Draft Memorandum

To: URGWOM Technical Team Members

Date: February 20, 2023

Subject: Notes of the February 14, 2023 URGWOM Technical Team Meeting

These notes summarize the items discussed during the February 14, 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 February, 2023 meeting agenda includes a presentation discussion by Reclamation about the URGWOM web-map viewer, Nambe Falls Reservoir accounts, simulation of the Rio Chama Acequias, 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 that the URGWOM web-map viewer is ready to go using object locations based on coordinates compiled by Marc. The locations of the aquifer objects are not able to be saved at the correct location but this bug will be fixed with the release of version 9.1.2. There is still some uncertainty about the locations of the Lower Rio Grande objects relative to their true location and at this time the locations are approximate. The locations of objects located above Elephant Butte Reservoir are correct but Lucas requested assistance with verification of the location of objects below Elephant Butte Dam.

Lucas reported to the Team that the accounts in Nambe Falls Reservoir do not seem to serve any purpose and that they are not utilized in any of the model rules, functions, etc. Only the physical slots are used in the model and only for San Juan-Chama Project water. Lucas suggested that these accounts should be deleted from the model to reduce confusion and he will proceed to do so, although this is a low priority item.

Lucas reported on the recent meeting held to discuss the development of the 2023 Annual Operating Plan. During that meeting the use of averaging and blending in the application of the forecast hydrographs was discussed. To demonstrate the application of blending, Marc shared his

screen to display the hydrograph of flow for Embudo Creek at Dixon showing the transition from observed data to the forecast period using blending. Blending interpolates the flow values over three days to avoid the abrupt change in flow between the observed and the forecast period. The default value is set to three days; however, the application of the blending method could result in a deviation from the official forecast volume. Cindy reported that the NMISC applies both averaging and blending in the developing of forecast hydrographs. Nick will also address the confusion surrounding the use of the correct slots when applying hydrograph blending and averaging in developing forecast hydrographs.

Marc reported to the Team that he had encountered an error (change script to ruleset) when disabling the Lower Rio Grande portion of the model from the Middle Valley portion. He asked if when disabling or disconnecting one part of the model, would it be possible to default to whatever ruleset is open? David will look into this questions and report back to the Team. He reported that conditional script logic is being developed that could help address this issue.

Lucas reported that he is planning to implement the changes to the Rio Chama Acequias in the model as outlined in Tetra Tech Inc.'s December 9, 2022 Memorandum *Updates to the Rio Chama Acequias in URGWOM*. Since there were no objections from the Technical Team Lucas will proceed to make the changes to the model.

Marc reported on the Corps current activities, including preparing for the development of the 2023 Annual Operating Plan and using URGWOM to simulate the operation of Abiquiu Reservoir for use in updating the Abiquiu Reservoir Water Control Manual. Prakash is working on the updating of the real-time model.

Cindy had no report to present on behalf of the NMISC.

Dave M. had no report to present on behalf of the U.S.G.S.

David N. reported that CADSWES has recently received authorization to begin work under the agreement with the Corps of Engineers and that he will have a report of model updates to present at the next meeting.

The next meeting of the Technical Team is scheduled for March 21, 2023, beginning at 9:00 am (MST).

There being no additional matters to be brought before the Team, the meeting was adjourned at about 9:31 am.

ATTENDANCE LIST URGWOM TECHNICAL TEAM MEETING

February 14, 2023

NAMEREPRESENTINGMarc SidlowUSACE, Albuquerque DistrictPrakash KainiUSACE, Albuquerque DistrictGeorge SchumanUSACE, Albuquerque DistrictReynalden DelgaritoUSACE, Albuquerque District

William Miller Southwest Water Design/USACE Contractor

Cindy Stokes NM Interstate Stream Commission
Walt Kuhn Tetra Tech/USACE Contractor
Breanna Chavez Tetra Tech/USACE Contractor

Genevieve Allen
Lucas Barrett
Bureau of Reclamation

Charles Moeser USGS
David Neumann CADSWES

Nick Mander Hydros Consulting

Diane Agnew ABCWUA

Brian Westfall Keller Bliesner Engineering / BIA contractor

Yining Bai NM WRRI