

MEETING NOTES  
UPPER RIO GRANDE WATER OPERATIONS MODEL  
STEERING COMMITTEE MEETING

NM INTERSTATE STREAM COMMISSION  
5550 SAN ANTONIO DR NE  
ALBUQUERQUE, NM

May 12, 2011

Amy Louise called the meeting to order at 10:00 am. Those in attendance and those participating in the meeting via telephone conference call introduced themselves. A meeting agenda and an attendance list are attached.

William Miller summarized the main tasks and time lines outlined in the current URGWOM 5-year plan, which had been previously circulated to Committee members. In response to a question about the middle Rio Grande vegetation survey (Task 1.4), Nabil Shafike stated that the work involved a field (crop) survey of MRGCD lands. In response to a question about a surface water quality modeling task in URGWOM, Nabil stated that the ground water objects (Task 2.5) will have to be modified to have the capability of simulating water quality, after which time the model would be capable of simulating certain water quality parameters, and surface water quality data collected in the middle valley will be suitable for use in this model. Edie Zagona also suggested revisions to the 5-year plan regarding CADSWES activities. Miller stated that the 5-year plan would be revised to reflect the comments received and will be circulated to Steering Committee members.

Mike Roark summarized the report on the activities of the Technical Team as follows:

- a) Modeling activities in the middle Rio Grande valley include an investigation into the gain/loss relationship in the San Marcial to Elephant Butte reach; the model is not currently simulating this reach correctly and a temporary regression equation has been developed for use in the model until further investigations can be made; additional work on implementing the water surface and wetted sands evaporation loss function is required before it is fully implemented.

- b) The new RiverWare model version 6.0 was tested against the previous version to ensure that the new model gives the same results as simulations using previous model version; the URGWOM model was also tested using the 64-bit model and operating system, which has resulted in reduced model run times.
- c) The Team is reviewing reference ET equations along with the Bureau of Reclamation (ET Toolbox) to determine which version(s) is most appropriate to use in the middle valley considering availability of appropriate climate data. Development of crop growth coefficients will also be required. The reduction in the number of crop types used in the URGWOM middle valley model will also be considered.
- d) Zhuping Sheng reported that work continued on the simulation of groundwater / surface water conjunctive use in the Mesilla Valley, and that additional data on crop acreage and groundwater pumping is being compiled. (Hilary Brinegar reported that EBID has recently updated their groundwater pumping policy).
- e) The Technical Team is working to combine the forecast and water operations model into a single model (see discussion below).
- f) The Technical Team is also reviewing the development plan for a monthly time step RiverWare URGWOM model (see discussion below).
- g) The development of a watershed runoff model continues, with focus placed on the Rio Chama basin above the La Puente gage.
- h) The Team is discussing the development of a database maintenance program and a review of DMI's with the intent of reducing their number.
- i) Jesse Roach led a detailed review of the PowerSim monthly model. Members of the Technical Team had copies of PowerSim on their computers and were able to test the model functionality.

Craig Boroughs presented a report on the status of the PHVA modeling effort. His presentation included a description of flow tools, rule changes and the latest model run results. The federal agencies are now preparing Biological Assessments of the impacts of projects on the Rio Grande silvery minnow.

Craig reported to the Committee on the development of a combined forecast and water operations model that should be completed in time for use in preparing the 2012 AOP model runs. CADSWES has made some changes in RiverWare that allows for the forecast computations to be made within the operations model, simplifying data and DMI

requirements. This will allow use of the multiple run manager within RiverWare to compare and evaluate multiple run results using different data sets or time periods. A test model of the 2011 runoff was set up and results are being evaluated.

Craig presented a summary of his review of the existing monthly model and the need for a monthly time step URGWOM model. He summarized the needs justifying the development of the URGWOM monthly model, alternatives available to the monthly model, and the problems associated with these alternatives. Craig then outlined the steps in the design plan.

The Steering Committee discussed their role in the development of the monthly time-step model. The Steering Committee deferred discussion on development of the monthly model until after they had had an opportunity to meet and discuss their role in more detail. It was suggested that the Committee may need to meet more frequently than quarterly.

Stephen Kissock presented a summary of the May, 2011 AOP model runs. His presentation included slides of hydrographs of streamflow and reservoir storage content for the 2011 calendar year.

Nabil Shafike reported to the Committee on the status of New Mexico's accrued credit status under the Rio Grande Compact. New Mexico currently has an accrued credit of approximately 164,700 acre-feet, and credit water relinquished in previous year is now being stored in El Vado Reservoir. He described the impact of the Elephant Butte operating agreement on water users in New Mexico below Elephant Butte Dam and on recreation opportunities in the reservoir. The URGWOM model was used to simulate operations associated with the relinquishment of New Mexico's credit water.

Under other business:

Zhuping requested that interested individuals submit comments on his abstract to be submitted for a presentation at the upcoming AWRA meeting in Albuquerque; Edie also reported that CADSWES will be submitting an abstract as well.

The next meeting of the URGWOM Steering Committee will be held after Steering Committee representatives of the NM Interstate Stream Commission, the Bureau of Reclamation and the Corps of Engineers have had an opportunity to meet to discuss the Steering Committee responsibilities.

There being no further business, the meeting adjourned at about 1:00 pm.

URGWOM Steering Committee Meeting  
May 12, 2011

Attendance List

NAME	ORGANIZATION
Nabil Shafike	NMISC
Cyndie Abeyta	Fish and Wildlife Service
William J. Miller	Consulting Engineer
Mike Roark	U. S. Geological Survey
Amy Louise	Corps of Engineers, Albuquerque District
Stephen Kissock	Corps of Engineers, Albuquerque District
Craig Boroughs	BH & H, Inc.
Warren Sharp	Bureau of Reclamation, Albuquerque
Steve Bowser	Bureau of Reclamation, Albuquerque
Zhuping Sheng	Texas A & M University
Andrew Lieuwen	City of Albuquerque
Jennifer Wellman	Pueblo of Santa Ana
Jesse Roach	Sandia National Laboratory
Edie Zagona	CADSWES, University of Colorado

Via telephone:

Hilary Brineger	NMSU / Dept. of Agriculture
Conrad Keyes, Jr.	Corps Consultant
Chris Banet	Bureau of Indian Affairs, Albuquerque
Guillermo Martinez	International Boundary and Water Commission, El Paso, TX



Steering Committee Meeting  
May 12, 2011 – 10:00 am – 12:00 pm  
New Mexico Interstate Stream Commission,  
5550 San Antonio Drive NE, Albuquerque, NM 87109

Call-in line: 1-877-985-2162, Passcode: 6077577

### Agenda

1. Introductions
2. Tech Team Update
3. 5-Year Plan Update
4. Update on PHVA/PVA Modeling Efforts for New BA/BO
5. Combined Forecast-Water Operations Model
6. Plan for Developing a Monthly Timestep RiverWare Model
7. May AOP Model Run Results
8. Analysis of New Mexico Credit Relinquishment
9. Other Business
10. Next Meeting Date