CALL TO ORDER: Chairman Karimi called the Second Quarter 2016 CO-OP Meeting to order at 8:32 AM on March 1, 2016. The following Commissioners, staff, and guests were in attendance in whole or in part.

**Commissioners**

**West Virginia**
- Patrick Campbell (Alt. Commissioner)

**District of Columbia**
- Hamid Karimi (Commissioner)
- Willem Brakel (Commissioner)
- Annemargaret Connolly (Alt. Commissioner)*
- Tiffany Potter (Alt. Commissioner)*

**Maryland**
- Herb Sachs (Alt. Commissioner)
- Robert Lewis (Commissioner)

**Virginia**
- Scott Kudlas (Alt. Commissioner)
- Paul Holland (Alt. Commissioner)

**United States**
- Darryl Madden (Commissioner, via phone)
- Robert Sussman (Commissioner)

**Staff and Guests**

**Staff**
- Carlton Haywood (Executive Director)
- Bo Park (Dir, Administration)
- Robert Bolle (General Counsel)
- Claire Buchanan (Dir, Program Operations)
- Karin Bencala (Water Resources Planner)
- Heidi Moltz (Assoc Dir, Water Resources)
- Cherie Schultz (Dir, CO-OP Section)
- Alimatou Seck (Water Resources Scientist)

**Guests**
- Kelly Heffner (Commissioner)
- Lori Mohr (Alt. Commissioner)
- Hank Gruber (NAD, USACE)

*DC Commissioners awaiting official appointment letters from DC Mayor’s Office.

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

APPROVAL OF MINUTES: Commissioner Kudlas noted a name correction for “Stephenson” not “Stevenson,” on page 2. Commissioner Sachs made a motion to approve with the change, which was seconded by Commissioner Holland. All were in favor.

OLD BUSINESS

Review of Action Items from Previous Meeting: As a routine matter going forward, Mr. Haywood reviewed the action items from the previous meeting.

1. Commissioner Karimi will arrange presentation on CO-OP to DC Water. Dr. Schultz has provided presentation materials to Commissioner Karimi for his correspondence with Mr. George Hawkins, DC Water.
2. DC Water General Manager George Hawkins and VA Tech Professor Kurt Stephenson were invited to participate in the water markets discussion series.

3. Commissioner Potter provided information on funding opportunities in water markets to Dr. Schultz, which is being reviewed.

4. Water markets topic will be discussed in this meeting.

5. Planning for a joint meeting with the CO-OP utilities has been added to the agenda.

Section Quarterly Report: Dr. Schultz summarized the Section’s quarterly activities, included in Tab 3, Attachment 2 of the meeting book.

Not included in the meeting book is a report on the CO-OP Operations Committee meeting on February 22. This is a governing board established by the Water Supply Coordination Agreement of 1982. Carla Reed, the new WSSC General Manager, Tom Jacobus, and Chuck Murray were present. Dr. Moltz presented on the water supply alternatives study. The general managers expressed interest in results for the base line scenario, that is, a scenario which assumes current system resources along with the new resources coming on board. The water markets webinar series was also discussed. The general managers said, however, that they would like to wait until after the alternatives study is complete before discussing potential next steps relate to water markets. The potential inclusion of Loudoun Water into the CO-OP system was discussed. Prior to the Operations Committee meeting, Fairfax Water had indicated that they support developing a mechanism to include Loudoun Water in CO-OP. At the Operations Committee meeting, all of the General Managers were positive regarding the concept while acknowledging that there would be challenges in working out the details. Dr. Seck presented a pilot implementation of the GNOME (General NOAA Operational Modeling Environment) model for fate and transport of floating contaminants in WSSC’s Rocky Gorge Reservoir. A possible funding source from Homeland Security was discussed for development of a GNOME model of the nontidal Potomac mainstem. A proposal was submitted by Fairfax Water to the Metropolitan Washington Council of Government last week.

Chairman Karimi added that in the Washington metropolitan area, the Potomac River trash TMDL in DC, Prince Georges County and Montgomery County could find the model effort useful as there were discussions on developing a regional agreement. Later in March the Alice Ferguson trash summit will take place, which may be of related interest. **Chairman Karimi would like to follow-up on this model as other jurisdiction may be interested.** The last item discussed at the Operations Committee meeting was a joint meeting with ICPRB. The utilities were positive, but indicated it may be more productive after the alternatives study is complete.

Dr. Moltz gave a briefing on the water supply alternatives study. This is a one-year study to evaluate the benefits of potential storage and operational alternatives using the PRRISM planning model. The study started in the fall with two meetings with the Corps’ Baltimore District Office and the study’s Technical Advisory Committee, comprised of utility representatives. This quarter, there were individual calls with Loudoun Water and Fairfax Water to discuss modeling details from a technical perspective. The first step in the process is to set up the PRRISM model for the project. PRRISM simulates river flow, water demands and reservoir operations and is used for long-term planning studies. Staff is in the process of adding Travilah Quarry (the subject of a recent feasibility study by Black and Veatch), Fairfax Water’s Vulcan Quarry and Occoquan estuary water treatment plant, and Loudoun Water’s quarries B & C and Beaverdam Reservoir.

Staff will continue discussions with the Technical Advisory Committee and the individual utilities, working to ensure that the model simulations reflect the key capabilities and constraints of the various alternatives. Two scenario years will be considered. The first is 2040 to match the recent CO-OP demand study. The second is a still to be determined future year (perhaps 2085) to capture the more long-term additions to the system. Streamflow scenarios will include potential impacts of climate change as described in the demand study. Previous CO-OP modeling work indicates that potential future decreases in average basin streamflows due to climate change may be up to 38%. A selected set of metrics will be used to evaluate how well the system performs under these conditions for the selected years. The goal is to have this project complete by the end of September.
Commissioner Kudlas added that Fairfax Water’s Vulcan Quarry and proposed estuarine water treatment plant would require a permit as well as integration of Beaver Dam and Loudoun’s quarries in the system. They need to be aware of that as they plan.

Commissioner Kudlas also commended the staff for working with cutting edge tools and for having the foresight for seeking out appropriate models and decision support tools.

**Financial Statement:** Mr. Haywood summarized the financial activities for the last quarter, in Tab 3, Attachment 2. Approximately $273k can be expected to be in the reserve, which can be used for any future approved projects in CO-OP.

**Water Markets Luncheon Discussion Series:** Ms. Bencala gave an update on CO-OP’s water markets webinar discussion series. There have been four brown bag sessions so far, including two on water markets in California. The next webinar will be on the DC stormwater retention credit trading program and in April, the topic will be groundwater trading in Virginia. The sessions are limited to one hour and the commissioners are welcome to attend. Commissioner Potter suggested looking into actual examples of funding from private sectors, the water restoration certificates which is used in the voluntary market, water benefits program, and other possibilities. Chairman Karimi asked for additional details in a future meeting, perhaps in a presentation by Commissioner Potter. Commissioner Potter proposed to present a couple of successful case studies in the East Coast particularly for voluntary markets. Mr. Haywood will meet with the principals involved to address presentation time requirement, the venue for the presentation, and identifying the audience group. Chairman Karimi asked the ED to followup with Commissioner Potter, Kudlas and Dr. Schultz for the best method of presentation.

**Planning for Joint Meeting of the CO-OP Section and Utilities General Managers:** Mr. Haywood informed that the general managers at the utilities are very interested in a joint meeting with ICPRB and they asked that the meeting be held after the alternative study is complete. Mr. Haywood proposed to hold the joint meeting in December, when the alternatives study will be finished. Further discussions on planning for the meeting will be done at the next ICPRB business meeting.

**ADJOURNMENT**
Commissioner Holland made a motion to adjourn, which was seconded by Commissioner Sachs at 9:51AM. All were in favor.

Minutes written by: Bo Park, Director, Administration
Reviewed by: Cherie Schultz, Director, CO-OP
Edited and Approved by: H. Carlton Haywood, CO-OP Secretary