Draft Memorandum

To:URGWOM Technical Team MembersDate:March 27, 2023Subject:Notes of the March 21, 2023 URGWOM Technical Team Meeting

These notes summarize the items discussed during the March 21, 2023 meeting of the Upper Rio Grande Water Operations Model (URGWOM) Technical Team. The meeting began at 9:00 am (MST) 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 March, 2023 meeting agenda includes a report from Reclamation on the most recent URGWOM updates, a discussion about the itinerary of the Spring URGWOM Tech Team inspection trip, a demonstration on recent RiverWare enhancements 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.

Lucas reported on the following updates to the URGWOM model reported out on March 3, 2023:

- A fix was made to override the Elephant Butte power generation rule to regulate release and storage levels in Caballo Reservoir to protect archaeological sites in Caballo Reservoir;
- Adopt storage targets in Caballo based on useable water in storage in Elephant Butte Reservoir; see Lucas's March 3, 2023 Memo (posted on SharePoint site) describing these changes in detail.
- Pumps at Nine-mile wasteway, Neil Cupp and the North and South Boundary Bosque del Apache are set equal to zero (=0); the North and South Boundary pumps will likely not be used in the future, the Nine-mile wasteway pump is not functioning and may not be used in the future; the Neil Cupp pump may be used in the future by MRGCD to prevent river drying;
- Implementation of the Rio Chama Acequia simulation changes to more accurately reflect current operations as outlined in TetraTech's December 19, 2022 Memorandum;
- Fixed Rio Grande account in the ABCWUA object so that Rio Grande water is reconciled correctly;
- Miscellaneous updates to scripts and rules in preparation for development of the 2023 Annual Operating Plan.

Lucas also briefed the Team on the use of the RiverWare autolock feature that prevents one operator from opening and overriding a model that is being used by a different operator. Lucas described how the autolock feature is used and requested that the Team adopt the use of this feature for the official model. The Team agreed with Lucas and will use the autolock feature going forward in the use of the official model.

Marc reported for the Corps that he has completed the model runs required for the update of the Abiquiu Reservoir water control manual. He reported that the model runs showed that the pre-evacuation of conservation storage in anticipation of flood control operations was never required, even with the increase in conservation storage from elevation 6220 to 6230 as authorized by the Water Resources Development Act of 2020. Marc is also reviewing the AOP model files in preparation for the final model runs.

Cindy had reported on behalf of the NMISC on the following work items:

- Changed the status of the ABCWUA object for compact debit accounting that was added as part of the Abiquiu operation deviation on account of the El Vado Reservoir construction related storage restrictions; the object is not functioning properly when storing Prior and Paramount water and rule 121 was modified to ensure that the releases were made from the correct account.
- The model is making an inconsistent application of initial soil moisture storage; some areas of the basin begin model simulation with no moisture in the soil column and other portions of the basin have full soil moisture columns. The soil moisture feature only applies to the Middle and Lower Rio Grande portions of the model. Nick, Cindy and Brian will discuss how to set initial soil moisture values at a follow-up meeting.
- Cindy requested that the average/blending hydrograph methods be implemented in the official model through the addition or modification of the appropriate slots and changing rules. The Team agreed with the changes to the official model as suggested by Cindy to provide additional flexibility in hydrograph development.
- Cindy reported that Anne Marken of MRGCD would like to participate in the Technical Team meetings but that she has a schedule conflict at the time of the regular Team meeting. If the time were change to 10:00 am, she would be able to attend. The Team members had no objection to beginning the meeting at the later time.
- Grace Haggerty (NMISC) requested a spot on the agenda for the next Team meeting for the presentation about modeling efforts in the middle Rio Grande, which may result in a longer than normal meeting.

Miller presented a proposed itinerary for the Spring, 2023 Tech Team field trip of the lower Rio Chama valley between Abiquiu Dam and Chamita. Inspection trip stops included in the itinerary are the Abiquiu Dam hydroelectric power plant, stream gages (below Abiquiu Dam and near Chamita) and Acequia diversion structures. The preferred date for the trip is May 16, 2023. The Team would rendezvous at the NM 599 Rail Runner train station and would travel together from the train station as a group. Miller requested that those interested in the trip contact him so that adequate transportation could be arranged. Miller will also follow-up with an email to all Team members outlining the details of the trip.

David N. presented information on RiverWare enhancements that CADSWES has been working on under contracts with the Corps and Reclamation:

- Developed the capability to select multiple scripts at the same time for copying or other application;
- RiverWare demonstration of conditional script action for defining mode and name of variable for direction to a specific script for use in the operation model or planning model; will be available in version 9.1 which will be released later in 2023;
- RiverWare demonstration of added capability of switching views from one model to another (e.g., simulation to accounting) while retaining the same work location and level of zoom between models;
- Added the capability of synchronized scrolling so that SCT table data can be scrolled simultaneously with rows in all open slot windows;
- Demonstration of QuickStart to be available in version 9.1, which provides the capability to choose and place scripts, window layouts and files on a QuickStart window so all are selected for use when the model is opened;
- Other upcoming work items include:
 - Capability of plotting periodic slot data;
 - Improvements to slot dateline navigation;
 - Enhancements to settings manager and window management.

Lucas reported that the annual AOP public meeting is scheduled for April 18, 2023.

Brian suggested that at least one Tech Team meeting each year should be held in person. The Team agreed to meet in person during the June, 2023 Technical Team meeting. Remote participation would remain an option.

The next meeting of the Technical Team will be held April 11, 2023 beginning at 9:00 am. All subsequent Technical Team meetings would begin at 10:00 am.

There being no additional matters to be brought before the Team, the meeting was adjourned at about 10:30 am.

ATTENDANCE LIST URGWOM TECHNICAL TEAM MEETING

March 21, 2023

NAME REPRESENTING USACE, Albuquerque District Marc Sidlow Prakash Kaini USACE, Albuquerque District George Schuman USACE, Albuquerque District Southwest Water Design/USACE Contractor William Miller **Cindy Stokes** NM Interstate Stream Commission Kyle Shour Tetra Tech/USACE Contractor Breanna Chavez Tetra Tech/USACE Contractor Genevieve Allen Bureau of Reclamation Lucas Barrett Bureau of Reclamation Bureau of Reclamation Jerry Melendez David Neumann **CADSWES** Nick Mander Hydros Consulting Keller Bliesner Engineering / BIA contractor Brian Westfall Yining Bai NM WRRI Dave Moeser NM Water Science Center, USGS