

Draft Memorandum

To: URGWOM Technical Team Members
Date: October 17, 2022
Subject: Notes of the October 11, 2022 URGWOM Technical Team Meeting

These notes summarize the items discussed during the October 11, 2022 meeting of the Upper Rio Grande Water Operations Model (URGWOM) Technical Team. The meeting began at 9:00 am and was conducted as an on-line collaboration hosted by the Corps of Engineers using Webex. All those participating in the meeting introduced themselves and their names and affiliation are listed on the last page of these meeting notes.

The October, 2022 meeting agenda included a report on Reclamation's Rio Grande Basin Study, an update on RiverWare enhancements, a summary report on the Fall, 2022 Technical Team Field Inspection, an update on the URGWOM Five-Year Plan and general updates on ongoing URGWOM related activities from the NM Interstate Stream Commission, the Corps of Engineers, the Bureau of Reclamation, the U. S. Geological Survey and their contractors.

Marc reported on the following model related items that the Corps of Engineers have been working on:

- Development of the URGWOM real time model;
- Updating the Platoro Reservoir operation rules to be consistent with the policies of the Conejos Water Conservancy District;
- Running URGWOM model simulations of changes in Abiquiu Reservoir operation for use in updating the Abiquiu Reservoir Water Control Manual; and
- Integration of the URGWOM model into SWMM.

Lucas reported on behalf of the Bureau of Reclamation that new members of Reclamation's Team will be joining the URGWOM Technical Team in future meetings and activities. He also reported that the URGWOM model to be used in the Rio Grande Basin Study has been circulated to Team members for their review. This model includes the addition of the Santa Fe River Basin, adjustments to MRGCD diversion and changes to Lower Rio Grande releases. This version of the model circulated by Lucas does not include the addition of the deep aquifer objects, but after the objects are added and that version of the model is reviewed, Reclamation may decide to use the model that includes the deep groundwater objects. Lucas requested that Team members review the Rio Grande Basin model and submit any comments to him within the next month. Nick reported that Hydros has sent the new model including the deep groundwater objects to the Corps for their review.

Lucas also reported that he has been developing evaporation and evapotranspiration data for use in the Rio Grande Basin model future projections. Lucas is performing a bias correction

that will extrapolate the 1975-2019 data to the 1975-2099 period for pan evaporation at El Vado, Abiquiu, Nambe Falls, Cochiti, Elephant Butte and Caballo Reservoirs. During this review process, Lucas identified pan evaporation data discrepancies at Cochiti Lake for the 2012-2019 period which showed a decrease in the overall data trend. Marc indicated that he would ask Reynalden or Roberta to look into this discrepancy, and that the evaporation data from Jemez Canyon Reservoir could be reviewed to compare to the Cochiti Lake data. Lucas also reported that he identified discrepancies in the pan evaporation and evapotranspiration data during the winter months between 2012-2016. These discrepancies may be the result of not incorporating the winter crop coefficients for use in computing evaporation developed by Craig Burroughs. Lucas will send out an email to the Technical Team with additional information about the discrepancies and requesting assistance with resolving this matter.

Lucas reported that he has relocated all of the URGWOM Technical Team data from the myUSGS web page on to the SharePoint site. The relocated data have not been fully organized on the SharePoint site.

Cindy reported that the NMISC has begun working on the consumptive use computations for riparian vegetation in the Middle Rio Grande Valley. The NMISC is also finishing up work on model calibration.

David Neumann reported on RiverWare enhancements including the addition of the capability to export/import selected slots but not the entire object. This import/export can now be accomplished without having to delete the entire object or overwriting the existing data in the slot, and is intended to maintain references, plots, DMIs, etc. CADSWES is also working on a design to provide access to the web service AWDB (air and water database) maintained by the NRCS. This will provide access to forecast table slots only, with one slot per location. David demonstrated the new web map view for URGWOM. Current URGWOM views include the simulation view, account view and the geospatial view. The web map view is based on web map tiles and will be ready in early 2023.

Miller presented a brief Report on the September 13, 2022 URGWOM Technical Team field inspection. The field inspection took place in the area of El Vado Reservoir and included a visit to the El Vado Reservoir rehabilitation work, the USGS gage below El Vado Dam and Acequia irrigation works on the Rio Brazos. Eighteen individuals participated in the trip. Miller explained the extent of the rehabilitation work which is being undertaken to address dam safety concerns and how URGWOM has been modified to account for the storage limitations in El Vado and the transfer of Prior and Paramount storage to Abiquiu Reservoir. The rehabilitation includes grouting to reduce seepage through the embankment and the foundation and the reconstruction of the service spillway. The rehabilitation work will extend through 2026. Field inspection findings and conclusions include:

- El Vado Dam is being rehabilitated to address dam safety issues and to reduce seepage through and around the structure.
- Storage levels in El Vado Reservoir are restricted during the rehabilitation work. The minimum pool will be limited to about 2,000 acre feet until about November, 2023 when Phase I is completed, and there will be storage restrictions (not to exceed about 81,000 acre-feet) in place through 2026 while the spillway is being rehabilitated.
- Access to the USGS gage Rio Chama nr. La Puente is across private lands which can limit the number of site visits which may impact reliability of gage data.

Miller briefed the Technical Team on the status of the URGWOM Five-Year plan, which had been circulated to the Technical Team on September 27, 2022. This plan is updated on a regular basis and the purposes include:

- Serves as guidance for prioritizing and budgeting for agencies;
- Demonstrates the need to continue funding for development and maintenance of the model; and
- Assist the Technical Team by directing their focus to specific work tasks that are underway or required in the future to improve model efficiency and reliability.

The Plan includes a narrative description of model activities including the objectives and approaches to accomplishing each task. The estimated costs and work schedule are also included. Miller used the Gantt Chart schedule to present and discuss the tasks in the Plan. As in previous versions of the Plan, the tasks are categorized as ongoing regular activities, model development and enhancements, and planning support. Miller requested that Team members provide comments on the Five-Year Plan as soon as possible.

The next meeting of the Technical Team is scheduled for November 8, 2022.

There being no additional matters to be brought before the Team, the meeting was adjourned at about 10:15 am.

ATTENDANCE LIST
URGWOM TECHNICAL TEAM MEETING

October 11, 2022

<u>NAME</u>	<u>REPRESENTING</u>
Marc Sidlow	USACE, Albuquerque District
Prakash Kaini	USACE, Albuquerque District
William Miller	Southwest Water Design/USACE Contractor
Dave Moeser	US Geological Survey
Cindy Stokes	NM Interstate Stream Commission
Kyle Shour	Tetra Tech/USACE Contractor
Faith Kuria	Bureau of Reclamation
Lucas Barrett	Bureau of Reclamation
Jerry Melendez	Bureau of Reclamation
Brian Westfall	Keller Bliesner / BIA Contractor
David Neumann	CADSWES
Nick Mander	Hydros Consulting
Steve Schultz	City of Santa Fe
Zhuping Sheng	Paso del Norte Watershed Council