

Draft Memorandum

To: URGWOM Technical Team Members
Date: June 20, 2023
Subject: Notes of the June 13, 2023 URGWOM Technical Team Meeting

These notes summarize the items discussed during the June 13, 2023 meeting of the Upper Rio Grande Water Operations Model (URGWOM) Technical Team. The meeting began at 10:00 am (MST) and was conducted as a hybrid meeting with an on-line collaboration hosted by the Corps of Engineers using Webex and in person at the NM Interstate Stream Commission Office in Albuquerque, NM. All those participating in the meeting introduced themselves and their names and affiliation are listed on the last page of these meeting notes.

The June, 2023 meeting agenda includes a report on the Spring, 2023 URGWOM Tech Team inspection trip, a status report 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.

The Bureau of Reclamation had no specific agenda items to bring before the Technical Team.

Marc reported that the Albuquerque District office is working on the following URGWOM related activities:

- Review of the AOP model run based on June 1, 2023 NRCS runoff forecast;
- Troubleshoot problems with computed release from Jemez Canyon Reservoir that was related to the implementation of new area-stage-capacity curves for the Reservoir;
- Developing and analyzing model runs for use in preparing the update of the Abiquiu Reservoir Water Control Manual;
- The Corps is planning to begin construction work on the outlet works at Abiquiu Reservoir and low flow operations (~50 cfs) are expected from November 15, 2023 to March 14, 2024; this will require that any flood storage retained and carried-over in Abiquiu Reservoir in 2023 be released beginning October 1, 2023 for temporary storage in Cochiti Lake, where it will be released before the end of 2023.

Cindy reported that the NM Interstate Stream Commission is working on the following URGWOM related activities:

- The Albuquerque Bernalillo County Water Utility has worked out an exchange agreement with the NM Office of the State Engineer to pay back the diversion of water that could not be offset with the release of San Juan-Chama Project water due

to flood control releases from Abiquiu Reservoir having priority during times of limited channel capacity. The offset release will be completed prior to the end of 2023;

- The NMISC is reviewing the URGWOM soil moisture simulation in the Middle Rio Grande;
- The NMISC is reviewing the application of blended functionality in development of short term and long term forecast hydrographs;
- The NMISC is evaluating changes to the model that limit the location of storage of debit water under certain circumstances; currently all debit water is stored in El Vado.

Miller presented to the Team an update of the URGWOM Five-year Plan (2024-2028). He presented slides showing the list of URGWOM tasks and the task completion schedule in the form of a Gantt chart. In addition to the Gantt chart, the Plan also includes a narrative description of the URGWOM activities and an estimate of the cost to complete each task. The general purposes of the Plan include serving as guidance for prioritizing and budgeting for agencies, demonstrating the need for funding for development and maintenance of the model, and assisting the Technical Team by directing the focus of work efforts to improve model efficiency and reliability. The Five-year plan is broken out into three categories including on-going and regular activities, model development and enhancements and planning model applications.

The draft Five-year Plan will be revised to reflect the following information provided by Technical Team members during the meeting:

- The National Weather Service ESP forecast traces have been completed for forecast points in Colorado;
- The MRGCD will provide the results of their annual inventory of irrigated acreage by the following March;
- The URGWOM Training Modules should be completed by the end of September, 2023;
- There has not yet been any significant reduction in the amount of irrigated land fallowed under State programs to reduce water use. Simulation of impact of the acreage reduction in the Middle and Lower Rio Grande would not be worthwhile at this point.
- The real-time model under development by the Corps will simulate runoff for the next ten days based on NWS forecasts, which are issued each Wednesday. Model calibration is on-going;
- Reclamation has completed the RiverWare Santa Fe River basin model for use in the Rio Grande Basin Study.

Miller presented a brief summary of the May 16, 2023 Technical Team field trip of the Lower Rio Chama area. Fourteen Team members participated on the trip and seven individuals representing the Corps of Engineers, Los Alamos County, the Rio Chama Acequias and the NM Office of the State Engineer presented information to the Trip participants. The Tour extended from Abiquiu Dam to the USGS stream gage Rio Chama near Chamita.

The Abiquiu Dam Project Manager, John Mueller, briefed the Team on the history, authorized purposes and the operation of the Project. The Team then descended into the valve chamber to view the gate system used to regulate releases of water from the Reservoir. The Team also visited the location and instruments of the weather station operated by the Corps adjacent to the Project Office.

Representatives of Los Alamos County led the Team on a tour of the hydroelectric facilities located at the toe of Abiquiu Dam. These representatives described the operation of the hydraulic system to release water from the reservoir into the penstock and turbine, as well as the generator and electrical switching systems used to produce and wheel the hydroelectric power into the local power grid system. The Team inspected system controls and equipment for the two 6.3 MW turbines and the low-flow 3.2 MW turbine.

Downstream of Abiquiu Dam, the Team met with the Rio Chama Watermasters from the NMOSE District VI office and with representatives of the Rio Chama Acequias. The Watermasters described the methods used to apportion water to irrigators diverting from the Rio Chama during times of shortage and how URGWOM model runs are used to determine the natural (Rio Grande) flow available for diversion by the irrigators. Tim Seaman of the Acequia Abeyta Trujillo described the history and the operation of the system of seventeen individual Acequias diverting from the Rio Chama downstream of Abiquiu Dam. Two of the Acequia diversion dams, the Acequia Abeyta Trujillo and the Acequias Chamita/Hernandez, were visited during the inspection trip. The USGS stream gages on the Rio Chama below Abiquiu Dam and near Chamita were also visited by the Team.

Additional details about the Field Trip can be found in the May 26, 2023 Post Inspection Trip Report which is available on the URGWOM SharePoint site. Miller also solicited ideas for a location for a one-day field trip later in the summer of 2023.

The next regular meeting of the Technical Team will be held July 11, 2023 beginning at 10:00 am. This meeting will be a hybrid online and in-person meeting at the NMISC Office in Albuquerque. The August, 2023 meeting will be on-line only.

There being no additional matters to be brought before the Team, the meeting was adjourned at about 11:25 am.

ATTENDANCE LIST
URGWOM TECHNICAL TEAM MEETING

June 13, 2023

NAME	REPRESENTING
<i>Those attending meeting in person:</i>	
Marc Sidlow	USACE, Albuquerque District
Prakash Kaini	USACE, Albuquerque District
George Schuman	USACE, Albuquerque District
William Miller	Southwest Water Design/USACE Contractor
Breanna Chavez	Tetra Tech/USACE Contractor
Lucas Barrett	Bureau of Reclamation
Brian Westfall	Keller Bliesner Engineering / BIA contractor
Cindy Stokes	NM Interstate Stream Commission
<i>Those participating in meeting virtually:</i>	
Kyle Shour	Tetra Tech/USACE Contractor
Anne Marken	Middle Rio Grande Conservancy District
Jerry Melendez	Bureau of Reclamation
Roland Becenti	Bureau of Indian Affairs
Guillermo Martinez	Intera
Phil King	EBID
Ashenafi Madebo	Colorado Department of Water Resources
Yining Bai	NM WRRI