

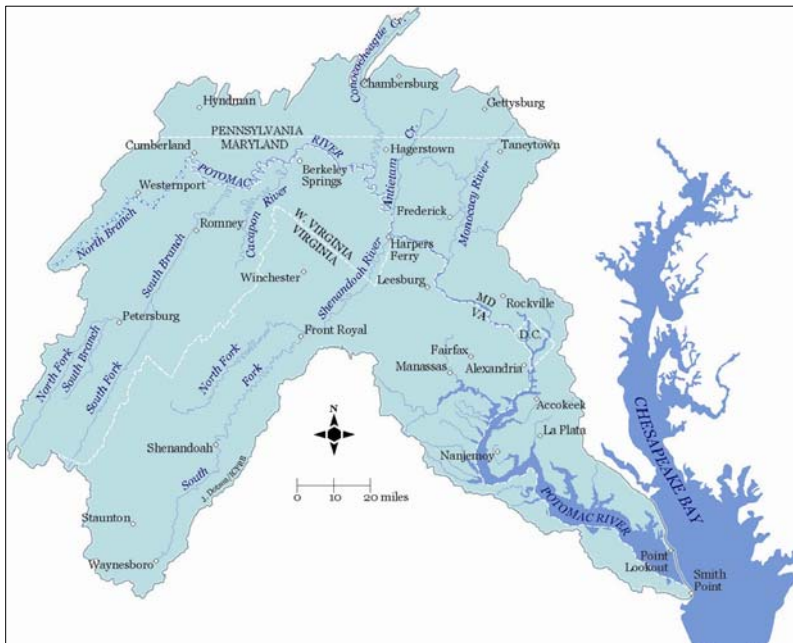


Proactive Water Supply Protection:

Potomac River Basin Drinking Water Source Protection Partnership

Residents of the Potomac River watershed enjoy a high quality of life, with the river and its environs providing jobs, growth, and recreational opportunities. A mainstay of that quality is in the purity of drinking water. Protection of that quality largely depends on protection of the quality of the Potomac River and its tributaries. Water utilities and other agencies responsible for the water supply for about four-million residents have partnered as the Potomac River Basin Drinking Water Source Protection Partnership to cooperatively assess current and potential issues that may affect the quality of these drinking water sources.

Drinking water treatment plants for public water supply systems meet United States Environmental Protection Agency (EPA) safe drinking water standards by implementing various treatment technologies. However, activities in upstream areas or in groundwater recharge areas can introduce contaminants to the water source that increase treatment costs, reduce treatment efficiency, or create taste and odor problems. In an extreme case, a contamination



Potomac River Basin

event can damage plant facilities, force a temporary plant shutdown, or require residents to boil drinking water. In order to address water quality concerns in drinking water source areas, water utilities and their governmental counterparts have created the Potomac River Basin Drinking Water Source Protection Partnership. The Partnership seeks to enhance drinking water quality and to minimize risks to public health by addressing threats to drinking water quality in source areas, that is, before water reaches the treatment plant.

A pristine natural watershed will generally present the fewest potential problems to water supplies. Even natural forests however can contribute organic matter that affects drinking water treatment. Agricultural activities have the potential to threaten water supplies through pesticide or herbicide residue in runoff, sediment production, or the introduction of pathogens from animal operations. Urban areas also contribute contaminants through stormwater runoff that is tainted with chemicals that are washed from roads and parking lots. Pathogens from combined sewer overflows or wastewater treatment plant malfunctions are another concern. Rapid development can produce high sediment loads if care is not taken in the construction process, and the increase in urbanization can exacerbate stormwater runoff issues from urban areas. Additionally, a range of other potential contaminants, such as ingested pharmaceuticals, may not be removed by standard treatment processes. The Potomac River Basin Drinking Water Source Protection Partnership has formed workgroups to research each of these issues and to propose strategies that address these concerns.

Membership

The current membership includes community water systems that derive all or part of their drinking water supply from the waters of the Potomac River basin as well as state and federal agencies with a role in source water protection:

City of Frederick, Maryland	District of Columbia Department of the Environment
City of Hagerstown, Maryland	Interstate Commission on the Potomac River Basin
City of Rockville, Maryland	Maryland Department of the Environment
Fairfax Water	Pennsylvania Department of Environmental Protection
Frederick County, Maryland	United States Environmental Protection Agency
Loudoun Water	United States Geological Survey
Town of Leesburg, Virginia	Virginia Department of Environmental Quality
Washington Aqueduct	Virginia Department of Health
Washington County, Maryland	West Virginia Department of Health and Human Resources
Washington Suburban Sanitary Commission	West Virginia Department of Environmental Protection

Objectives

The Partnership’s major focus is to give water utilities and relevant government agencies a stronger voice in watershed protection efforts. Cooperatively, the Partnership will implement its source water protection strategy, identify regional protection priorities, enhance coordinated approaches to protection, maintain a dialog on watershed protection and information-sharing, and develop new initiatives to ensure the highest quality drinking water.

Activities

The Partnership holds meetings and workshops designed to keep members up-to-date on issues such as pathogens, emerging contaminants, and other river pollutants that can threaten the reliable delivery of quality drinking water. When data gaps are identified, it works cooperatively to conduct research projects related to these issues. The group also has formulated an overall strategy for protecting drinking water sources as recommended in the source water assessments developed throughout the basin.