

Delaware River Basin Commission

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DRBC WATER MANAGEMENT ADVISORY COMMITTEE MEETING October 22, 2013

COMMITTEE MEMBERS PRESENT

George Kunkel Philadelphia Water Department, Chair

Dana Olivio NYC Dept. of Environmental Protection, Vice- Chair

Ferdows Ali NJ Dept. of Agriculture

John Barndt DE Dept. of Natural Resources & Environmental Control

Laura Bittner US Army Corps of Engineers

Janet Bowers Chester County Water Resources Authority
Mark Hartle PA Fish & Boat Commission (via Conference Call)

David Jostenski PA Dept. of Environmental Protection

John Mello US EPA, Region II

Mary Ellen Noble Delaware Riverkeeper Network
Carolyn Olynyk NJ Dept. of Environmental Protection

Joanne Rufft Artesian Water Company
Edith Stevens League of Women Voters-PA

GUESTS

Kelly Anderson Philadelphia Water Department

Jeffrey Fischer US Geological Survey, NJ Water Science Center

DRBC STAFF

Kent Barr, Water Resource Analyst
Carol Collier, Executive Director
Kenneth Najjar, Manager, Planning & Information Technology
Chad Pindar, Supervisor, Planning Section
Jessica Sanchez, River Basin Planner
Jessica Sanko, Secretary
David Sayers, Supervisor, Information Technology Section
Amy Shallcross, Supervisor, Operations Section

MEETING HIGHLIGHTS

The DRBC Water Management Advisory Committee (WMAC) meeting, chaired by George Kunkel was held on October 22, 2013 at the DRBC offices in West Trenton, NJ. It was the first meeting of the Committee since October 18, 2011. Note: Due to an equipment malfunction, the first hour of that meeting was not recorded.

MINUTES/AGENDA/ADMINISTRATIVE

- Meeting minutes from 10/18/2011 were approved without change.
- Membership Status: Due to the gap in meetings, it was decided that the current chair and vicechair, appointed in October 2011, would continue in their capacities for the year ahead. Meeting Highlights: Responding to a comment about the adequacy of information in the new format, staff agreed to add details as necessary.
- Next Meeting: The next meeting is scheduled for April 23, 2014.

PRESENTATIONS: Presentations from the October 22' 2013 meeting have been posted on the WMAC webpage at http://www.state.nj.us/drbc/about/advisory/management/

USGS WATER CENSUS UPDATE

Jeffrey Fischer gave a presentation and general update on progress of the Water Census demonstration project for the Delaware River Basin. Water use data—based on median values for five years of water use (2005-2010)—are being aggregated to HUC 12s. Waters, a rainfall/runoff model based on the TOP Model, is being used to develop stream flows for areas of those HUC 12s not controlled by reservoir operations. Land use and population forecasts will factor into projected conditions for 2030 and 2060. Results from the Waters model are expected by the end of 2014. The presentation made to the WMAC is available at: http://www.state.nj.us/drbc/library/documents/wmac102213_fischer.pdf
An overview of Water Census is available at: http://water.usgs.gov/watercensus/data-products.html
Information on the Delaware Basin focus area is available at: http://water.usgs.gov/watercensus/delaware.html

DRBC SUSTAINABLE WATER RESOURCE PLANNING

The vision document for DRBC's "Sustainable Water Resources 2060" was shared with the Committee prior to the meeting. Carol Collier addressed the Committee and stressed the importance of building on:

- the supply and flow work of USGS,
- the ecological flow work of The Nature Conservancy,
- the work of the US Army Corps on salinity modeling, and
- OASIS alternatives analysis

Interim draft documents describing the tools, scenarios, and tentative analyses—as well as an outline of the scope of the 2060 work—were shared with the Committee members. An important role of the WMAC will be to help maintain focus on seminal questions and metrics.

Ken Najjar reported that DRBC, in partnership with Penn State University, Rutgers University and USGS, responded to the National Science Foundation's solicitation for Water Sustainability and Climate projects. The proposal for a 4-year, \$4M grant is entitled "When the Extreme Becomes Common: How will we react to climate change and altered landscapes to sustain integrated water resource management?" The proposal focuses on developing condition scenarios for the benchmark years of 2035 and 2060 to support the long range sustainable water resource planning effort.

DRBC.NET

Members enjoyed a live demonstration of DRBC's new web application and reporting capabilities provided by Kent Barr.

DRBC WATER SUPPLY CHARGING ADVISORY COMMITTEE UPDATE

Amy Shallcross reported that the Committee had been formed in 2011 to address two issues: cost estimates and funding for improvements at Beltsville and Blue Marsh reservoirs, and an analysis of the DRBC water charging program. The Committee is being assisted by O'Brien & Gere and the Municipal & Financial Services Group, respective consultants to DRBC on the two elements. Reports are being developed. More information about the Committee membership and charge, as well as products of their deliberation can be found at: http://www.state.nj.us/drbc/about/advisory/charges/index.html.

WATER AUDIT UPDATE

David Sayers presented preliminary results of the first year (2013) of the DRBC mandatory Water Audit program which is the results of several years of effort by the WMAC to replace the outdated "unaccounted-for water" model with the AWWA-endorsed approach to water loss accountability. Following a trial year with voluntary reporting of 2011 data, the online reporting became mandatory in March 2013. Although significant follow-up was required by staff to engage docket holders, about 200 audits were ultimately suitable for analysis, offering insight into the ultimate 'delivery' of about 665 MGD, or 77% of the total volume of water "used" by public water suppliers. The analysis, including estimates of the annual costs of real and apparent losses, can be found at: http://www.state.nj.us/drbc/library/documents/wmac102213 sayers.pdf

ECOLOGICAL FLOWS INITIATIVE

Chad Pindar reported on the TNC initiative to develop the science that will ultimately inform the development of policy efforts to ensure adequate instream flows for habitat. The original effort to assess instream flow needs began at DRBC in 2002 with an initial focus on the cold water habitats of the upper basin. The recent TNC-lead initiative, now including all but the aquatic habitats of the coastal plain, employs the Ecological Limits of Hydrologic Alteration (ELOHA) framework for assessing environmental flow needs over broad geographic areas when site-specific studies cannot be conducted. A draft report with recommendations is due shortly. The presentation can be found at: http://www.state.nj.us/drbc/library/documents/wmac102213 pindar.pdf

STATE WATER PLAN UPDATES

State representatives offered brief status reports on their respective programs.

NY: No report.

PA: Dave Jostenski reported that the registration and reporting process has nearly finished its migration from paper to an on-line system. The development of Critical Area Resource Plans continues without any additional watersheds being added, however, the Little Lehigh and Brodhead Creek watersheds are still on the State watch list as possible being candidates for Plan development.

NJ: Carolyn Olynyk reported that the NJ Water Supply Plan is with the Governor's office. NJDEP has published several relevant reports.

- DGS10-3 New Jersey Water Transfer Model Withdrawal, Use, and Return Data Summaries is a set of 5 databases of measured and estimated water withdrawal, use and return volumes by site. The description and link to the underlying monthly data from 1990 through 2009 are available at http://www.njgeology.org/geodata/dgs10-3.htm.
- DGS13-1 Computer Workbook Summarizing New Jersey Withdrawals and Discharges on a HUC11
 Basis is a worksheet documenting freshwater withdrawals and discharges from 1990-2009. The
 description and link to the data are at: http://www.njgeology.org/geodata/dgs13-1.htm.

• Technical Memorandum TM 13-1, documenting New Jersey Water Supply Planning Activities in 2012 is available at: http://www.state.nj.us/dep/njgs/pricelst/tmemo/tm13-1.pdf.

DE: John Barndt reported that they are working to finalize the updated water supply plan for Kent and Sussex Counties; ground water availability estimates are nearing completion.

FUTURE MEETINGS: 10AM Wednesday, April 23, 2014.

The meeting was adjourned at 3:00 pm.

APPROVED: June 19, 2014