

## Notes from the URGWOM Steering Committee Meeting, Thursday, March 9, 2000, 10:00 AM, Corps of Engineers, Albuquerque District

### *In attendance:*

Roberta Ball, Corps

Gail Stockton, Corps

John D'Antonio, OSE

LeAnn Towne, Bureau of Reclamation

Ellen Dietrich, SAIC

Jack Veenhuis, USGS

Conrad Keyes, Jr., Consultant

Dave Wilkins, USGS

Charles Lujan, Pueblo of San Juan

Mark Yuska, Bureau of Reclamation

Tracy Matthews, NMISC

- ❖ Gail Stockton opened the meeting and turned it over to Mark Yuska to provide an update of URGWOM Technical Team activities. He distributed a handout that is attached to the end of these notes. Additional information and discussion are summarized below.
  - The Technical Team has been working on a problem with the water accounting at Heron Reservoir. The model is not generating the same numbers as the other accounting method.
  - The water operations managers are beginning to work on the Annual Operating Plan (AOP), using the March 1 forecast.
  - The Technical Team met with Mark Treviño, Bureau of Reclamation, to discuss database development, which is fundamental to URGWOM for managing data. This effort will help define how data goes into and out of URGWOM.
    - For now, the plan is to use HEC DSS to help define the input/output structure and flow. In the future, they expect to use HDB and Oracle, but this would be at least one year away.
    - It was pointed out that the ISC is developing a database using HDB with Oracle to manage data in the RiverWare model on the Pecos system.
    - The current configuration of HDB is not set up to do water accounting, so this functionality will take time to develop.
  - The Technical Team is working on the water accounting rules for Abiquiu and CADSWES is fixing some of the problems. Until the rules work correctly, the managers will set the values for reservoir outflows.
  - The Bureau of Reclamation might be able to fund CADWES work on enhancements and performance improvements of RiverWare.
  - The presentation Mark made to the Engineer-Advisors was well received. They were especially interested in the water accounting methods and requested further explanation.
    - The water accounting methods were not developed by URGWOM but are explained well in the documentation, so the Engineer-Advisors asked Mark to present the information at another meeting.

*Notes from the URGWOM Steering Committee Meeting, Thursday, March 9, 2000, 10:00 AM,  
Corps of Engineers, Albuquerque District*

- It was recommended that new staff at the Bureau of Reclamation and others not familiar with the water accounting procedures should attend the April 7 presentation. The meeting is scheduled for the entire day.
- The Technical Team is concerned that making additional presentations will take time away from their modeling efforts. On the other hand, presentations like this provide an opportunity to gain recognition for URGWOM.
  - Don Gallegos has been presenting information to the Bosque Hydrology Group.
  - The Technical Team would like to reduce the number of presentations they are making and is looking for support from the Steering Committee.
    - Gail supports this suggestion to reduce the number of presentations by the Technical Team. She recommended that the same PowerPoint slide show and talk that Mark would be using for the afternoon presentation to the Water Operations Review Interdisciplinary NEPA Team could be used by others to meet the requests for information about URGWOM without taking time from the Technical Team.
    - Another alternative suggested was to invite people interested in URGWOM to attend the AOP public meetings that will be held in different locations.
- Requests for data and questions about data quality are also taking Technical Team time. Conrad Keyes is working on quality control for Water Operations Review data and recommended that there be close coordination between the Review teams and the URGWOM Steering Committee. LeAnn Towne suggested that there also be close coordination between the URGWOM Steering Committee and the Water Operations Technical Team for the Water Operations Review.
- In their meeting with Ray Bennett from Colorado, they discussed how Colorado could assist in the development of the daily timestep data from their monthly timestep planning model.
  - It was pointed out that Steve Vandiver also offered, at the Technical Review Committee meeting, to assist the URGWOM Technical Team in converting their data to a suitable format.
- Chuck Braden, with the IBWC, will assist the Technical Team again now that the routing and wave velocity data for the section below Caballo are available.
- When the reach to American Dam is completed, the Technical Team will work with both sections of IBWC to demonstrate the benefits of using URGWOM in flood loss reduction all the way to Fort Quitman.
- The development of web input forms for field people to enter reservoir data would be a good way to show progress for URGWOM. Mark Treviño could help develop the forms.
- Issues for Steering Committee consideration:
  - Conrad asked if there is any quality checking on the new features being developed by CADSWES.
    - Yes, normally the Technical Team first tries them out to see if they work.
    - Also, there are professional software development procedures that check the datasets during rebuilds every day.

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- At some point, the Technical Team will need an ongoing procedure for data quality control.
  - A Quality Control Plan for the URGWOM model is being developed by Bill Miller.
  - The Planning Model will most likely just include San Juan-Chama and Rio Grande flows at first, at least until RiverWare performance improves.
    - Improved communications with the Water Operations Review teams is needed to determine what is needed in the Planning Model.
    - The Planning Model could aggregate the daily timestep information into monthly data for long-term planning to reduce the quantity of data being processed.
  - Before developing the Planning Model, the Technical Team must calibrate URGWOM using the 1975-1985 data.
  - URGWOM and river data collection is not in the President's 2001 budget, so funding is a concern.
- ❖ Jack Veenhuis informed the group that most of the WARSMP funding of watershed and ecosystem modeling (Modular Modeling System or MMS) that was supposed to complement URGWOM this year has been shifted to a similar effort in the Truckee-Carson basin.
- The Rio Grande effort through USGS had been promised funding of a 15-month effort to develop a watershed model that would use digital elevation data, snowpack runoff predictions, climate information, and watershed characteristics to predict annual runoff and flows.
  - The WARSMP representative told Jack that because the RiverWare modeling is far along, it is too late to develop the MMS.
  - The proposal for MMS in the Rio Grande basin was submitted in 1997. So far, funding has gone to the Yakima River basin, where the modeling is being completed.
  - Conrad suggested that coordination with the Joint Lead Agencies in the Water Operations Review might help obtain WARSMP funding next year, once the Review is well underway. However, MMS would be most useful to the technical teams if it was started this year and could be used for analysis next year.
  - John D'Antonio said that a watershed person will soon be hired for the Governor's Blue Ribbon Task Force, and this person could be directed to find ways to leverage state funding of a watershed modeling project. In order to get this opportunity to work out, it will be important to demonstrate cooperation among the state, USGS, BOR, and the Corps.
- ❖ Gail reminded the group of the public information meeting on URGWOM that will be held on March 22, 1:30 p.m., at the IBWC 2<sup>nd</sup> floor conference room, 4171 N. Mesa, El Paso. The topics will be general URGWOM information, status, and outlook.
- The group recommended that Mark make sure that the print is large enough on the slides and that he use full-size slide printouts or 2 slides per page without the background color on the handouts.
- ❖ The next URGWOM Steering Committee meeting is scheduled for Thursday, April 13, at 10:00 a.m.

STATUS OF URGWOM TECH-TEAM ACTIVITIES

**Activities:**

- Recognized Danielle with a Performance Award – exemplary work on data input!
- **Two Key Activities:**
- Testing and Debugging Accounting Model - Problems mostly with Heron, DMI
- Preparing Water Operations Model for Annual Operating Plan
- Trying to get models into production mode by defining data I/O structure
- Data Management System Effort Kicked Off 3/7 - Mark Treviño Team Leader
- SJ-C Contractor Rules for Water Operations Model are still under development
- There are some glitches between SJ-C/RG 2-water and full Contractor Accounting
- Preparing funding for CADSWES - Wish list of enhancements, RW performance, etc.
- Preparing funding for Brad Vickers - Continuing with rules and accounting
- Received positive feedback from Engineer Advisors at 2/23/00 meeting in Santa Fe
- Wish to approve Accounting Model at next year's EA meeting - begin using exclusively 1/1/2001
- Appreciate URGWOM's documentation of methods used in accounting as a valuable product
- Desire a presentation on reservoir accounting methods - Here April 7<sup>th</sup>
- Received positive feedback on technical presentation 2/22/00
- We have asked for comments back on document by 3/14/00
- Presenting to URGWOPS this afternoon
- Doing lots of presentations: Today at URGWOPS EIS, Bosque Hydrology Group, RGCC at El Paso, Engineer Advisors, MRGCD, Cochiti Pueblo...
- Met with Ray Bennett of Colorado DSS last month on coordination of stateline flow forecasting
- May have Chuck of IBWC begin assisting again
- Javier has provided the below Caballo Cross-Section Data we needed
- We have also received from him Caballo Evaps to compute inflows, to do routing/gain/loss
- Are backing off on El Paso to Fort Quitman reach for now
- Are seeing more data requests come in, along with queries on quality of information
- Met with Al Brower here Should soon receive 36-hour ET forecasts
- Looking to put web-input forms up for field folks to put reservoir data on

**Issues requiring Steering Committee Considerations:**

**Steering committee should serve similarly for database team:** The data management effort - towards developing a system providing organized, centralized data storage for URGWOM and many other purposes, is in need of support and oversight. We believe the URGWOM Steering Committee should continue to do this.

**RiverWare WishList:** We have a running wishlist of features and enhancements needed in RiverWare to improve usability and performance. CADSWES is aware of this, and has some items in the works and others are on their funding wishlist. Reclamation is determining how much funding can be supplied and comparing it to their estimates on these wishlist items. Examples are; Performance improvements, Table series slot writing, Heron Seepage through the dam, viewing combined SJ-C numbers, keeping timeseries notes on data, etc.

**Planning Version of Model will need to be pared down for performance purposes:** It is a significant revision of the water operations model

**We seem to be OK funding-wise this year, but next year?**

**Some Target Dates:**

The first Accounting Model results: This Month

AOP development: Beginning now, for April 1 forecast, by mid-April

Caballo to El Paso physical model completion: Late spring

Accounting Model verification for acceptance: End of year