

Potomac River Basin Drinking Water Source Protection Partnership

2016 Annual Report

www.PotomacDWSPP.org



Note from the Co-Chairs

Industrial spills that threatened drinking water supplies occurred at both the beginning and end of 2016. These spills provided another opportunity to put earlier planning to combat spills into place, revealing both what we do well and where we need to work harder. Of course, the best outcome is to prevent spills in the first place. The metropolitan area's water suppliers and managers are working with other entities to minimize these occurrences, although they will continue to happen. Our direct response to these incidents remains a focus, and working through these actual situations has shown that all involved are communicating and responding effectively.

Coordinated and effective emergency response is just one benefit of a strong Potomac River Basin Drinking Water Protection Partnership. This report highlights the many **DWSPP activities** designed to protect our sources of drinking water, the headwaters of the Potomac and its tributaries. These headwaters streams are rarely in the public eye, yet they experience many pressures in the form

of erosion and sedimentation, agricultural impacts, land use change, and emerging contaminants that we know so little about but are being more-frequently found in streams.

For 2017, the group will continue to research threats to drinking water, recommend solutions to problems where applicable, and continue to promote protections to our most valuable resource: safe and adequate supplies of drinking water in the basin. The group also will continue to reach out beyond the metropolitan area to engage water suppliers and managers throughout the basin. As the water supply needs of the basin continue to grow, we must advocate for the resource to ensure its sustainable existence into the future, and we hope to be welcoming several new members into the fold in 2017.

Tom Jacobus, General Manager, U.S. Army Corps of Engineers, Washington Aqueduct Division

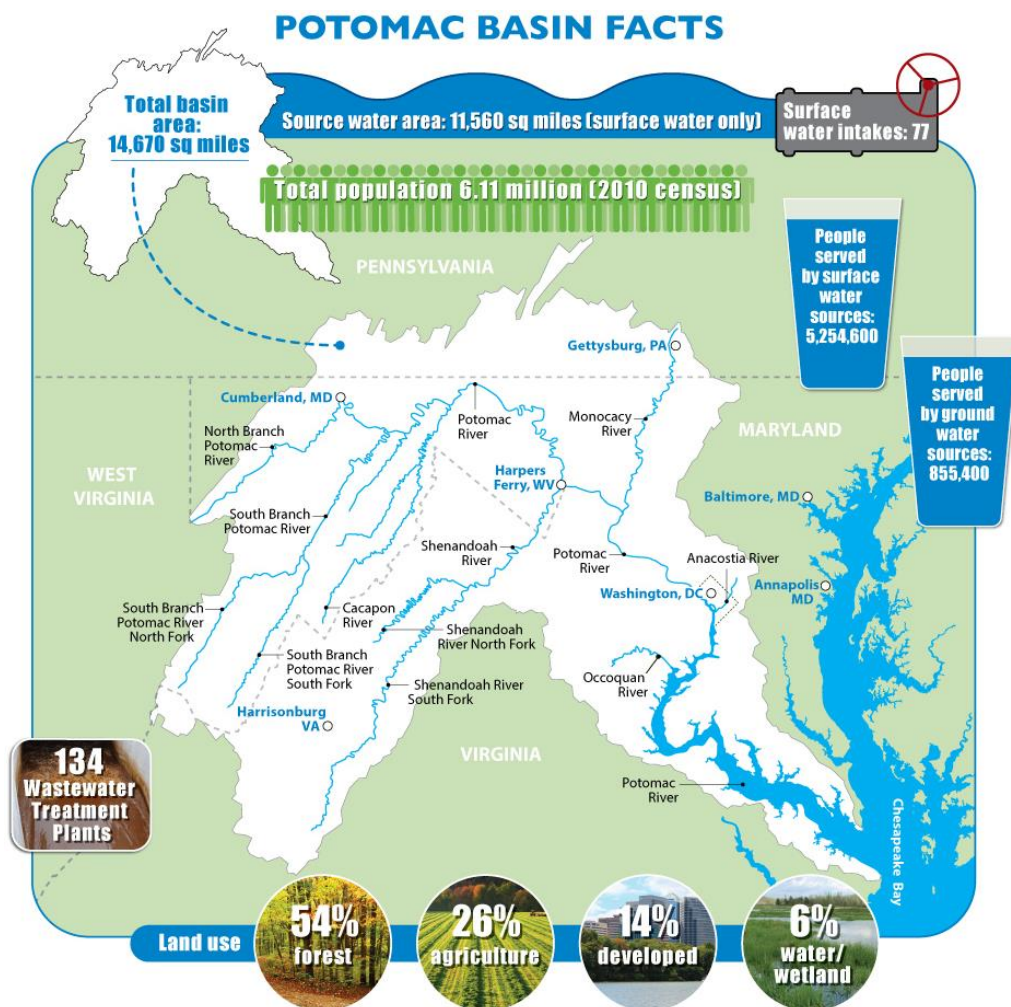
Lisa Daniels, Pennsylvania Department of Environmental Protection.

About the Partnership

Established in 2004, DWSPP is a coalition of water utilities and state, interstate, and federal authorities. Twenty organizations are official members, with others participating in Partnership meetings, workshops, and activities.

Mission

DWSPP serves as a cooperative, voluntary partnership working toward the goal of improved source water protection for 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 the public drinking water supply.



2016 Year in Review

Spills early and late in 2016 required emergency management, but did not impact water supplies. A number of initiatives during the year focused on honing spill response. Implementing improvements included development of a monitoring plan, a secure web-portal for internal spill event communications (which was first used during actual spill events), and improved awareness of sensitive downstream resources. The communications portal worked very well, and centralized important information to be shared. A draft spill monitoring plan was prepared and is currently under review and refinement. The plan outlines steps for monitoring before, during, and after a spill event.

Utilities work to improve their knowledge of the many chemicals that can be released to the environment. To **enhance chemical contaminant knowledge** in the Potomac basin, the Partnership explored two GIS-based tools for identifying contaminant sources. Assessments of the tools are ongoing.

In efforts to **explore source water protection related to toxic and non-toxic algae**, EPA Region 3 built a website to act as an online repository for sharing resources on harmful algal blooms (HABs). The Partnership has participated in multiple HAB-related webinars throughout the year. Summaries and links to recorded webinars are posted on the site.

To build awareness about the need to protect drinking water sources, the group has been conducting **outreach to drinking water stakeholders** in the Monocacy and Catoctin sub-watersheds to establish a local collaborative source water protection partnership. Stakeholders expressed interest in pursuing a collaborative approach and identified spill response as an initial priority issue.

Forests have a positive influence on source water quality conditions in the Potomac basin and the Partnership is studying the relationship between **forests and drinking water treatment costs**. This collaborative project between the Water Research Foundation, the U.S. Endowment for Forestry and Communities, DC Water, Fairfax Water, Washington Aqueduct, WSSC, and ICPRB is collecting initial data collection and research began during the year. A land cover assessment of current conditions in the basin was conducted with particular emphasis on forested lands. A methodology was developed that builds on the results of the land cover assessment to identify and prioritize opportunities for forest conservation in the basin.

2017 Work Plan

Enhance chemical contaminant knowledge in the Potomac basin. The Partnership will continue to focus on chemical contaminant risks, available analytical tools, and formalize a governance structure. Outreach to facilities upstream of drinking water intakes will begin and identifying and prioritizing risk from upstream sources will continue throughout the year.

Implement improvements to regional, cooperative spill response. The spill monitoring plan will be refined and finalized and internal communications will continue to be enhanced using a dedicated web portal. A spill exercise in the upper basin will be conducted during the year.

Explore source water protection activities related to toxic and non-toxic algae. Information and resources on toxic and non-toxic algae will continue to be developed. The Partnership will continue to participate in relevant webinars and collect information on new research.

Outreach to stakeholders. The committee will continue to build on momentum from the first Monocacy-Catoctin watersheds stakeholder meeting with a second meeting planned for early in 2017. Outreach to drinking water systems and other stakeholders in West Virginia will also begin during the year.

Road salts and de-icing. Members of the Partnership participated in an MWCOC road salt workshop over the summer. There was agreement that this should remain a priority for the membership. In addition to monitoring road salts effect on water quality, the Partnership will consider impacts of road salts on drinking water infrastructure.

Contaminants of concern. Chromium-6 levels in drinking water is a growing concern, and the Partnership is exploring the benefits of conducting a study to identify the natural levels of chromium-6 in the Potomac basin.

Forests and source water quality. For 2017, activities will include implementing the methodology to identify and prioritize forest conservation opportunities and developing four additional model land use scenarios for the year 2030. Additional testing of the water quality-treatment dose relationships will be performed, and a spring meeting of the project team will be planned.

These are just some of the activities DWSPP has developed and will be pursuing. A more complete picture of the group's activities is available on its website.

For More Information:

Visit www.PotomacDWSPP.org or contact Jim Palmer, ICPRB (301) 274-8104; jpalmer@icprb.org.

Member Organizations: Berkeley County, W.Va. – City of Frederick, Md. – City of Hagerstown, Md. City of Rockville, Md. – District Dept. of Energy & Environment – DC Water – Fairfax Water, Va. Frederick County, Md. – Interstate Commission on the Potomac River Basin – Loudoun Water, Va. Md. Dept. of the Environment – Pa. Dept. of Environmental Protection – Town of Leesburg, Va. Town of Shepherdstown, W.Va. – Metropolitan Washington Council of Governments – U.S. Environmental Protection Agency, Region 3 – U.S. Geological Survey – Va. Dept. of Environmental Quality Va. Dept. of Health – Washington Aqueduct Division, U.S. Army Corps of Engineers – Washington County, Md. – Washington Suburban Sanitary Commission, Md. – W.Va. Dept. of Health and Human Services