

**INTERSTATE COMMISSION ON THE POTOMAC RIVER BASIN
CO-OP SECTION**

**SECOND QUARTER 2017
MARCH 7, 2017**

**ICPRB, LOWER LEVEL CONFERENCE ROOM
ROCKVILLE, MD**

FINAL MINUTES

CALL TO ORDER: Chairman Brakel called the Second Quarter 2017 CO-OP Meeting to order at 8:31 AM on March 7, 2017. The following Commissioners, staff, and guests were in attendance in whole or in part.

Commissioners

West Virginia

Patrick Campbell (Alt. Commissioner)

District of Columbia

Willem Brakel (Chair, Commissioner)

Hamid Karimi (Commissioner)

Kimberly Jones (Alt. Commissioners)

Tiffany Potter (Alt. Commissioner)

Maryland

Virginia Kearney (Alt. Commissioner)

Robert Lewis (Commissioner)

Virginia

Scott Kudlas (Alt. Commissioner)

Paul Holland (Alt. Commissioner)

United States

Robert Sussman (Commissioner)

Staff and Guests

Staff

Carlton Haywood (Executive Director)

Robert Bolle (General Counsel)

Bo Park (Dir, Administration)

Curtis Dalpra (Communications Manager)

Cherie Schultz (Dir, CO-OP Section)

Alimatou Seck (Water Resources Scientist)

Guests

Jennifer Orr (ICPRB Commissioner, PA)

Henry Gruber (USNAD)

Heather Cisar (USCOE, Baltimore)

Herb Sachs (Ret. Commissioner)

ADOPTION OF AGENDA: Commissioner Lewis made a motion to approve the agenda, which was seconded by Commissioner Karimi. All were in favor.

APPROVAL OF MINUTES: Commissioner Kearney made a motion to approve the December 6, 2016 Minutes, which was seconded by Commissioner Lewis. All were in favor.

OLD BUSINESS

Follow-up from December Action Items: There were no follow-up action items from the December meeting.

Section Quarterly Report: Dr. Schultz summarized the Section's quarterly activities which can be found in Tab 3, Attachment 2 of the meeting book.

Draft results from the Washington Metropolitan Area Water Supply Alternative Study were presented on Dec 6. Since then, more work was conducted and incorporated in the report, which was recently sent to the water suppliers for their review. When the report is completed, it will be placed on the ICPRB website. A Decision Support System (DSS) that integrates CO-OP's planning and operations models is still in the scoping stage. It is planned that the first version of the DSS will be completed in a year and half. As part of the scoping phase, staff member Z. Smith is working on a prototype model in the R language. Several prototype models will be built using

different software platforms for experimentation. Among the prototypes is another planning model, OASIS by Hydrologics, Inc. Hydrologics, Inc. is upgrading their model with features that may be of interest to CO-OP. The annual drought exercise report went out to the water suppliers and should be on the website in the next several weeks.

The goal of broader regional coordination on water supply discussed at the December 6 Commission meeting prompted the USACE, Baltimore District Office, to seek funding for a project to update the Jennings Randolph Water Control Plan. Such an update might allow for use of water quality storage for water supply purposes during droughts. The available funding is enough to support a scoping phase of a complete Water Control Plan update that will follow when additional funding is secured.

Staff spent significant time troubleshooting the Low Flow Forecast System, a real-time model to assist determining how much water needs to be released from the various reservoirs during droughts. The developer, Riverside, is currently working on improving the modeling system. In the meantime, a second backup system is being pursued.

On staff activity, Dr. Schultz gave a presentation to the Fairfax Water Board on the Water Supply Alternative Study.

Financial Statement: Mr. Haywood informed that the financial status is in good standing. The funds shown as being in the reserve are unallocated funds that, in part, could be used for future projects.

Update on Water Supply Conditions: Dr. Seck gave a background presentation on the current water supply conditions. The U.S. Drought Monitor produced by the National Drought Mitigation Center at the University of Nebraska-Lincoln, the United States Department of Agriculture, and the National Oceanic and Atmospheric Administration, indicates that a portion of the Potomac basin is currently in moderate to severe drought. The drought outlook from mid-February through end of May, developed by the Climate Prediction Center indicates that removal of the Potomac basin from drought status is likely. Drought status maps produced by Pennsylvania DEP and MDE shows both states in normal or in “drought watch” stage. Monthly precipitation has been below normal for most of the Fall and Winter. The 12-month cumulative precipitation departure is -3.9 inches as of February 28, 2017. Adjusted river flow at Little Falls is currently below median value. The 2017 Little Falls adjusted flows (flow that would occur in the absence of Washington metropolitan area withdrawals) have been comparable to 1999 flows (a dry year), but are above flows values observed at this time of year in 2002. WSSC’s Patuxent reservoirs are 49% full and Fairfax Water’s Occoquan Reservoir is full. Savage Reservoir and Jennings Randolph Reservoir (Water Quality storage account) are about 60% of full. The Jennings Randolph Reservoir Water Supply storage account is 100% full.

Commissioner Kudlas commented that, in Virginia, it was a low recharge winter with groundwater levels at moderate drought conditions throughout the northern Piedmont and some wells at record low levels. Because there is not much ground water storage in the system, the region will be highly dependent on rainfall over the summer to maintain streamflow. Projections based on drought percentile flows indicate the likelihood of seeing drought warning flows is 35% in August, the highest DEQ has seen in the limited time they have used their recharge based drought forecast model.

Commissioner Kearney added that as of end of February, the upper western Maryland regions, except Baltimore City served by WSSC are in a warning status. In the eastern shore, it was changed to a watch status.

Update on Water Supply Alternative Study: Dr. Schultz gave an update on the Washington Metropolitan Area Water Supply Alternatives study. A final draft report has been submitted to the water suppliers for their review. Further modeling was conducted after the December 6 Commission meeting to address two issues: 1) the increasing probability of Potomac River flow deficits in the future as demands rise, even when ample storage was available, especially under the most severe climate change scenario, and 2) the suppliers’ request for recommendations on phased implementation of alternatives. It was found that future flow deficits were mitigated

by better one-day flow forecasts and by minimum releases from Luck Stone Quarry B and Vulcan Quarry, in addition to the presence of Travilah Quarry.

Two options were recommended for phased implementation of alternatives. Both of these options included, as a first step, the implementation of the following four operational alternatives:

- Cooperative use of Loudoun Water's Quarry A,
- Use of Beaverdam Reservoir for low flow augmentation,
- Improvements in river flow forecasts of 10%, and
- Use of Jennings Randolph water quality storage for water supply purposes during droughts.

Option A, recommended if the region chooses not to pursue acquisition of Travilah Quarry, or in the event that Travilah is not available in the near term, consists of the four operational alternatives listed above, plus implementation of Vulcan Quarry by 2035, implementation of Luck Stone Quarry B, and an improvement of the one-day flow forecasts by 35%.

Option B consists of the four operational alternatives, implementation of Vulcan Quarry by 2035, and implementation of Travilah Quarry by 2040.

NEW BUSINESS

Proposed Technical Work Related to Update the Jennings Randolph Water Control Plan: Dr. Schultz is working with USACE, Baltimore District, staff, Julie Fritz, Heather Cisar and Amy Guise, on a workplan for a scoping study for an update of the Jennings Randolph Reservoir Water Control Plan. Given the large number of stakeholder groups and the upcoming hydroelectric facility, it was premature to immediately initiate a plan update. One idea to support a plan update is a shared vision planning study. In a discussion with Hydrologics, Inc., who have experience with shared vision planning, the cost estimate for such an effort is \$100k-\$150k, including an update of the Potomac OASIS model. No decision has yet been made to proceed with the shared vision study.

ADJOURNMENT

Commissioner Kudlas made a motion to adjourn, which was seconded by Commissioner Lewis at 9:30AM. All were in favor.

Minutes written by: Bo Park, Director, Administration

Reviewed by: Cherie Schultz, Director, CO-OP

Reviewed and Approved by: H. Carlton Haywood, CO-OP Secretary