

**INTERSTATE COMMISSION ON THE POTOMAC RIVER BASIN
SECOND QUARTER CO-OP SECTION MEETING FY2025
MARCH 18, 2025**

**VIRTUAL MEETING, ROCKVILLE, MD
APPROVED MINUTES**

Call to Order: Chair Robert Sussman called the CO-OP Section Meeting to order at 8:30am on March 18, 2025. The following commissioners, staff, and guests attended the meeting in whole or in part.

Commissioners

District of Columbia

Willem Brakel (*)
Tiffany M. Potter
Steve Saari
Kimberly L. Jones (a)
Hamid Karimi (a)

Maryland

Randy K. Rowel, Jr. (a)
Birthe V. Kjellerup
D. Lee Currey (a*)

Pennsylvania

Jason Minnich (a)
Chris Ann Kimple (a)

United States

Robert Sussman (*)
Amy M. Guise (a)

Virginia

Del. Kathy Tran
W. Weedon Cloe III (a*)
Mark E. Peterson (a)

West Virginia

Mindy S. Neil (a*)

(a) - Alternate Commissioner
(*) – Executive Committee

Staff

Michael Nardolilli, Executive Director
Richard Masters, General Counsel
Cherie Schultz, Director of CO-OP Operations
Renee Bourassa, Director of Communications
Heidi Moltz, Director of Program Operations
Laurel Glenn, Director of Administration
Claire Buchanan, Director Emerita
Michael Selckmann, Assoc. Dir. Aquatic Habitats
Carlington Wallace, Assoc. Dir. Water Resources
Sarah Ahmed, Senior Water Resources Engineer
Alimatou Seck, Senior Water Resources Scientist
Renee Thompson, Water Resources Planner
Stephanie Nummer, Water Resources Scientist
Megan McClaugherty, Ecological Technician
Serena Moncion, Community Outreach Manager
Lily Bedwell, Administrative Coordinator
Daniel Bloedow, Water Resources Intern
Alyssa Freedman, Water Resources Intern

Guests

Megan Jadrosich, U.S. Army Corps of Engineers
Joe Chandler, U.S. Army Corps of Engineers
R. Brian Paul, U.S. Army Corps of Engineers
Matthew Walderon, Pennsylvania DEP
Duke Adams, Pennsylvania DEP
Christina Davis, Loudoun Water
Anne Spiesman, Fairfax Water
Joel Caudill, WSSC Water
Benjamin Simon, George Washington University

1. Virtual Roll Call via Teams Chat

Chair Sussman welcomed everyone to the second quarter meeting of the CO-OP section of fiscal year 2025.

2. Welcoming Remarks

Chair Sussman expressed his appreciation to Commissioner Currey for his willingness to assume the position of Acting Vice Chair of the CO-OP Operations Section after former CO-OP Vice Chair Scott Morris's recent departure from the Commission. Chair Sussman directed Dr. Schultz to facilitate the adoption or modification of the agenda as he needed to attend to a connection issue on his computer.

3. Adoption or Modification of Agenda

Dr. Schultz asked if there were any modifications to the agenda. Hearing none, she asked for a motion to approve the agenda. **Commissioner Karimi made a motion to approve, then Commissioner Potter seconded the motion. All were in favor and the agenda was approved.**

4. Minutes from December 17, 2024, CO-OP Section Meeting

Chair Sussman returned as the moderator of the meeting. He asked for comments or corrections to the previous meeting's minutes. **Hearing none, he asked for a motion to approve the minutes and Commissioner Karimi made a motion to approve them. Commissioner Potter seconded the motion. All were in favor of approving the minutes from the first quarter meeting on December 17, 2024.**

5. Old Business

A. Follow-up on December Action Items

Dr. Schultz shared that no action items required follow-up.

B. Section's Quarterly Report

Dr. Schultz reported that CO-OP was focused on three main topics since the last meeting: continuing drought awareness, the 2025 Water Supply Study due this spring, and the USACE Feasibility Study. Additionally, the CO-OP Operations Committee met in February, CO-OP spent a considerable amount of time on drought response tools, CO-OP staff attended the American Geophysical Union meeting in December 2024, and the Phase 3 Potomac bathymetric LIDAR data is being processed by the contractor. CO-OP submitted several manuscripts to peer reviewed journals and Dr. Schultz shared her hopes for good outcomes with those. Although CO-OP is not currently engaged in drought response activities, drought remains a low-level concern. The U.S. Drought Monitor map showed improvement in extreme drought conditions since the last version in December 2024; however, CO-OP staff remain concerned about the continued dryness in the basin.

Potomac River flow has been below the long-term historical median at the Point of Rocks station most of the time since last November. February precipitation events caused the flow to increase above the long-term historical median temporarily, but data from the Middle Atlantic River Forecast Center shows a substantial precipitation deficit over the past several months. Flows at Point of Rocks are above CO-OP's drought monitoring threshold of 2000 cfs. Flows at Little Falls Dam have been considerably greater than the environmental flow-by. CO-OP system reservoirs are refilling.

CO-OP will publish the first 2025 Water Supply Outlook in early April. The Metropolitan Washington Council of Government (MWCOG) Drought Coordination Technical Committee will discuss whether to extend the in-place Drought Watch. NOAA will host meetings on a potential mid-Atlantic Drought Early Warning System (DEWS) with river basin commissions in the region and other stakeholders at the end of March and CO-OP staff will attend.

The USACE Feasibility Study federal cost share was changed to 90% in the Water Resources Development Act of 2024 (WRDA), as discussed in the Commission's first quarter meeting. The USACE study will identify and evaluate measures to mitigate a potential loss of Potomac River source water, with the help of the regional water suppliers, MWCOG, ICPRB and others. Dr. Schultz provided a summary of CO-OP's role in the study. The raw data from CO-OP's 2025 water supply study is being provided to USACE and CO-OP's report will include extrapolations of forecasts out through the feasibility study's planning horizon, 2085. Once the USACE study arrives at a final set of potential mitigation measures, CO-OP will use the PRRISM planning model to evaluate the mitigations' effectiveness.

Questions about the Quarterly Report

Chair Sussman asked Dr. Schultz if the extrapolation to 2085 is being done by ICPRB in conjunction with the USACE, and Dr. Schultz said that it is not totally clear yet, however their request for raw data implies that they may be conducting some of their own forecasts. Chair Sussman also mentioned that the Commission will be interested in hearing about the measures of mitigation and asked when that information will be ready to share. Dr. Schultz told the Chair that workshops for stakeholders to share their input are being planned but dates have not yet been announced. The USACE is looking at short-, medium-, and long-term mitigation strategies.

Commissioner Currey asked why the Savage reservoir is lower than the other reservoirs, and Dr. Schultz speculated that it's because the Potomac North Branch watershed hasn't received as much rain as it usually does for this time of year, but she would need to take a look at data on the historical levels compared to the modern levels to give an educated response. She shared that perhaps the spring season will refill it to higher levels.

Commissioner Brakel mentioned the "turbulence" among federal agencies amidst the various federal announcements over the last eight weeks with the new administration. He asked if CO-OP has been adversely affected. Dr. Schultz had not yet been made aware of any problems; however, they do rely on data from the USGS and the USACE. She was able to retrieve and download climate change projection data from NASA, though there was concern about data availability amid server shutdowns. Mr. Nardolilli anecdotally mentioned that the amount of weather balloons has decreased, likely due to NOAA staffing cuts, which could have an impact on weather forecasting.

C. Updates on 2025 Water Supply Study

Dr. Schultz reported on the status of the study's main components: the demand forecasts, availability forecasts, and reliability assessment. The annual average, monthly pattern, and daily fluctuation demand forecasts are complete. Forecasted impacts on Potomac River flow from new upstream consumptive use estimates and new climate change projections are almost complete. Dr. Seck will share her findings on future consumptive use of data centers in the Spotlight Presentation. Dr. Schultz said the main task remaining is the reliability assessment, which will be conducted using CO-OP's planning model, PRRISM.

Future Water Savings: Sarah Ahmed

Sarah Ahmed presented findings on future water saving and the effects of regulation or legislation changes with the new presidential administration. She gave background on the subject, sharing how increased efficiency of household appliances allowed water demand in the D.C. metropolitan area to stay relatively steady since the 1990s. The Energy Policy Act of 1992 set federal water efficiency standards which positively affected conservation efforts across the U.S. These standards shaped the decreases in consumption and demand nationwide and created a foundation for further efficiency improvements. EPA Water Sense and Energy Star are voluntary programs with a system to test household appliances in EPA recognized labs for compliance. Ahmed reviewed manners in which a public law such as the Energy Policy Act could be ended. She shared that it would require congressional repeal, a judicial intervention, the president to write an executive order, or for the president to declare the law unconstitutional going through the Supreme Court. She discussed how this could impact the water supply study by changing estimates of future unit use savings. CO-OP's savings estimate in the mid-range scenario has a forecasted plateau in 2025. Ahmed conducted an experiment where she zeroed out the savings and found that demand projections return to the level of CO-OP's 2015 projections and fall within CO-OP's 2025 projection estimated range of uncertainty. She believed this gives reason to keep the mid-range energy savings forecasts in place but suggests including the high demand projections in the water supply study. Ahmed finished the presentation and asked for any questions or comments.

Commissioner Brakel shared his concern over the potential for policy changes dismissing of the energy and conservation standards. He suggested sharing information of rising concern in public messaging, especially because of the possible long-term impacts on the security and resilience of water supply in the capital region.

Commissioner Karimi thanked Ms. Ahmed for the presentation and expressed his concern at the projected impact of removing the efficiency regulations. He suggested that some of these efficiency standards could be implemented locally if the national standards change with new or changing legislation. Ahmed commented that the water suppliers made CO-OP staff aware that the localities have implemented and built in standards in local building regulations, and that the concern over efficiency and conservation is mostly over household appliances.

Impacts of Climate Change on Water Availability

Dr. Schultz presented a graph of the global land-ocean temperature index showing data starting from 1880. The world has warmed 1.3°C since then, and global models predict more warming given rising greenhouse gas levels. Global models also predict slightly more precipitation with increased temperature and spatial variability. Increasing variability pushed CO-OP to study this at the regional scale. Dr. Schultz shared that because of rapid climactic changes, some common statistical assumptions and methods prove invalid. CO-OP's approach to forecasting change in the Potomac basin includes the averaging of results from many projections and use of a simple observation-based climate response function (CRF) to predict streamflow. The CRF predicts annual flow from precipitation and temperature. An elaborated description of what CO-OP is doing is in a manuscript under review by the Journal of the American Water Resources Association and she shared her hopes that it will be approved and published. Dr. Schultz presented next the least squares regression equation for long-term historical means of average annual flow. The model allows CO-OP to rapidly predict and process a large amount of climate data and apply it to temperature's effect on streamflow. The percentage change in flow from 1°C in the medium temperature scenario is -

5.19%. Then, adding +/- 1 standard error provides the low temperature sensitivity scenario at -3.2% and high temperature sensitivity scenario at -8.6%. The projections from CO-OP's 2020 water supply study came from the Coupled Model Intercomparison Project Phase 5 (CMIP5), with bias-corrected and downscale projections made available by the Lawrence Livermore National Laboratory and the Bureau of Reclamation. There were 234 ensemble members, and the spatial resolution was 12km by 12km. This time CO-OP used a NASA data set called Daily Climate Projection 30 Arc Seconds Data Set (NEX-DCP30-CMIP6), which just became available in December. This set of projections has 113 ensemble members and 1km by 1km spatial resolution.

Dr. Schultz next addressed the question of what greenhouse gas scenario to use. She explained that CO-OP plans to use the two middle levels of shared socioeconomic pathways (SSP), SSP245 and SSP370. SSP245 was defined as “Continuation of historical patterns and trends, with moderate progress towards sustainability but persistent disparities between regions” and SSP370 was defined as “Resurgence of nationalism and regional conflicts; reduction in international cooperation and trade” which she found to be relevant. Preliminary results from the CMIP6 projections show higher increases in temperature for the Potomac Basin, less increase in precipitation, and lower river flows during future extreme drought. Dr. Schultz predicted this to cause the planning model to predict more water deficits.

The final step will involve using the PRRISM model to test the future reliability of the Washington metropolitan area water supply system. PRRISM is a daily planning model that will simulate reservoir operations, river flows, and water demands. It will predict the chances of mandatory water use restrictions, the chances of missing the environmental flow-by at Little Falls, and the chances of not meeting water supply needs. She hoped it would all be completed by the next Commission meeting on June 17. She allowed time for questions. Hearing none, the meeting moved to the next item.

D. LFAA Next Steps

Chair Sussman asked Dr. Schultz to report on the next steps on LFAA Modification 3 given Commissioner McCabe’s absence. Dr. Schultz shared that all parties have worked hard to finish the proposed revision of the Low Flow Allocation Agreement, and phase 1 of the review by attorneys at the District Department of Energy and the Environment, the Maryland Department of the Environment, the Virginia Department of Environmental Quality, and the USACE Baltimore District, is nearing completion. The next step will be a review by the USACE's North Atlantic Division.

E. Financial Statement

Dr. Schultz reported that CO-OP is on track and on budget for the second quarter of the fiscal year 2025.

6. New Business

A. Election of CO-OP Section Vice Chair

Chair Sussman called for a vote to elect Commissioner Lee Currey from Maryland to Vice Chair of the CO-OP Section to serve in the position for the remainder of the fiscal year. Chair Sussman asked for comments from the Commission and Mr. Nardolilli shared that the Executive Committee approved the nomination of Commissioner Currey during yesterday's meeting of the Executive Committee. Mr. Nardolilli asked if anyone wanted to put forward other nominations. **Hearing none, Chair Sussman asked for a motion to elect Commissioner Currey as the CO-OP Vice Chair. Commissioner Karimi**

made a motion and was seconded by Commissioner Potter. There was no further discussion, and all were in favor.

7. Adjourn

Chair Sussman asked the Commission for a motion to adjourn. Commissioner Karimi made a motion to adjourn which was seconded by Commissioner Potter. Chair Sussman called the CO-OP section meeting to a close at 9:23am and reminded the group that the Business Meeting would begin at 9:45am.

These minutes were written by Ms. Lily Bedwell, reviewed by Dr. Cherie Schultz, and approved by Mr. Michael Nardolilli.