Potomac Basin Basics

THE BASIN: Drainage area includes 14,670 square miles in the District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia.

MAINSTEM LENGTH: Approximately 383 miles from Fairfax Stone, W.V. to Point Lookout, Md.; Tidal reach: 108 miles.

MAJOR TRIBUTARIES: Shenandoah, South Branch Potomac, Monocacy, and Anacostia rivers; Conococheague Creek.

POPULATION: Approximately 6.1 million; 5.1 million (2010 Census) in the Washington metropolitan area.

FLOW: Highest flow at Washington, D.C., in March 1936 was about 275 billion gallons per day. Lowest flow was in September 1966, about 388 million gallons per day. Average flow is about 7 billion gallons per day.

WATER USES: Major uses of water are for public and domestic water supply, power plant cooling, industrial use and agriculture. About 600 million gallons per day (mgd) is used for water supply, of which 500 mgd is used for the Washington area. About 1.6 billion gallons, most of which is returned to streams, is used daily for power plant cooling and industrial use.

MAJOR ISSUES: Increasing population impacts water quality and increases the demand for water; legacy pollution; emerging contaminants; reliability and safety of drinking water supplies.
The river’s water quality is in many ways vastly improved in the last seven decades, but some old and new threats require regional attention. Population increases, land use change and the growth of impervious surface, chemical contaminants, and nutrient and sediment enrichment challenge the gains made. The lives of more than six-million basin residents, 75 percent of whom live in the Washington metropolitan area, are touched daily by the river, which provides the majority of the region’s drinking water, accepts effluent from wastewater treatment plants, cools power plants, and provides a wealth of recreational and cultural opportunities. The Potomac watershed comprises about 20 percent of the Chesapeake Bay watershed and is a major factor in the bay’s restoration.

COMMISSIONERS
The ICPRB’s member jurisdictions appoint Commissioners who set policy and provide guidance for Commission activities.

COOPERATION AND PARTNERSHIPS
The ICPRB works with its partners to leverage efforts to address the shared responsibilities of the basin jurisdictions. This brings a cooperative approach to meeting the basin’s major challenges, including water quality impairments, water supply, groundwater use, and sources of pollution. The Commission works with federal, state, academic, and private organizations to forward these goals with greater efficiency.

STAFF AND PROGRAMS
Complementing the commissioners is a professional staff that has gained a reputation for delivery of sound science and analysis that provides decision-makers at various government levels with the facts and technical data to resolve issues concerning water quality and resources. The staff efforts focus on four primary areas of involvement:

**Water Resources**
- Ensure the reliability of major water supply systems in the metropolitan area during droughts and assess the current and future adequacy and safety of the region’s drinking water supply through the ICPRB Section for Cooperative Water Supply Operations on the Potomac (CO-OP).
- Assist federal, state, and local agencies with their water resources programs.
- Safeguard sources of drinking water for basin residents.

**Water Quality**
- Conduct studies and write reports to assist decision-making by the basin states and stimulate federal and state actions to improve water quality.
- Perform Total Maximum Daily Load and watershed action plans that guide restoration of streams and rivers.

**Aquatic Life**
- Conduct studies that assist management actions to achieve ecologically healthy aquatic communities.
- Restoration of aquatic species and habitats.

**Education**
- Use electronic and print media tools to educate and inform the public on basin water quality, and resource issues, and ICPRB and basin state efforts to address them.
- Conduct outreach and education programs for teachers, students, watershed groups, homeowners, and other stakeholders to foster active stewardship and involvement in use and protection of the basin’s waters.

*Created with an interstate compact by an Act of Congress in 1940, the Interstate Commission on the Potomac River Basin (ICPRB) is composed of commissioners representing the federal government, the states of Maryland, Pennsylvania, Virginia, West Virginia, and the District of Columbia. The ICPRB mission is to enhance, protect, and conserve the water and associated land resources of the Potomac River basin and its tributaries through regional and interstate cooperation. ICPRB accomplishes this mission through a variety of actions to conduct, coordinate, and cooperate in studies and programs in the areas of water quality, water supply, living resources, and land resources. The Section for Cooperative Water Supply Operations on the Potomac River (CO-OP), a special section of the Commission, was created as a technical operations center for management and coordination among the regional water utilities to avoid water supply shortages in Metropolitan Washington during droughts.*