

**Notes from URGWOM Steering Committee Meeting;
December 12, 2002; 10:00 AM; Corps of Engineers Conference Room,
Albuquerque**

In Attendance:

Steve Bowser, USBR	Nabil Shafike, NMISC
Mike Buntjer, USFWS	Gail Stockton, Corps
Ellen Dietrich, SAIC/Corps	Jack Veenhuis, USGS
Don Gallegos, Corps	Tim J. Ward, UNM
Debbie Hathaway, SSPA/NMISC	Dave Wilkins, USGS
Charles Lujan, Pueblo of San Juan	Mark Yuska, USBR

- ❖ Dave Wilkins opened the meeting and turned it over to Mark Yuska to provide an update on development of the Planning Model.
 - Due to a serious problem encountered in the rule set within the Water Operations Model, the Technical Team will not meet the deadline of a functional Planning Model by the end of the year. The Water Operations Model is working but the rules are not running correctly.
 - The overall problem is in accounting reconciliation—water demanded from a reservoir is shown taken from Rio Grande water, regardless of whether or not Rio Grande water is available. The planning model is meeting all demands even if no water is available, something the model should recognize and make adjustments.
 - The solution for this problem may involve substantial rewriting of some of the rules. However, Brad Vickers is the only one familiar enough with the rules to fix them, but due to his workload, he is unable to spend enough time on this to complete this by the deadline.
 - Since the extent of the rules problem and solution, as yet, are unknown, it is difficult to estimate when the Planning Model will be functional. One benefit is that the rules will also be debugged in this effort.
 - The problem with the rules has highlighted the fact that no one on the Technical Team knows the rule set logic well enough to assist Brad. Mark asked for recommendations from the Steering Committee, which provided the following.
 - Write the logic of the rule set as a flowchart to enable the Technical Team to help determine if the logic is correct.
 - The Technical Team should have access to the code so they can understand how the rules are written. The rules are individually documented, but their relationship and flow are not.
 - Have brainstorming session, possibly with Marc Sidlow, Mark Yuska, Roberta Ball, Nabil Shafike, and Brad Vickers to identify the problem and discuss possible solutions.
 - Entry of data from 1975 through 1984 into the Planning Model is continuing.

- Mark has received some population trend data for the Planning Model and will be meeting with URGWOPS technical team members to discuss additional data and their application.
- The Engineer-Advisers of the Rio Grande Compact Commission have provided preliminary feedback that they will approve the proposed releases from Elephant Butte that are in the model.
- ❖ Mark gave a summary of Technical Team activities. His handout is included at the end of these notes. Discussion and additional information are summarized below.
 - USBR staff in El Paso are considering several databases to use for water operations reports besides HDB, such as the Corps' DSS and a USGS database. Gail Stockton reported that the Paso del Norte Watershed Council wants to coordinate their database with URGWOM, HDB, and others used in the basin.
 - It is very difficult to run URGWOM without DMIs or HDB because the inputs require detailed and specific knowledge.
 - Question: Could HDB have menus so an URGWOM user could select the data needed? Answer: There are no plans to modify HDB(2) in this way. HDB has DMIs just like DSS does, but no menus. However, user queries can be set up. HDB will contain much more description of data, but it will still be somewhat difficult to use due to so much detail.
 - Steve Markstrom of USGS and Doug Boyle of Desert Research Institute are running MMS, but its forecasts are not being compared to URGWOM yet. Jack Veenhuis reported that he has changed the watershed delineations to match the watershed boundaries to the forecast points. Data for some of these watersheds must be regenerated for the new boundaries.
 - Marc Sidlow is seeking his replacement on the URGWOM Technical Team.
- ❖ Mark reported on the development of HDB and Steve Bowser provided additional information (below) after the meeting.
 - The latest incarnation of HDB, dubbed HDB2, was to be released for testing this month or next.
 - A contract is in place for Phase I of modifying HDB2 to accept accounting data (\$35,000). The results of Phase I will feed Phase II (\$150,000), from April to September of 2003, theoretically resulting in a working version of HDB2 that can accept accounting data. The USBR Albuquerque Area Office will contribute one-half of the Phase II cost as they did for Phase I.
- ❖ **The next meeting of the URGWOM Steering Committee will be held on January 9 at 10:00 a.m. in the Corps' conference room.**

STATUS OF URGWOM TECH TEAM ACTIVITIES—MARK YUSKA

People:

- Focus on modeling, avoiding distractions
- Will have some holiday outages pretty soon here

Activities:

- Evaluating draft alternatives for EIS. Working with Nabil and others on ESA models.
- Working on Water Ops model DMIs to make them able to completely fill models with needed data
- Working with CADSWES to get Nambe Falls Accounting ready for new year
- Struggling with a problem of “reconciliation” between accounting and physical storages in reservoirs
- Investigated perceptions of large losses in the Middle Valley with increased flows from the Chama system. We’re unable to reproduce the problem: It looks like our middle valley losses are reasonable
- Checking rule based modeling against actual data for 1996.
- Checking and filling in, when necessary, reservoir data from 1975 thru 1984.
- Providing Water Ops Model Output to Weston for Web placement.
- Testing Cochiti Rules for Channel capacity (Albuquerque, San Marcial, Jemez), Carryover, & Spillway Flows.
- Had a major system hard-disk crash Thanksgiving Weekend. Impact to URGWOM was minimal, thanks to Roberta and a great system of backups.
- Installed RiverWare and supporting applications on USBR-AAO’s new SUN workstation.

Meetings:

- RiverWare Technical Steering Committee meeting at Boulder 11/18/02 thru 11/19/02 – Discussed development needs.
- Database development/coordination meeting with El Paso USBR staff (Wayne and Javier) 12/10/02 – El Paso USBR considering several database systems.
- HDB development meeting with Carol Marra (Tetra Tech) and Neil Wilson (Cadswes) 12/18/02 – Adding Water Accounting to HDB for Rio Grande Basin.

Issues:

- Problems with Water Ops Rules still dominating Brad’s attention – Planning Rules benefiting from debugging, but not extracted yet.
- We are not on track to have first Planning Model by EOY due to above, and other factors.
- We really need someone strongly suited to detailed, hands-on modeling to replace Marc.
- The “Big Document” is pushing from mid-December to EOY. It is made up of mostly draft, not final material.
- Rules document not progressing since last month. Model development has our full attention.
- The Water Operations Model needs to be easier to use. We need to make it more friendly.
- Not able to do Forecast Model runs for 1998 and 1999 to compare with MMS yet. Due EOY.
- HDB development needing and getting some attention from us.