MEETING NOTES UPPER RIO GRANDE WATER OPERATION MODEL STEERING COMMITTEE MEETING CORPS OF ENGINEERS ALBUQUERQUE DISTRICT OFFICE SEPTEMBER 11, 2008

April Sanders called the meeting to order at about 9:00 am and reported that the last meeting of the URGWOM Steering Committee was approximately three months ago. April also reported that the process of selecting a new URGWOM Project Manager was underway. Those in attendance and those participating in the meeting via telephone conference call introduced themselves. An attendance list is attached.

William Miller distributed a copy of the September 11, 2008 draft URGWOM 5-year plan. He reported that the Technical Team had been developing descriptions of work tasks and associated funding requirements. A Gantt chart showing the schedule of the activities has also been developed, but has not yet been updated to reflect the current activities described in the Planning document. He requested that members of the Committee review the draft 5-year plan and submit comments or suggested revisions.

Steve Bowser reported that the \$2 million appropriation received by Reclamation for support of URGWOM development in the current fiscal year had been allocated to Sandia National Laboratory (Jesse Roach), Craig Boroughs, Tom Stockton, Tetra Tech and CADSWES. An additional \$200,000 Reclamation appropriation was transferred to the Corps for Population Habitat Viability Analysis (PHVA) modeling support.

April has requested that Tetra Tech submit a proposed work plan for URGWOM modeling support under an existing IDIQ contract between the Corps and Tetra Tech. Approximately \$300,000 will be available under this work plan for funding of the following activities:

- Update accounting model;
- Develop URGWOM user's manuals;
- Update Corps' URGWOM web page;
- Prepare regular URGWOM newsletters;
- Develop design document for incorporating Rio Grande basin in Colorado into URGWOM models;
- Develop design document for developing Rio Grande watershed model.

Upon receipt of estimated schedule and costs from Tetra Tech, the 5-year plan would be updated to reflect these work activities.

April reported that the Corps has been advised that the Senate version of a 2009 appropriation for the Corps URGWOM funding is \$1.2 million, which is the amount requested. The Corps has submitted an additional capability funding request of \$1.03 million. In addition to activities described in the 5-year plan, this funding would be used for in-house investigations regarding Jemez Canyon Reservoir and Cochiti Lake operations and Lower Rio Grande investigations.

It was the consensus of the representatives of the federal agencies present at the meeting that the FY2009 funding would be based on continuing resolution authority based on last year's budget, and that funding in any case would not become available until next spring or summer. Steve Bowser reported that FY 08 funding levels may not fully support Reclamation's ET Toolbox maintenance and development activities.

Mike Roark reported on the current status of URGWOM modeling activities related to PHVA (Collaborative Program) investigations, specifically:

- a calibration model of the entire basin in NM above Elephant Butte, including the new middle Rio Grande valley model, is working;
- operating rules have been written and 25 years of data can be loaded and run in the model;
- the model is running on RiverWare version 5.0.2 (Edie Z. reported that activating the performance enhancing feature of RiverWare 5.0 will allow for longer time period runs);
- the stochastic hydrologic sequence using paleo-hydrologic data (tree ring data) has been prepared;
- the URGWOM Technical Team has been meeting with the PVA biologists to develop the hydrologic data required for input to the biological model;
- Craig Boroughs has developed the initial starting conditions (2010) for the ten –year PHVA model runs based on the 2008-09 period.

In response to an inquiry from April regarding the simulation of El Vado Reservoir for the storage and release of Pueblo Indian Prior and Paramount water, Chris Banet reported that he will request that Randy Shaw consult with Marc Sidlow regarding this operation and the development of operation documentation. April requested that Chris follow-up on this soon, as the PHVA water managers have an aggressive schedule. The initial PHVA model runs are scheduled to be completed by the end of September, and the new Biological Opinion is scheduled to be finalized by 2010.

Mike Roark distributed box plot statistical summaries comparing the simulated flow (using both the new middle valley model and the old version of the middle valley model) against historic measured flow for five reaches through the middle valley for the 1990-2000 period. The new model simulation of the Central to Bernardo reach and the Bernardo to San Acacia reach were not as close to the historic data as the old version of the model, possibly due to problems associated with unmeasured return flows in these reaches. Mike reported that additional calibration work in these reaches should improve model simulations.

Nabil distributed copies of bar charts comparing the new model simulated loss rates for six reaches in the middle valley with recorded seepage losses in these reaches (seepage runs) for the 1990-2000 period. The summary shows a good correlation between simulated and historic losses in the Central to Isleta reach, with less correlation for reaches upstream and downstream of Central Avenue. Nabil reported that this may be due in part to the lack of deep aquifer water level data that are required as model input, which lack of data results in unreliable simulated ground water levels.

April volunteered to send copies of the box plots and bar charts to those Committee members participating via telephone.

Zhuping Sheng reported on model development and results of the simulation of groundwater/surface water interaction in the Rincon Valley reach of the lower Rio Grande. Zhuping discussed model cross section inputs, surface water hydraulics in this reach, groundwater object configurations and calibration procedures. Considerable discussion followed among those in attendance about the calibration parameters and the reliability of the simulation results. Zhuping completed his presentation by outlining additional work required for improvement of model simulation results.

Edie and April reported that the Corps and CADSWES will be entering into a new RiverWare licensing agreement similar to that of the TVA and Reclamation. This new three-year agreement would allow for any Corps employee to operate a RiverWare license in exchange for a commitment by the Corp to fund a portion of the annual model maintenance expenses, estimated to be about \$25,000 to \$35,000 per year.

Conrad reported that the International Boundary and Water Commission, Reclamation and private consultants are initiating discussion regarding Paso del Norte Watershed projects, and that Congressional staff member have been involved, although no funding has been identified other than EPA funding. April suggested that the irrigation districts should consider funding water operations simulations.

Under other business:

Conrad reported that IBWC will be raising levees below Elephant Butte Dam in order to meet FEMA certification criteria;

Steve Bowser reported that Reclamation's HDB work is ongoing and that a new server has been set up for the Upper Colorado Region data base.

Steve also reported that Reclamation has provided \$2 million to the USGS to upgrade stream gages in the Pecos River and Rio Grande with a higher baud rate for one hour reporting intervals.

The meeting adjourned at noon.

Attendance List URGWOM Steering Committee Meeting September 11, 2008

NAME

Michael Roark Conrad Keys, Jr. Zhuping Sheng Warren Sharp Patricia Dominquez Steven Bowser Nabil Shafike Andrew Lieuwen April Sanders William J. Miller

Via telephone: Lawrence Abeyta Edie Zagona Chris Banet Bobby Creel

ORGANIZATION

US Geological Survey Corps Consultant TAMU – PdNWC USBR, Albuquerque Senator Bingaman's Office USBR, Albuquerque NMISC Albuquerque Water Utility Corps of Engineers, Albuquerque District Consulting Engineer

Ohkay Owingeh CADSWES Bureau of Indian Affairs, Albuquerque NMSU - WRRI