
Water Management Advisory Committee

MEETING HIGHLIGHTS

Tuesday, October 22, 2019

10:00 a.m. – 12:00 p.m.

The DRBC Water Management Advisory Committee (WMAC) was called to order by Preston Luitweiler, Committee Chair. Information pertaining to the WMAC, including member listing and past meeting materials, is available at

http://www.nj.gov/drbc/about/advisory/WMAC_index.html.

ADMINISTRATION

- The highlights of the June 20, 2019 meeting were approved and will be posted on the WMAC webpage.
- Membership: Three positions for Watershed Organization, Academia, and Recreation will expire June 30, 2020. These positions will be posted on the DRBC website in January 2020. Current members in those positions are welcome to apply for reappointment. Please see the DRBC website (<http://www.nj.gov/drbc/about/advisory/committee-openings.html>) for more information.
- The WMAC meetings of 2020 are scheduled for February 20, June 18, and October 22.

HYDROLOGIC CONDITIONS REPORT

Anthony Preucil, DRBC Water Resource Scientist, provided a report on basin-wide hydrologic conditions. As of October 15, 2019, the drought monitor shows: no drought in most of the Upper Basin, some abnormally dry conditions in the Upper and Middle Basin (D0); some moderate drought conditions in the Middle and Lower Basin (D1); and a very small area of severe drought in the New Castle County area of DE in the Lower Basin (D2). The 90-day and September precipitation departures were both below average. The basin has experienced dry conditions in August and September until recent rain events on October 16 and 20. Subsequently, October precipitation departure to date is now above average.

The October 15-16 storms lead to spikes in streamflows throughout the Basin. Current streamflows at the USGS gages in the DRB indicate flows are in the normal range. The combined New York City reservoir storage for most of July through September followed a downward trend, similar to 2016 levels. The two recent rain events have resulted in an increase in reservoir storage and is currently around 60%. In the Lower Basin, F.E. Walter and Blue Marsh are currently drawing down to winter storage pools. The salt front had steadily moved up to almost RM 85, but recent rain events lowered it downstream to RM 81 (compared to a normal location at RM 72 for this time of year).

As of October 20, 2019, groundwater levels at 3 USGS monitoring wells in the Upper and Middle Basin (Wayne, Monroe, and Schuylkill Counties, PA) are under drought watch. Other groundwater monitoring wells in the Basin indicate normal or above normal levels.

NOAA's seasonal drought outlook suggests that drought conditions will likely be removed for the Basin. The 3-month outlook from NOAA shows that temperatures are predicted to be above normal while there is an equal chance of above or below departures of precipitation in the Delaware River Basin region.

Mr. Preucil's presentation can be viewed at

https://www.nj.gov/drbc/library/documents/WMAC/10222019/preucil_HydrologicReport.pdf.

Weekly, monthly and annual hydrologic reports are archived at

<http://www.nj.gov/drbc/hydrological/reports/>.

DRBC UPDATES

Chad Pindar, DRBC Manager of Water Resource Planning, provided an update on DRBC activities, upcoming advisory committee meetings, Commission actions, and other items of interest, among them:

- At the September 11 DRBC Business Meeting, the Commissioners approved 23 dockets and 2 resolutions. The first resolution approved staff to proceed with laboratory contracts for analyzing toxic pollutants in ambient water samples, sediment and fish tissue. The second resolution approved staff to proceed with a contract with Temple University to analyze aqueous samples for microplastics via a National Fish and Wildlife Foundation Delaware Watershed Conservation Fund grant.
- DRBC hired Kristen Bowman Kavanaugh, PE, as Deputy Executive Director on October 7.
- DRBC's Water Quality Advisory Committee (WQAC) has 2 upcoming meetings on November 14 and December 5.
 - Preston Luitweiler asked if the toxics work will include Per- and polyfluoroalkyl substances (PFAS). John Yagecic responded "Yes."
- The Water Resources Association for the Delaware River Basin's Annual Fall Conference will be held on November 6 at the Eco Complex in Bordentown, NJ. DRBC will be presenting in the morning session on the State of the Basin 2019 Report.
- The next DRBC Public Hearing will be on November 13 and Business Meeting on December 11.

Recent Commission Meeting materials can be accessed at

<http://www.nj.gov/drbc/meetings/archive/recent-drbc-mtg.html>.

Mr. Pindar's presentation can be viewed at

https://www.nj.gov/drbc/library/documents/WMAC/10222019/pindar_DRBCupdate.pdf.

OUR SHARED WATERS CAMPAIGN

Peter Eschbach, Director of External Affairs and Communications, presented "Our Shared Waters" Campaign to the WMAC. The program started with DRBC's State of the Basin Report, which is released about every 5 years. Funded by the William Penn Foundation, the goal of the Campaign is to educate the public about the Basin's role in supporting critical water resource

needs for the four-state region. The primary audiences are residents of the Basin in targeted areas including communities of color and social justice. The major components of the Campaign include an online/digital presence, community presence, and experiential opportunities. The online/digital component consists of a web-based, crowd-sourced Basin waters evaluation site (under development), social media (primarily Facebook [@OurSharedWaters](#)), and a website (www.OurSharedWaters.Org).

Mr. Eschbach's presentation can be viewed at

https://www.nj.gov/drbc/library/documents/WMAC/10222019/eschbach_OSWcampaign.pdf.

- Questions/comments from WMAC:
 - Preston Luitweiler asked how DRBC targets the subareas? Peter Eschbach responded that they used state house and senate for targeted areas.
 - Preston also asked why is the Campaign using trash as the main story? He suggested that it might be a perception issue and that there might be data available to show improvement in the streams/rivers. He suggested to possibly to add other types of pollution and allow them to click.

WATER USE UPDATE

Michael Thompson, Water Resource Engineer, presented an update of water use in the DRB. In 2017, estimated total water withdrawals in the Basin were 6,389 million gallons per day (mgd). Thermoelectric (3,630 mgd) was the largest water use sector, followed by Public Water Supply (963 mgd). Estimated consumptive use and major basin exports totaled 929 mgd. Thermoelectric (113 mgd) accounted for over 1/3 of total consumptive use (318 mgd), followed by Public Water Supply (96 mgd). Trends for monthly water withdrawals for the 3 major water use sectors (Thermoelectric, Public Water Supply, and Industrial) in the Basin show that overall water use is decreasing over time. Spatial distribution by Basin sub-region shows the largest water use estimate for the Lower Estuary (3,254 mgd). However, the largest consumptive use percentages occur in the Delaware Bay (40.4%) and Schuylkill Valley (28.7%) sub-regions.

Additional comments from WMAC related to the Water Use Update included:

- The WMAC suggested that DRBC may want to show the exports and in-basin uses.
- Curtis Schreffler (USGS) ask about how farmers reported on irrigation. He also asked if DRBC included self-supplied domestic, which USGS is currently trying to quantify.

Mr. Thompson's presentation can be viewed at

https://www.nj.gov/drbc/library/documents/WMAC/10222019/thompson-kwityn_DRBCwater-use-gwpa-update.pdf.

GROUNDWATER MANAGEMENT

Evan Kwityn, Water Resource Scientist, presented an update of water withdrawals in the Southeastern Pennsylvania Groundwater Protected Area (SEPA GWPA). SEPA GWPA includes 76 subbasins in Montgomery, Berks, Bucks, and Chester County, PA. Each subbasin has annual withdrawal limits, or the 1-year-in-25 average annual baseflow. For 2016 and 2017, the subbasins with groundwater withdrawals greater than 50% of availability include: Schuylkill-

Crow Creek (168%), Pine Run Basin (70%), North Branch Neshaminy Creek (67%), and Newtown Creek (61%). Of note, Schuylkill-Crow Creek is potentially stressed (greater than 75%) because of a quarry operation in the subbasin. Five other subbasins (Perkiomen-Lodal Creeks, Doylestown-Neshaminy Creek, Upper Reach Wissahickon Creek, Schuylkill-Trout Creek, and Towamencin Creek) had groundwater withdrawals greater than 50% of availability for 2016, but these subbasins fell below 50% for 2017. Lastly, the trend for groundwater withdrawals in SEPA GWPA shows reductions since 2000.

- Comments from the WMAC:
 - Preston Luitweiler suggested putting an * to identify Schuylkill-Crow Creek as a special scenario.

Mr. Kwityn's presentation can be viewed at

https://www.nj.gov/drbc/library/documents/WMAC/10222019/thompson-kwityn_DRBCwater-use-gwpa-update.pdf.

ROUNDTABLE

Updates by WMAC Members

- Preston Lutweiler (WRA DRB) – WRA DRB's upcoming conference will be held on November 6, at the Eco Complex in Bordentown. WRA has appointed a new executive director, Skelly Holmbeck (see <https://www.wradrb.org/executive-director.php> for more information).
 - Preston asked DRBC about the Storage Study RFQ. Chad Pindar responded that DRBC is currently working on an RFP for the Commissions to approve.
- Jim Mershon (Merrill Creek Owners Group) – Merrill Creek is at nearly 99% of storage level.
- Curtis Scheffler (USGS)
 - As part of the Next Generation Water Observing System (NGWOS), the Integrated Water Availability Assessments (IWAAs) provide water availability information for multiple goals of the National Water Census. One of the IWAAs is to determine self-supplied domestic household use by placing meters throughout the states in the Delaware River Basin as a pilot. The program has about 7-8 in NJ, and will be starting in Chester County, PA. The meters track household use for every 15 minutes. The IWAAs will include 10 more watersheds in 10 years and will also try to collect economic statistics. More information about the NGWOS and the DRB Pilot can be found at https://prd-wret.s3-us-west-2.amazonaws.com/assets/palladium/production/s3fs-public/atoms/files/USGS_NextGen_DRB_BriefingSheet_v7.pdf.
 - PFAS: USGS recently partnered with PADEP and SRBC on a surface water study that sampled 178 sites for PFAS. There is an ongoing extensive QA/QC effort before analyzing. Results should be back in about a month. There is currently no written field method, the partners are currently developing a field method for collecting and analyzing field samples for PFAs.
- Sandra Howland (NJ Dept of Agriculture)

- NJ Dept of Ag is participating in NJ DEP Water Supply Advisory Council subcommittee investigating irrigation. NJ DEP requires a water allocation permit for agricultural users who pump more than 100,000 gallons per day for 30 days and requires annual reporting. The investigation is related to issues with the accuracy of reporting, as NJ Dept of Ag believes that most water users in the agricultural sector report pump capacity multiplied by hours per day. The study is installing meters on 10 farms, mainly in the southern portion of NJ and covering a variety of crops. The farmers will continue record keeping and reporting in the same manner as before meters are installed.
- Jan Bowers (Chester County Water Resource Authority)
 - Jan added to the discussion about the new meters in the White Clay Creek Watershed as part of the USGS IWAAs. They are converting a long-time gaging station into an updated station with many meters (e.g. sediment movement via camera imaging).
 - CCWRA is also in the process of updating the County-wide water resources plan and appreciates the updates on SEPA GWPA. CCWRA will be likely following up with DRBC in a few months to request data. Jan would like DRBC to keep giving updates on water use in the Basin at future meetings.
- Bill Cocke (DNREC) – DNREC is installing EQUIS data software to share water use data with the public. Still at least 6 months away from completion.
- Jerry Kauffman (University of Delaware) – Jerry reiterated Jan Bower’s statement that they are excited that White Clay Creek was selected by USGS for metering. Jerry mentioned that the White Clay is a National Wild and Scenic River.

Updates by Other Attendees

- Kirk Barrett (Mott MacDonald) – Mott MacDonald recently hired former President of the WRADRB Board, Jane Rowan. The firm has also been working on renovations to a water intake for Trenton Water Works; a hydraulic study on outlets with the NJ Water Supply Authority; and green infrastructure work for the Philadelphia Water Department.

The meeting was adjourned at 11:46 am by Chair Preston Luitweiler.

WMAC Meeting Attendance – October 22, 2019			
SECTOR	WMAC MEMBER/ ALTERNATE	REPRESENTING	ATTENDANCE
Delaware	Steven Smailer Bill Cocke (A) Allison Diggins	DE DNREC	- GoToMeeting -
New Jersey	Andy MacDonald Jeff Hoffman	NJ DEP NJDEP-NJGS	- -
New York	Erik Schmitt (A)	NY DEC	-
Pennsylvania	Hoss Liaghiat Dave Gordner (A) Mike Hill	PADEP	- - -

US Army Corps of Engineers	Laura Bittner	Phila. District	GoToMeeting
US Env. Protection Agency	Katie Lynch	Drinking Water Protection	-
US Geological Survey	Dan Goode	Water Science Center	-
	Curtis Scheffler (A)		Present
City of New York	Dana Olivio	NYC DEP	GoToMeeting
City of Philadelphia	Kelly Anderson Hesson, Molly (A)	Phila. Water Dept.	GoToMeeting -
County Water Agency	Jan Bowers	Chester Co. WR Authority	GoToMeeting
Water Resource Association	Preston Luitweiler (C)	WRA of the DRB	Present
Industry	Jim Mershon	Merrill Creek Owners Group	Present
Water Utility	John Thaeber (V) Virginia Eisenbrey (A)	Artesian Water	GoToMeeting GoToMeeting
Agriculture	Sandra Howland	NJ Dept. of Agriculture	Present
Civic	Jill Greene	PA League of Women Voters	-
Environmental Organization	Mary Ellen Noble	Delaware Riverkeeper Network	GoToMeeting
Watershed Organization	Golod, Pete	Upper Delaware Council	GoToMeeting
Academia	Jerry Kauffman Andrew Homsey (A) Martha Narvaez	University of Delaware	GoToMeeting GoToMeeting -
Recreation	Ann Pilcher	Pocono Mts. Visitors Bureau	-
Fisheries	Sheila Eyler	US F&W Service	GoToMeeting
<i>(A) indicates Alternate (C) indicates Chairperson (V) indicates Vice Chairperson</i>			
DRBC STAFF	Byun, SeungAh	WMAC Liaison	
	Eschbach, Peter	External Affairs and Communications	
	Kavanaugh, Kristen B.	Deputy Executive Director	
	Kwityn, Evan	Water Resource Planning	
	Pindar, Chad	Water Resource Planning	
	Pruecil, Anthony	Water Resource Operations	
	Shallcross, Amy	Water Resource Operations	
	Tambini, Steve	Executive Director	
	Thompson, Michael	Water Resource Planning	
	Yagecic, John	Water Quality Assessment	
GUESTS	Kirk Barrett	Mott MacDonald	

Approved: