

Memorandum

To: URGWOM Technical Team Members
Date: October 26, 2020
Subject: Notes of October 20, 2020 URGWOM Technical Team Meeting

These notes summarize the salient matters discussed during the October 20, 2020 Upper Rio Grande Water Operations Model (URGWOM) Technical Team meeting. The meeting began at 9:00 am and was conducted as an on-line collaboration hosted by the Corps of Engineers using the Corps' WebEx account. All those participating introduced themselves and their names and affiliation are listed on the last page of these meeting notes. Phillip reported that the Corps would take over as Technical Team coordinator and he thanked Dave Moeser and the USGS for their work on serving as Team coordinator in the past.

Specific meeting agenda topics include a status report on the review of the simulation of Rio Chama Acequias in the Model, and update on the Rio Grande Basin study and general updates on ongoing URGWOM related activities from the Corps of Engineers, the Bureau of Reclamation, the Interstate Stream Commission and the US Geological Survey.

Miller reported to the Team on his investigation into the diversion and depletion of Rio Chama flow by the Acequias diverting from the Rio Chama below El Vado Dam. The model simulates the irrigation depletion of these Acequias in three different URGWOM reaches. Miller summarized the steps he proposes to take to determine the difference in depletion of Rio Chama flow that could result from the use of historic diversion data in lieu of assumed diversion data which is currently used in the model. The study will be based on the provisional record of diversions collected by the NMOSE for the 2012-2020 period which will be compiled and subjected to a quality control review.

The current model depletion is based on a fixed diversion rate during the entire irrigation season which is the water right limit. The overall depletion rate of 67%, with return flow of 33%. The sum of all of the water right diversion rates is about 100 cfs. If there is a significant change in depletion of the flow of the Rio Chama due to the use of recorded data instead of the assumed data, the local inflow file for the Abiquiu to Chamita reach may be revised. Nabil requested that in the absence of return flow measurement data, that the depletion rate be reviewed based on the use of ET Toolbox ET data. The amount of water diverted, less the crop ET and incidental losses, could be considered return flow. Miller will keep the Technical Team informed on the progress of this study.

Lucas reported to the Team on his work on developing water supply data for the Rio Grande basin study. Lucas has extracted only the datasets of inflows and local inflows that are needed for URGWOM planning runs which will be performed for the Basin Study. The purposes of his presentation are to produce a visualization of the amount of water supply input to

URGWOM and where, geographically, that input enters the model and identify any quality control issues with the water supply inputs. Andrew discussed the inflows and local inflows used in the model and the uncertainties and errors introduced into the model when computing the local inflow, especially when making projections of future local inflow values. The local inflow computations based on the historic record may not take into account future watershed conditions. Andrew stated that it would be helpful for the public to have access to the URGWOM documentation so that the methods used to compute local inflows would be readily available.

The projected flow at Lobatos will be based on Colorado's Compact delivery obligation and not any changes in watershed activities in Colorado. Colorado is not participating in the basin study. Andrew's presentation included box plots of local inflows and gaged inflow for contributions from various portions of the basin. The statistical summaries of the data from the tributaries or basins were also summarized. The analysis of data so far has shown some unusual data for some locations, including the Otowi to Cochiti local inflow, which show some years of data flow values of zero. Similar analysis of ET rate, irrigate acres, etc. will also be undertaken as part of the basin study.

Nick stated that Hydros has developed local inflows for the middle valley, but that the volumes were so low as to be insignificant and were not used, except for the San Marcial to Elephant Butte reach. Nick will follow-up with Reclamation to make sure that documentation on the computation of local inflows is available to Reclamation for their use in the basin study. Marc added that the model does simulate flows in Colorado required to meet Rio Grande Compact obligations and therefore is capable of simulation of specific operations in Colorado.

Cindy reported that the NMISC had no updates to report on URGWOM related activities at this time.

Dave M. reported that he had no matters to bring before the group and that he would present a report on basin precipitation at the next meeting.

The next regular meeting of the Technical Team is scheduled for November 17, 2020 at 9:00 am, which will also be an on-line collaboration.

The meeting adjourned at approximately 10:00 am.

ATTENDANCE LIST
URGWOM TECHNICAL TEAM MEETING
October 20, 2020

<u>NAME</u>	<u>REPRESENTING</u>
Dave Moeser	USGS
Marc Sidlow	USACE
Phillip Carrillo	USACE
Reynalden Delgarito	USACE
Nabil Shafike	USACE
William Miller	WJM Engineers/USACE Contractor
Mike Brown	Tetra Tech/USACE Contractor
Andrew Gelderloos	USBR
Carolyn Donnelly	USBR
Lucas Barrett	USBR
Cindy Stokes	NMISC
Guillermo Martinez	Intera
Brian Westfall	Keller Bliesner Engineering / BIA Contractor
David Neumann	CADSWES
Nick Mander	Hydros Consulting
Ashenafi Madebo	Colorado Division of Water Resources