MEETING NOTES UPPER RIO GRANDE WATER OPERATION MODEL STEERING COMMITTEE MEETING U. S. FISH AND WILDLIFE SERVICE, FIELD OFFICE ALBUQUERQUE, NM

January 14, 2010

Marc Sidlow 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.

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

- a. The middle valley upgrade work is complete and is being used in the planning model; documentation will be completed by April 1, 2010;
- b. The Technical Team recommends that a Technical Review of model improvements be held in the fall of 2010 (see below);
- c. A model rules workshop was held December 15, 2009 to review system operations and to ensure that the model rules reliable reflect actual operations;
- d. A draft design plan for adding the Colorado portion of the basin into the URGWOM models was prepared and has been reviewed by the Technical Team (see below);
- e. Work on the development of groundwater/surface water interaction methods for the lower Rio Grande portion of the model is continuing;
- f. Work on improvements to the monthly model is continuing which includes documentation of findings of the comparison with URGWOM model and a workshop to review model assumptions and capabilities will be held in 2010;
- g. The Technical Team continues discussion on development of real-time water operations model and a workshop to further define the scope will be held in 2010;
- h. Modeling for the PHVA workgroup (ESA compliance and BA/BO development) continues (see below);
- i. The water quality modeling subcommittee met on November 2, 2009 and on January 12, 2010, Jesse Roach presented to the Technical Team a summary of the capabilities of the monthly model to simulate water quality in the Rio Grande (see below);
- j. The Technical Team has tested the new CADSWES water surface/wetted sands loss method and it meets requirements and will be incorporated into the model.

Mike Roark , on behalf of Scott Anderholm, reported that the water quality modeling subcommittee met on November 2, 2009 to compile and group issues based on constituents, to determine the appropriate model time step, to compile known existing models and to determine if available data are adequate. The Subcommittee organized the effort into three aspects: scientific relations, economic effects and legal (water quality standards, ESA). The subcommittee also discussed the principal constituents that might be suitable for modeling (and existing models that simulate them) which were salinity, nutrients/dissolved oxygen/ temperature, fecal coliform/E-coli and pharmaceuticals/pesticides. All available data, their source and duration, will have to be reviewed. In summary, many issues were identified and existing models do not address them all, but they could be refined to address the issues identified.

Conrad Keyes reported that a two-year program to collect bacteria samples, in cooperation with NM Environment Department, will begin in 2010. Cyndie Abeyta reported that the Fish and Wildlife Service, in cooperation with the Corps of Engineers, will resume continuous water-quality monitoring for dissolved oxygen, pH, specific conductance, water temperature and turbidity in the Albuquerque reach of the middle Rio Grande. The Steering Committee consensus was that the water quality subcommittee should meet with the Steering Committee to further the efforts of water quality modeling in the Rio Grande basin.

Craig Boroughs briefed the Steering Committee on the status of the PHVA/PVA modeling efforts for new Biological Assessment / Biological Opinion. Ongoing work includes modification of model rules, adjustment of target flow release step-down during hydrograph recessions, the MRGCD San Juan-Chama storage pool in El Vado Reservoir was adjusted, the MRGCD diversion at Angostura during times of shortage was increased to 400 cfs, which would result in no flow in the river below the diversion during times of shortage, and the model was modified to incorporate the provisions of Article VIII of the Rio Grande Compact (Texas call on post-compact storage in El Vado). Modeling and consultation with biologists in the PVA work group is continuing.

Craig Boroughs summarized the draft plan for incorporating the Colorado portion of the Rio Grande basin into the URGWOM model. The purpose of this model would be to replace the anticipated stateline delivery data provided by Colorado, to evaluate future changes in hydrology in the Colorado portion of the basin and to perform Rio Grande Compact computations. Craig reviewed aspects of the draft model plan including basin reservoirs and their operations, operation of the Closed Basin Project (including sodium ion concentration conditions in the Compact), transbasin diversion from the San Juan River basin, water users and water rights (including instream flow rights). Craig reported that the draft plan study found that the existing data are adequate and the RiverWare water rights solver could be used in this portion of the model. Additional work would include development of reservoir operation rules, review of seepage loss studies for use in developing channel losses, data set-up, development of rules, accounts and DMI's and model calibration and validation. Craig Cotten suggested that a Technical Team meeting in Alamosa would help further the development of this portion of the model.

Craig Boroughs logged his laptop computer onto the world wide web and led the Steering Committee through a brief review of the updated URGWOM web page, focusing on the changes made since the last presentation to the Steering Committee.

Marc Sidlow reviewed for the Steering Committee the work that has been done to incorporate into the model changes to the accounting of Pueblo Indian prior and paramount storage and release from El Vado Reservoir intended to reflect current accounting being utilized by BIA and Bureau of Reclamation. Chris Banet stated that the BIA supports the work done to update model rules to incorporate the changes, but would like to defer the use of the revised changes in the model until after the BIA has had the opportunity to present and discuss the changes with representatives of the six middle Rio Grande Pueblos.

The Steering Committee requested that a meeting of the Technical Review Committee be scheduled for October 14, 2010. Potential items to include in the Technical Review include the upgrade to the middle valley portion of the model (groundwater/surface water, loss from open water and wetted sands), changes to rules and DMI's, changes to the accounting model, development of groundwater/surface water interaction in the lower Rio Grande (below Elephant Butte) and the potential for inclusion of the Colorado Portion of the Rio Grande basin.

Marc Sidlow presented to the Steering Committee a presentation comparing the May 1, 2009 AOP model run projected streamflow and reservoir operations with the actual recorded streamflow and reservoir operation. Marc reported that he believed that the 2009 AOP operation runs were the best simulation of actual operations since use of the model in AOP preparations began. The 2010 AOP model runs will utilize the upgraded model.

The next meeting of the URGWOM Steering Committee is scheduled for April 8, 2010.

There being no further business, the meeting adjourned at noon.

URGWOM Steering Committee Meeting Hillary Brinegar January 14, 2010

Attendance List

NAME

Steve Kissock Nabil Shafike Cyndie Abeyta Jesse Roach William J. Miller Chris Banet Craig Boroughs Mike Roark Walt Kuhn Lawrence Cata Marc Sidlow

Via telephone: Hillary Brineger Conrad Keyes, Jr. Edie Zagona Bobby Creel Craig Cotten John Sorrell

ORGANIZATION

Corps of Engineers NMISC Fish and Wildlife Service Sandia National Lab Consulting Engineer Bureau of Indian Affairs, Albuquerque B H & H, Inc. U. S. Geological Survey Tetra Tech Ohkay Owingeh Corps of Engineers, Albuquerque District

NMSU Dept. of Agriculture Corps Consultant CADSWES NMSU – WRRI Colorado Division of Water Resources Pueblo of Isleta



Steering Committee Meeting January 14, 2010 – 10:00 am South Conference Room – US Fish and Wildlife Service, New Mexico Ecological Services Field Office, 2105 Osuna Road NE, Albuquerque, NM

Call-in line: 1-866-769-5378, Passcode: 6504045

Agenda

- 1. Introductions
- 2. Tech Team Update
- 3. Water Quality Modeling Update
- 4. Update on PHVA/PVA Modeling Efforts for New BA/BO
- 5. Design Document for Colorado Portion
- 6. URGWOM website Update
- 7. Revised P&P Storage and Release Implementation
- 8. Schedule Tech Review
- 9. '09 AOP Comparison Results
- 10. Other Business
- 11. Next Meeting Date