Draft Memorandum

To: URGWOM Technical Team Members

Date: September 16, 2024

Subject: Notes of the August 13, 2024, URGWOM Technical Team Meeting

These notes summarize the items discussed during the September 10, 2024, 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 virtual meeting hosted by the Corps of Engineers using MS Teams. Kiara Takacs chaired the meeting. All those participating in the meeting introduced themselves and their names and affiliations are listed on the last page of these meeting notes.

The September 2024 meeting agenda includes general updates on URGWOM related activities from the NM Interstate Stream Commission, the Corps of Engineers, the Bureau of Reclamation, and their contractors, a report on riparian evapotranspiration (ET) loss rate, a report on the NMISC Middle Valley mass balance corrections and a status report on the URGWOM Five-year Plan.

Lucas Barrett reported to the Team that Reclamation had been working on the Basin Study and on the review of the updated stream flow predictions prepared by the University of Massachusetts. Lucas had no other items to bring before the group at that time.

Kiara reported that the Corps of Engineers had no URGWOM related matters to bring before the Team at this meeting.

Cindy reported that the Interstate stream Commission had no items to report to the Team except for those to be presented by Hydros Consultants later during the meeting.

David reported for CADSWES on the following RiverWare upgrade tasks being prepared for the Corps of Engineers and the Bureau of Reclamation.

Those task performed for the Bureau of Reclamation include:

* Develop data extraction tools not using MRM;
* Implementation of account views;
* Adding lines, shapes and text options for use in the workspace;
* Add the ability to synchronize objects and slots with the time step; and
* Add the ability to wrap text in a diagnostic window.

Under the Corps of Engineers contract CADSWES is working on the following tasks:

* HEC product connections;
* windowing layout associated with individual users; and
* improvements to scripting interface and usability.

David also reported that CADSWES is working on an update to OLAMs (object level accounting method). This includes changes to RPL to make the method more transparent so that users can make changes. These changes involve fifteen methods, some are simple, and some are more complex, and the changes involve around two thousand lines of text and many slots. This will be a big task which could impact model performance. CADSWES will add predefined RPL to the help section. CADSWES has just completed the initial memo on this task and will be sending this to the Corps of Engineers. CADSWES will prepare a prototype to evaluate how these changes might impact model performance.

Nick reported on the work being prepared by Hydros for the Interstate Stream Commission including riparian ET loss rates and the travel time lag between Cochiti Dam and Elephant Butte Reservoir.

Nick reminded the Team of the lag time discrepancy between the accounting model and the operations model. The accounting model has a four day time lag between Cochiti and Elephant Butte Reservoir including two days between Bernardo and Elephant Butte. The physical model has a three day time lag, with one day of travel time lag between Bernardo and Elephant Butte Reservoir. Nick utilized the calibration model for the years 1975 through 2021 to evaluate a change in the travel time lag and he reported that the travel time should be a whole integer value and that the error became worse as the travel time lag was increased in the physical model. Nick recommended that the physical model retain the three day travel time lag and that the accounting model travel time be reduced from four days to three days so that the accounting model is consistent with the physical model. Lucas will make these changes to the model and send the model out to the Technical Team.

Nick reported on the results of the computation of riparian ET loss that includes a carryover of effective precipitation from one day to the next. By implementing the revised riparian ET computation method, the ET value is reduced between 4% and 5%. Nick will update the DSS file to reflect the change in the riparian ET rate and he will send a memorandum summarizing the development and results of the new method of computing the riparian ET rate.

Nick also reported that Hydros is updating the accounting of return flow from water released by the Pojoaque Valley Irrigation District from Nambe Falls Dam to properly account for the return flow of San Juan-Chama project water stored in Nambe Falls Reservoir by exchange

John Craven reported on updates to the middle Rio Grande mass balance accounting prepared for the Interstate Stream Commission. John began with a data overview including M & I pumping and sewer and water line leakage to be used in the Interstate Stream Commission’s spreadsheet water budget of inflow and outflow to the Middle Valley for the years 1975 through 2021. John identified a big shift in the year 2015 which reflecting a drop in public water supply depletion. John reported that Hydros updated the M & I pumping depletion values based on the 2019 USGS groundwater model and that the spreadsheet now uses a loss value in the sewer and water line category of 5%

Miller presented to the Team an update of the URGWOM Five-year Plan for the 2025 to 2029 period. He summarized the Five-year Plan, which includes work plans for individual tasks, an estimated budget and a work schedule The plan includes three areas of activities including ongoing and regular activities, model development enhancements, and planning applications. The model development tasks described in the plan are intended to meet general goals of an accurate and efficient model. The planning goals are subject to funding availability and current Technical Team workload priorities. Miller posted the draft of the URGWOM Five-year plan and requested that Team members submit comment on the plan by the end of September 2024.

The next meeting of the Technical Team will the October 8, 2024, beginning at 10:00 am.

There being no additional matters to be brought before the Team, the meeting was adjourned at about 11:00 am.

ATTENDANCE LIST

URGWOM TECHNICAL TEAM MEETING

September 10, 2024

