

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

### *In attendance:*

Steve Bowser, USBR	W.J. Miller, WJM Engineering, Inc./Corps
Ellen Dietrich, SAIC/Corps	Nabil Shafike, NMISC
Rodger Ferreira, USGS	Gail Stockton, Corps
Rhea Graham, NMISC	Jack Veenhuis, USGS
Sterling Grogan, MRGCD	Dave Wilkins, USGS
Conrad Keyes, Jr., EWRI of ASCE	Mark Yuska, URGWOM/USBR

- ❖ Gail Stockton opened the meeting and turned it over to Jack Veenhuis to report on progress in developing the Modular Modeling System (MMS) for watersheds in the upper Rio Grande basin.
  - MMS is a set of models that predict daily surface water runoff from a watershed.
  - It uses input parameters such as precipitation, snowmelt, temperature derived from meteorological data, and soils, slope, aspect, vegetation, land use/land cover, and subwatersheds derived from GIS layers.
  - Using real-time data, MMS forecasts daily flows and flow probabilities from a watershed using current hydrological conditions. The intent is to provide output from MMS into the URGWOM Forecast model. Remotely sensed data, in addition to Snotel data, may also be available to interface with the Forecast model.
  - Jack has completed development of the model for the northern part of the upper Rio Grande basin, which he has separated into the Colorado part (Del Norte and Conejos), the western part (Rio Chama), and the New Mexico district (eastern part of the upper basin).
  - He is collecting GIS and meteorological data for the rest of the basin down to El Paso.
  - Most of the Rio Chama watershed has been calibrated using 8 to 10 gages.
  - More information can be obtained on the GIS data and MMS modeling at the web site URL <http://wwwbrr.cr.usgs.gov/mms/>.
  - Jack stressed that it is important to get the model working and integrated with URGWOM by this fall, then refine it.
  - The URGWOM Technical Team needs to get a list of the real-time climate data needed to run MMS. **Jack will provide the team with a list of data and stations with their sources for the Rio Chama watershed.**
- ❖ URGWOM Technical Team status and activities—Mark Yuska distributed a handout that is attached to the end of these notes.
- ❖ Database subcommittee
  - Discussion was brief. Gail told the group that the letter to be sent to the agencies responsible for data should inform each agency that the data to be released would be in

the form and format that is used with URGWOM. If members of the public want the source data, they will be asked to contact the originating agency.



- **It was agreed that the appropriate metadata should be sent with the letter.**
- Gail distributed a draft file report that provides recommendations on database development that should mesh with the Corps' and Reclamation's databases. This preliminary report is a good place to see where the agencies left off in the development of a database for use with URGWOM.
- A team leader with database skills is needed to take the lead in this effort. Steve Bowser may be able to do this if funding were available.
- ❖ Funding issues—Mark pointed out that the URGWOM Technical Team needs funding to continue to work with USGS staff.



- ❖ **The next meeting of the URGWOM Steering Committee will be held on August 9 at 10:00 a.m. at the Corps conference room.**

### ***Status of URGWOM Tech Team Activities—July 12, 2001***

#### **People:**

- Vacation season continues! Marc and Dave were out ~2 weeks and Carole is out July 6-23.
- Danielle is leaving July 27<sup>th</sup> for a permanent job.
- Gail, Don, Roberta, and Marc received Corps Medals for great work on URGWOM!!
- Leann Towne took over as USBR Water Oprs Chief 6/17/01.

#### **Activities:**

- We re-calibrated using 2 seasons on all 5 middle valley reaches.
- Validation shows improved matches between measured historical and modeled flow
- Redoing the relationships relating estimated river leakage to river flow at an upstream gage and to ET-Toolbox bosque ET. Evaluating using flow ranges for each month for each reach.
- Downloaded new release of RiverWare.
- Completed setting up process to allow Reservoir Control to run the WaterOps model weekly.
- Still helping with debugging/enhancing ruleset based on comments from Don, and comparison of ruleset runs with historical data against historical operations.
- Implementing the Hypothetical Simulation function into ruleset to solve for constraint releases (minimum flows and channel capacity flows) below Cochiti.
- Adding to data and updating metadata in preparation for upcoming web posting.
- We have a list of data providers to be contacted prior to making data available.

- We plan on responding by email to TRC comment providers, and placing comments and responses on WEB.
- Getting compiled comments by July 31<sup>st</sup> for team review, and changes to model.
- Documenting the Water Operations Model Ruleset.
- Further refining the Accounting model daily procedures, adding ftp routines and mail notifications.
- Danielle is closing out and documenting her data and other organizational work.
- Steve Bowser, UC-Region, and Denver are looking into stepping up the Database Development in HDB.

**Meetings:**

- Mark presented forecast modeling and needs at the June 27-30 AWRA Conference in Snowbird, UT.
- Dave, Nabil, Gail, and Steve Bowser met 6/26 to figure out why bosque ET is not correlating well with leakage.
- Dave, Marc, and Mark met with Vince Tidwell, Dick Thomas, and Steve \_\_\_ of Sandia Labs 6/21 to see their "PowerSim" Model (PC-based Yearly or Monthly Water Budget Analysis).
- USBR Water Management Workshop in Boise, August, with HDB/HEC-DSS Session – Mark and/or Steve B. will attend.
- Mark will be presenting water operations modeling at the November AWRA meeting here in Albuquerque.

**Issues:**

- There's a hitch in URGWOM Accounting Model Acceptance by EA's: They have not yet come to terms with USBR on the conditions for acceptance. Both parties are negotiating now.
- USBR is procuring a new faster SUN computer for URGWOM. The team's current SUNs are 5 and 4-years old.
- USBR is looking to hire another engineer/hydrologist to work on URGWOM.
- CADSWES' FY2001 contract with USBR/AAO did get enacted in the amount of \$100,000 (thanks Leann and Steve!).
- Brad Vickers' contract through Tetra-Tech is not finalized yet.
- PC/Windows NT RiverWare will soon be released.