develop a non-technical presentation that can be used to meet these requests. It can be given to tribal groups and other organizations, such as regional water planning boards and university classes.

➤ The twenty to thirty minute presentation could be developed from the many presentations already created by the Technical Team to describe the essence of URGWOM—its purpose, status, objectives, approach.



➤ **Mark will work with Gail and Leann Towne to develop this presentation within the next month.**

❖ Jack Veenhuis provided a short update on progress in developing the MMS watershed model. They are pressing to complete it this year and are developing an interface with URGWOM. He also mentioned an AWRA conference to be held in June this year and would like to discuss the possibility of having a presentation on URGWOM.



❖ **The next meeting of the URGWOM Steering Committee will be held on February 8 at 10:00 a.m. at the Corps, Albuquerque District conference room.**

January, 2001 - STATUS OF URGWOM TECH TEAM ACTIVITIES

People:

- Use or lose A/L and Holidays are just about over – back to work!

Activities:

- Worked on importing CY 2000 SJC Accounting into URGWOM Accounting Model
- Setting up the Accounting Model for its port over to USBR for 2001 use
- Looking at Water Quality Enhancement for RiverWare
- Working with CADSWES to get physical processes added including river evap, new sediment methods, etc.
- Getting WaterOps model set up to run AOP

- Looking at local inflow to recommend development and use in WaterOps and Planning models.
- Cleaned up the leakage program to more correctly represent river gradients between Bernardo and Elephant Butte as a precursor to using the RiverWare developed leakage methods:
- Developed a separate leakage program that averages all river to drain gradients in cells used in the original leakage program.
- Developed a separate leakage program that computes an average river and drain water surface elevations using gage data at Bernardo and San Marcial and an average river to drain distance for the Bernardo to San Acacia reach.
- Used the average elevation RiverWare method, in the Bernardo to San Acacia reach, to compute leakage. This also required developing river water surface elevation-river bank area relationships. Initial results look good
- The results of optimized drain interception of river leakage are being recomputed for the three reaches: Bernardo to San Acacia; San Acacia to San Marcial; San Marcial to Elephant Butte. New computations were needed because river leakage was recomputed.
- Preliminary verification results for January 1, 1998 through September 30, 1999 showed that the average of the 637 modeled daily flows was 12 % lower than the average of the 637 historical daily flows. This calculation is without the benefit of local inflow data for days when precipitation occurred.
- There is a new version of the physical document by Bill and Harriet, and we are putting it up on the Web

Meetings:

- Marc and Mark attended a WaRSMP meeting in Boulder, CO, 12/18 and 12/19, to coordinate funding and development activities
- Gail and Mark interviewed for the Albuquerque Tribune, and the article January 4th was informative and good publicity
- We have meetings with Sandia Labs and University of Arizona on 1/19/01, for coordinating related modeling

Issues requiring Steering Committee Considerations:

- Feverishly working to get Accounting Model in production. Data input and output challenges are the biggest hurdles. Need management support and patience to get it working
- Also preparing for AOP with Water Operations Model. Ditto on support
- We are viewing performance as the key to continued support and funding, and now is the time.