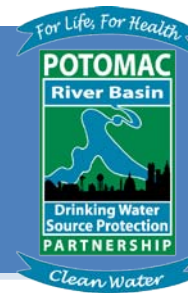


POTOMAC RIVER BASIN DRINKING WATER SOURCE PROTECTION PARTNERSHIP



2011 Annual
Report

www.PotomacDWSPP.org

Letter from the Co-Chairs

Clean, safe, water is the cornerstone of any community's public health program to protect and enrich the lives of their citizens. Protecting and providing this precious resource is a legacy that we must leave for generations that follow. As we enter the year 2012, it is important to reflect on the accomplishments of those dedicated to this mission since the original Clean Water Act of 1972.

In the past 40 years, technologies have improved, engineered solutions became more robust, operational efficiencies were identified, and analytical methods were able to identify a host of new contaminants. Along the way, we also found that a holistic approach to protect and treat the water from source to tap provides benefits that reach far beyond basic public health needs. The collaborative approach of the Potomac River Basin Drinking Water Source Protection Partnership (DWSPP) actively engages the support of water utilities and local, state, and federal agencies in order to accomplish this mission.

Thanks to the hard work of those individuals that made up our workgroups and committees, DWSPP accomplished a number of important initiatives this year. A key highlight was our continued efforts to work with Colonial Pipeline to prevent an oil spill into the river. Multiple conversations were held this year, including one that brought Colonial officials to Washington Aqueduct to learn about potential water supply impacts from a spill.

We would encourage you to take the time to review a selection of the Partnership's 2011 initiatives highlighted in this report.

INSIDE THIS ISSUE

About DWSPP	2
Member Organizations	2
2011 Activity Highlights	3
2011 Annual Meeting	6
Get Involved!	6

Looking forward, we have focused the Partnership's Strategic Plan and identified key areas where each workgroup will work in the upcoming year. The 2012 workplan can be found online at www.PotomacDWSPP.org for your review.

As the Partnership finishes its seventh year of source water protection collaboration, we would like to thank the agencies and individuals for their dedication to the mission of providing clean, safe water to protect the public health, welfare, and environment in the Potomac River basin. The success of the Partnership is a direct reflection of your willingness to give freely of your time and talents.

As we close this message, we extend an invitation to other water utilities and government agencies to become a part of this dynamic partnership and welcome you to attend any of the upcoming meetings and workshops. There is no better action than to leave a proud legacy for generations to come based on the commitment you make today.

Dr. J. Wesley Kleene
Virginia Department of Health,
Office of Drinking Water
2011 Government Committee Chair

Dr. Mohammad Habibian
Washington Suburban Sanitary Commission
2011 Metro Area Water Utility Committee Chair



Mission Statement

Our mission is to serve as a cooperative and voluntary partnership working toward the goal of improved source water protection within the Potomac River basin in recognition of the vital role of the river and its tributaries in supplying drinking water to millions of people and in support of the multi-barrier approach to safeguarding drinking water supply for public health.

About DWSPP

The Potomac River Basin Drinking Water Source Protection Partnership is a voluntary alliance of water utilities and state, interstate, and federal authorities working to protect sources of drinking water in the Potomac River basin. Established in 2004, 20 organizations are official members of the Partnership with many others participating in Partnership meetings, workshops, and activities.

Partnership priorities include:

- ❖ Identifying the sources of contaminants entering the Potomac River.
- ❖ Improving our understanding of the impact these contaminants have on drinking water.
- ❖ Developing strategies to minimize the presence of the contaminants and their effect on drinking water.

Member Organizations

City of Frederick, Md.

City of Hagerstown, Md.

City of Rockville, Md.

D.C. Department of the Environment

Fairfax Water, Va.

Frederick County, Md.

Interstate Commission on the Potomac River Basin

Loudoun Water, Va.

Md. Department of the Environment

Pa. Department of Environmental Protection

Town of Leesburg, Va.

U.S. Environmental Protection Agency, Region 3

U.S. Geological Survey

Va. Department of Environmental Quality

Va. Department of Health

Washington Aqueduct, U.S. Army Corps of Engineers

Washington County, Md.

Washington Suburban Sanitary Commission, Md.

W.Va. Department of Health and Human Resources

W.Va. Department of Environmental Protection

2011 Highlights

The Partnership's activities are structured to address priority issues. The membership is organized into workgroups focusing on these priorities. This section highlights each workgroup and a selection of their 2011 achievements. More information on each workgroup can be found on the Partnership's website – www.PotomacDWSPP.org.

Early Warning and Emergency Response

This workgroup aims to better prepare the Partnership's member utilities to respond in the event of a spill or other incident that affects their water supplies. The workgroup promotes open dialogue with emergency response agencies and with operators and owners of significant hazardous waste sources to improve the mutual understanding of water supply vulnerabilities and emergency response preparedness.

- ❖ Furthered relationship with Colonial Pipeline with two in-person meetings that improved their understanding of the high consequences to water supply from a pipeline spill within the metro Washington area and DWSPP members' understanding of Colonial Pipeline's integrity management program and spill response plan.
- ❖ Began planning for a spill exercise to be held in the winter or spring of 2012, with funding support from the U.S. EPA. Assistance for this exercise will be provided by Horsley Witten.
- ❖ Opened lines of communication with the Coast



Clean-up workers responding to an oil spill on the Anacostia River in the 1990s.

Guard Area Committee, the group of government agencies that responds to emergency events such as spills.

- ❖ Assisted the Metro Area Water Utility Committee in drafting comments to the U.S. Department of Transportation on the Pipeline and Hazardous Materials Safety Administration's Advance Notice of Proposed Rulemaking on the Safety of On-Shore Hazardous Liquid Pipelines. Letters were also sent to the U.S. EPA and U.S. Department of Homeland Security, encouraging the consideration of source water protection when reviewing pipeline safety rules.

Agricultural Issues

The Agricultural Issues (Ag) workgroup was formed to take an active role in building alliances with the agricultural community in order to minimize water pollution in the region's sources of drinking water. The Ag Issues workgroup works primarily with state and local academic institutions and agencies that can provide technical, extension, and veterinarian support.

- ❖ Conducted and recorded second "Cryptosporidium, Cattle & Drinking Water" webinar.
- ❖ Advertised live and pre-recorded webinar locally and nationally.
- ❖ Conducted an informative 13-question survey of webinar and reviewed feedback from participants.
- ❖ Provided technical information for article on Crypto in *Lancaster Farming*.
- ❖ Explored Potomac land preservation possibilities.
- ❖ Created poster on Crypto source-tracking project, an EPA-funded Regional Applied Research Effort.
- ❖ Worked on updating DWSPP's Strategic Plan, including adding language on the Ag Issues workgroup.

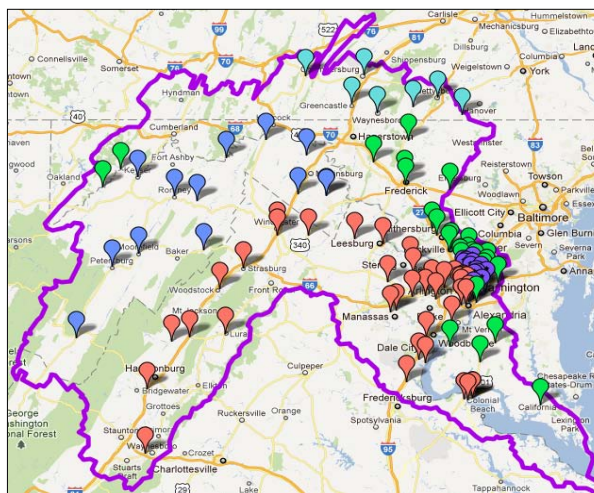
Emerging Contaminants

The role of the Emerging Contaminants workgroup is to support the Partnership by tracking and reporting on findings of research and monitoring of persistent and newly identified threats posed to source water quality in the Potomac River basin. A primary focus of the workgroup is on endocrine disrupting chemicals (EDCs), pharmaceuticals and personal care products (PPCPs), and on other chemicals or contaminants of concern – specifically, their identity, sources, distribution, possible human and ecological health effects, treatability, and control through management practices to limit their occurrence in the Potomac River and its tributaries.

- ❖ Tracked chemical regulation initiatives. These included the Endocrine-Disrupting Chemicals Exposure Elimination Act of 2011 and the Safe Drug Disposal Act. The latter was signed into law in fall 2010 and rulemaking is currently underway.
- ❖ Worked with the Government Committee and EPA Region 3 and Headquarters to support several of the participating locations in the Drug Enforcement Administration’s National Take-Back Day on April 30, 2011.
- ❖ Workgroup members continued to participate in Water Research Foundation project 4169, “Water Utility Framework for Responding to Emerging Contaminant Issues.” A workshop was

held with the intent of soliciting feedback from DWSPP members. In July, the consultant team released a draft framework web-tool (series of interlinked web pages and related documents) for beta-testing. The outcome of the project to date does not fully meet the original expectations of many members.

- ❖ Periodically updated the Partnership website with upcoming conferences, symposia, seminars, workshops, and webcasts. In addition, members reviewed and added content for a new web page to address proper pharmaceutical disposal.
- ❖ Efforts to identify pharmaceutical manufacturing plants in the basin commenced using EPA data on NPDES permits. Pre-treatment schemes and multiple standard industrial classification codes for pharmaceutical plants have complicated the process.



More than 100 pharmaceutical disposal sites in the Potomac basin were part of DEA’s National Take-Back Day. Many Partnership members supported local DEA take-back efforts.

Reaching Out

The Reaching Out workgroup informs and educates the public and water professionals about DWSPP activities and initiatives and supports the activities of the other workgroups. The workgroup produces materials and conducts outreach activities to help move DWSPP toward its goals.

- ❖ Served as a resource for reporters on the impacts of road salt and deicing chemicals on source waters during last year’s large snow events.
- ❖ Maintained the Partnership’s website.
- ❖ Presented to and held meetings with outside organizations interested in the Partnership’s efforts, including at presentations ICPRB made to several international delegations.
- ❖ Prepared 2010 Annual Report.
- ❖ Helped organize the annual meeting.
- ❖ Kept membership informed of news items and other information.

Urban Issues

This workgroup is intended to position the Partnership to better communicate drinking water needs in the Potomac River basin to the agencies who oversee implementation of point and non-point source discharges of urban runoff, including Municipal Separate Storm Sewer (MS4) programs. This workgroup focuses on urban stormwater including urban and highway runoff and other point and non-point discharges associated with storm activity. The goal of this workgroup is to promote implementation of better stormwater management and better integrate Clean Water Act and Safe Drinking Water Act water quality programs to protect sources of drinking water in the Potomac.

- ❖ Organized an information session on “Identifying Source Water Protection Opportunities in the Chesapeake Bay Watershed Implementation Plans.”
- ❖ Engaged in discussions with groups from other parts of the country that train snow plow operators on environmental and source water protection issues to generate interest in developing nationwide deicing operator training and certification programs.

- ❖ Developed a webinar presentation on the environmentally sensitive application of deicing materials and the potential benefits for source waters.
- ❖ Continued tracking regional programs and initiatives that may impact urban source water protection efforts in the Potomac basin, including the Chesapeake Bay TMDL, State Watershed Implementation Plans, and Clean Water Act Reauthorization for the Chesapeake Bay Program.



Developments being built alongside the river in Montgomery County, Md.

Disinfection By-product Precursors

Disinfection by-products (DBPs) are generated when a disinfectant such as chlorine reacts with organic matter (the precursors) in water. They are considered potential carcinogens and are strictly regulated under the Safe Drinking Water Act. The current practice takes the precursors as a given and attempts to lower DBP formation via treatment steps. This workgroup proposes that limiting precursors in raw water, via source water protection, may provide another option for limiting DBPs in finished water.

The workgroup continues to track Water Research Foundation projects that are investigating the significance of land- and water-based DBP precursors for controlling DBPs in drinking water. Two water utilities came up with considerable funding to support Water Research Foundation studies in their watersheds. The first project, being conducted by the University of Colorado and the City of Fort Collins, Colorado, aims to characterize the source of organic matter that contributes to DBP formation, primarily focusing on the land-based sources of DBP precursors. Another group, led by the U.S. Geological Survey, focuses on investigating water-based organics, as well as developing techniques to rapidly identify the characteristics of organic matter in a reservoir to better control DBPs. The projects are anticipated to be completed in 2012.

2011 Annual Meeting

The Partnership's 2011 Annual Meeting was held at the University of Maryland, College Park. Members and stakeholders came together to approve an updated strategic plan, discuss future priorities, and network with other systems and agencies involved in source water protection in the Potomac basin.



2011 Government Committee Chair Wes Kleene from VDH passes the gavel to 2012 Metro Area Water Utility Chair Chuck Murray (on left) from Fairfax Water.

A special session covered impacts water utilities may experience due to climate change and the tools available to help them adapt to the changes. Speakers included experts from the university's Earth System Science Interdisciplinary Center and the Environmental Protection Agency.

Discussions at the meeting led to a new effort for the Partnership focused on reaching out to other drinking water systems in the basin and stakeholders with common water quality concerns. In 2012, members will meet with systems to promote awareness of our efforts, explore common interests, and consider collaboration with or participation in the Partnership.

The last order of business at the Annual Meeting was to transfer the leadership role from the Government Committee led by Virginia Department of Health in 2011 to the Metro Area Water Utility Committee to be led by Fairfax Water. Many thanks to Washington Suburban Sanitary Commission and Virginia Department of Health for leading us over the past two years and to Fairfax Water and West Virginia Department of Health and Human Resources who are now taking on the job.

Potomac River Basin Drinking Water Source Protection Partnership

For Life, For Health, Clean Water

Interested in learning more?

Contact Karin Bencala

Interstate Commission on the Potomac River Basin

51 Monroe St. PE-08

Rockville, MD 20850

Phone: 301-274-8139

E-Mail: kbencala@icprb.org

We're on the Web!

Visit us at:

www.PotomacDWSPP.org
