

# Draft Memorandum

To: URGWOM Technical Team Members

Date: April 15, 2022

Subject: Notes of the April 12, 2022 URGWOM Technical Team Meeting

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These notes summarize the items discussed during the April 12, 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 Microsoft Teams software. All those participating in the meeting introduced themselves and their names and affiliation are listed on the last page of these meeting notes.

This month's meeting agenda includes a presentation of a draft itinerary for the Technical Team Spring 2022 inspection trip in the Middle Rio Grande, a presentation on the April, 2022 AOP model run results and general updates on ongoing URGWOM related activities from the Corps of Engineers, the Bureau of Reclamation, the U. S. Geological Survey and the NM Interstate Stream Commission.

Miller presented to the Tech Team the proposed itinerary for the Spring, 2022 Technical Team field inspection. This inspection trip will visit sites in the middle valley between Cochiti Dam and Corrales. The trip would begin at the Corps of Engineer's Office and following sites will be visited:

- Cochiti Dam
- USGS Steam Gage Rio Grande at San Felipe, NM
- MRGCD Angostura Diversion Dam
- Corrales Siphon
- Sandia Lakes Wasteway
- AMAFCA North Diversion Channel Outfall

The proposed itinerary calls for the Team to travel from Albuquerque to Cochiti and then proceed down the river from there, travelling through Peña Blanca, Santo Domingo, San Felipe, Algodones, Santa Ana and arriving in Bernalillo for lunch. The goal is to have all Team members travel together in a single vehicle for safety and efficiency sake. Miller requested that all those interested in participating in the trip notify him so that transportation needs can be identified.

Lucas presented the results of the April, 2022 AOP model run results. The presentation included reports on the basin current snow pack, the current drought monitor report and ENSO forecast (moves toward neutral later in 2022). The NOAA three month climate forecasts were also presented, which indicated the possibility of above normal precipitation for southwest NM

during the monsoon season. The 2022 snowpack level is similar to 2021 and the 2021 runoff hydrographs were used in developing runoff forecasts for 2022 in the AOP model. The runoff forecasts range from just below normal to below normal. Lucas presented hydrographs of storage, inflow and outflow at the major reservoirs and hydrographs of discharge at major stream gages as forecasted by the AOP model runs.

Lucas highlighted the following:

- MRGCD will not divert more than 50% of the natural flow at San Felipe until the river channel dries;
- Initial San Juan-Chama Project Contractor allocation is 65% of full supply;
- 20,000 acre-feet of Pueblo Prior and Paramount water will be stored in Abiquiu Reservoir due to the storage restriction imposed at El Vado Reservoir to allow rehabilitation construction work;
- Storage of Usable Water in Elephant Butte Reservoir will not exceed 400,000 acre-feet during 2022;
- Abiquiu Reservoir is projected to be in flood control operations for about one week (1,800 cfs release);
- The Rio Grande Project irrigation districts will begin the irrigation season about June 3 and conclude irrigating in early September.

The AOP will be presented at a public meeting (virtual) sponsored by the Bureau and the Corps on April 14, 2022.

Lucas also described the following changes to the model default values that are being presented to the Technical Team for their consideration:

The current model set-up default allows for San Juan-Chama Project contractors to lease water to Reclamation after July 16<sup>th</sup> of each year. In practice, Reclamation may require the use of this water prior to July 16, in some years as early as April. Lucas will change the default value to an earlier date.

The current model setup includes a default value flow trigger that is called to curtail the Albuquerque Bernalillo County Water Utility surface water diversions when there is not adequate Rio Grande water available at the point of diversion. The Water Utility's water right permit requires that an equal amount of San Juan-Chama and Rio Grande water be diverted at any time and if there is not adequate Rio Grande at the Water Utility point of diversion, all diversion must shut down. The current default value of *TriggerUseAllSJCIIfNeeded* is set equal to 1, which will allow the Water Utility to divert San Juan-Chama Project water even if there is no Rio Grande flow to divert concurrently. The default setting will be set = 0 to prevent release and diversion of San Juan-Chama Project water if the Rio Grande flow at the point of diversion is not adequate. This setting is being used in the 2022 AOP model.

Lucas described his uncertainty regarding the implementation of Rule 183 which concerns the diversion demand at the Angostura Diversion Dam. During shortage operations the default setting is for the diversion at Angostura to take all of the flow in the river, up to 400 cfs, which results in the flow at Albuquerque equal to zero (depending upon Prior and Paramount release status). When the default setting is turned off, the diversion is limited to the actual current demand, up to 150 cfs. Lucas noted that he has not observed the actual implementation of the default setting in his review of the historic operation. Marc indicated that this rule was set up for operation during very low flow conditions requiring the transport of flow (up to 400 cfs) through the MRGCD canal system instead of the river channel. Lucas will reach out to Anne Marken at MRGCD to discuss the implementation of this rule with her.

Lucas described a problem with the methods used to simulate releases of Reclamation water from Abiquiu Dam to meet target flows at Isleta and San Acacia because of the inability to reliably predict gains and losses from Abiquiu Dam to these locations. Target flows are not being accurately predicted while Reclamation water is being released, and the model does not accurately compute required releases from Abiquiu. Lucas summarized new rule logic to work around this problem. Lucas will circulate the proposed new rules among the Team members for their review and comment.

Andrew reported that he has been working with a Reclamation contractor to develop URGWOM Training modules. He will keep the Team advised of the progress on this effort during upcoming Technical Team meetings.

Cindy had no updates from NMISC to present at the meeting.

The next meeting of the Technical Team is scheduled for May 10, 2022, which will be the Technical Team spring field inspection.

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  
April 12, 2022

<u>NAME</u>	<u>REPRESENTING</u>
Marc Sidlow	USACE, Albuquerque District
Prakash Kaini	USACE, Albuquerque District
Gannon Price	USACE, Albuquerque District
Reynalden Delgarito	USACE, Albuquerque District
William Miller	Southwest Water Design/USACE Contractor
Kyle Shour	Tetra Tech/USACE Contractor
Walt Kuhn	Tetra Tech/USACE Contractor
Lucas Barrett	Bureau of Reclamation
Andrew Gelderloos	Bureau of Reclamation
Brian Westfall	Keller Bliesner / BIA Contractor
David Neumann	CADSWES
Nick Mander	Hydros Consulting
John Carron	Hydros Consulting
Cindy Stokes	NM Interstate Stream Commission
Dave Moeser	NM Water Science Center
Diane Agnew	Albuquerque Bernalillo County Water Utility Authority
Steve Schultz	City of Santa Fe
Zhuping Sheng	Paso del Norte Watershed Council
Ashenafi Madebo	Colorado Department of Water Resources