



Partners Protecting the Potomac: Maryland and the Interstate Commission on the Potomac River Basin, 2014

The Interstate Commission on the Potomac River Basin (ICPRB) was created by an Act of Congress and by individual jurisdiction statutes to address pollution and other water problems within the basin. It was directed to conduct studies and issue reports; to assist and provide liaison for other agencies; and to inform the public. The commission is the only entity for coordinating the activities of the signatory bodies and their respective agencies with respect to matters relating to the waters of the Potomac River Basin. Maryland shares the watershed with the District of Columbia, Pennsylvania, Virginia, and West Virginia.

This annual report provides short descriptions of ICPRB's activities in 2014 that benefited Maryland. ICPRB's efforts focus on four topic areas: Water Resources, Water Quality Improvement, Aquatic Life, and Education. More information about these activities can be obtained by contacting us by phone, e-mail, and by visiting our website.

ICPRB is supported by a base level of funding from its member jurisdictions that is supplemented with project specific grants and contracts that together enable ICPRB to carry out its mission.

WATER RESOURCES

Drinking Water Availability. The Potomac River is the primary drinking water source for the Washington metropolitan area, including the Maryland's Montgomery and Prince George's counties. The ICPRB conducts long-term planning and coordinates drought operations for the metropolitan water suppliers to ensure adequate water to meet demands and environmental flow guidelines during low-flow conditions.

Future water availability. Every five years, on behalf of the Washington Suburban Sanitary Commission (WSSC) and the region's other major suppliers, ICPRB conducts a study that assesses the ability of current supplies to meet future demands. The first portion of the upcoming 2015 study was completed this year.

Low-flow forecasts. During droughts, ICPRB develops forecasts of Potomac River flow to make efficient use of water stored in the metropolitan area water suppliers' reservoirs. To improve forecasts during low-flow periods, a pilot real-time prediction tool was constructed based on the Chesapeake Bay Program watershed model and National Weather Service rainfall data and forecasts.

Drought exercise. ICPRB helps maintain regional drought preparedness by conducting an annual exercise of drought-related communications and operations. This year's exercise, whose participants included WSSC, other major metropolitan area water suppliers, and the Metropolitan Washington Council of Governments, focused on procedures to ensure continued communications and operations in case of a regional power outage.

New water supply resources. ICPRB coordinated the first phase of a study to evaluate the potential use of Travilah quarry, located in Montgomery County, Maryland, as water supply storage facility with regional benefits.

Drinking Source Water Protection. The Potomac Basin Drinking Water Source Protection Partnership, coordinated by ICPRB, includes metropolitan area water suppliers and water supply agencies focused on protecting of the raw sources of drinking water from contamination. The project exemplifies the interstate, collaborative leadership that provides value to Potomac jurisdictions and water utilities. The group, which includes several Maryland organizations, helps area utilities to address emerging contaminants, agricultural impacts, disinfection by-products precursors, and other challenges that impact both raw water quality

and the cost of production. This year, Partnership members worked with Colonial Pipeline Company, discussing integrity management, emergency response, and tactical response plans for pipeline ruptures that could contaminate the river. This improved the working relationship between Colonial and the water utilities. In the event of a hazardous spill, ICPRB maintains a model to estimate the time it would take material to travel from a spill to downstream intakes. Each year, contact information is verified and communication procedures are tested.

ICPRB provides administrative and technical support to partnership efforts, such as compiling results from unregulated contaminant monitoring, evaluating alkalinity and pH trends in Occoquan and Potomac source waters, mapping locations of pharmaceutical and endocrine disrupting compounds in point source discharges, and organizing a workshop on harmful algal blooms. In the initial planning stages are efforts to update the utilities' source water assessments and to evaluate the role of forest cover in improving water quality and lowering treatment costs.

Basinwide Comprehensive Water Resources Plan.

Sustainability of the basin's water resources is crucial to its future. Development of a comprehensive plan can provide a platform for Potomac jurisdictions to look at the region's water future and discuss how their individual resources plans can work cooperatively to protect those resources. The initial stage of the plan, gathering information from MDE and local jurisdictions, began in 2014.

WATER QUALITY IMPROVEMENT

Chesapeake Bay Restoration. The ICPRB is a contributing partner to the Chesapeake Bay Program, with staff contributing their individual technical expertise in many of the Bay Program's issue areas. In FY 2014, ICPRB staff led efforts to improve measures of American shad restoration in the Bay and of stream health in the bay's watershed. These measures are called for in the 2009 Chesapeake Bay Executive Order and the 2014 Chesapeake Bay Watershed Agreement.

Chesapeake Bay Watershed Modeling. ICPRB staff have been (and continuing in 2015) part of a team developing the Phase 6 Chesapeake Bay Model. The model is a key tool that will be used to assign pollutant load allocations to different land types and jurisdictions, and to track progress in meeting

pollution reduction goals, for the Chesapeake Bay TMDL. The ICPRB helped to improve the model on a more-local scale, and revised phosphorus TMDLs for 11 small impoundments in Maryland. Land use, baseline loads, and allocations are now expressed in terms consistent with the Chesapeake Bay TMDL. A report was prepared for MDE with draft phosphorus allocations for the impoundments. Work continued on various aspects of the calibration methodology for the model, particularly for processes that control delivery of nutrients and sediments from edge-of-field to the rivers represented in the Phase 6 model. ICPRB will continue to work on the model in 2015.

Chesapeake Bay Data Management and Analysis. ICPRB continued its multi-year Data Management project for the Chesapeake Bay Program (CBP) which maintains and updates very large databases of monitoring data collected in the Chesapeake Bay and its watershed, including the Potomac River. The data are used by resource managers, analysts, researchers, students, and the general public, to track problems back to their sources and assess progress toward meeting restoration goals.

Leadership for Potomac Basin Water Quality Management. ICPRB staff continued in 2014 to participate in many local, regional, and national organizations that are addressing water quality problems. ICPRB brought technical expertise and an interstate and basinwide perspective to discussions on particular issues at the local level through participation in the Anacostia Watershed Management Committee, Anacostia Watershed Citizens Advisory Committee the Trash Free Potomac group, and support for various local watershed groups. The ICPRB also works at the larger, regional, scale of the Chesapeake Bay Program and the EPA's Region 3; and with national organizations such as the Association of Clean Water Administrators and the Interstate Council on Water Policy. These connections and partnerships can spur new approaches to and ideas about issues in the Potomac basin.

Stormwater Outreach for Montgomery County, Md. The ICPRB in 2014 worked with the county to assist in the public engagement section of its MS4 Stormwater Plan. The project's two phases included efforts to empower and strengthen citizens' watershed organizations and other groups to play a greater role in controlling stormwater. Groups were offered education opportunities and assistance with organizational issues, such as incorporation and grant application. The second phase was a pet waste control pilot project and was performed with the Rock Creek Conservancy. The very successful pilot identified problem areas and worked with homeowners associations to install pet waste collection stations and bags at community swimming pools and dog walking areas. A service maintained the stations and weighed the waste collected during the project.

AQUATIC LIFE

American Shad Restoration. An American shad stocking program run by ICPRB, with the US Fish and Wildlife Service and the Virginia Dept. of Game and Inland Fisheries (DGIF), concluded in 2014. When the project started in 1995, shad abundance in the Potomac was at a historically low level and now both the Potomac River and Rappahannock River, which was stocked with shad fry from the Potomac, meet restoration targets set by the ASMFC. These two rivers are the only areas with strongly improving shad stocks in the Chesapeake Bay.

Water Chestnut Monitoring and Harvesting. The ICPRB worked with the U.S. Geological Survey, DGIF, Northern Virginia Park Authority, and volunteers to remove water chestnuts in the Potomac. The plants were a huge management problem in the

1920s-1940s, and a stand was found growing this summer in Pohick Bay after an absence of decades. ICPRB is collecting information on plant sightings so that management of the plants can continue next spring. The Maryland DNR currently manages water chestnut infestation in two Maryland rivers, and is now working with Virginia DGIF on posting signage at tidal Potomac boat ramps to help the public monitor for new infestations this spring.

Atlantic Sturgeon Restoration. The ICPRB worked with Maryland DNR and the U.S. FWS toward protecting efforts to restore sturgeon to the Potomac River, specifically by seeking for clarification about the future of captive fish held by DNR and a power company for breeding and stocking purposes. Concerns were heightened when the species was declared endangered in the Bay. The designation could limit stocking efforts to fish native to the watershed—the research stock held are from outside the Chesapeake Bay.

EDUCATION AND OUTREACH

The ICPRB's education and outreach efforts provide ongoing educational resources for the public through its website, weekly news digest, summertime weekly public service announcements, and other tools. The unit also fields information requests from the public, researchers, and government officials.

Watershed-Wise Workshops and Other School Outreach. Watershed-wise workshops, biological monitoring, and green school assistance programs were conducted in Prince George's and St. Mary's counties in Maryland, and reached more than 60 teachers. The workshops show teachers how to build a watershed model that is used in classrooms to explain the impacts of land use change and stormwater pollution. Monitoring classes show how students and teachers can make basic assessments about streams near their schools. Other workshops help classes assess their school grounds, along with a planning exercise that results in the installation of best management practices and can lead to a "green school" designation.

American Shad "Schools in Schools." In partnership with the Living Classrooms Foundation, this companion to the shad restoration project since 1996 has engaged schools that hatch and release shad fry as part of their curricula. In 2014, approximately 900 students from 24 Washington metropolitan area schools, including 13 in Maryland, hatched shad in their classrooms and stocked more than 30,000 shad fry into the Potomac River.

Potomac Cleanups and Trash-Free Initiative. The ICPRB has partnered for more than 20 years in cleanups and trash reduction efforts with the Alice Ferguson Foundation including the watershed-wide annual Potomac River Watershed Cleanup. In 2014, the 26th annual cleanup enlisted more than 14,700 volunteers in removing 288 tons of trash from 670 sites in the basin. An offshoot of the cleanup is the Potomac Watershed Trash Free Initiative, which seeks to end litter in the watershed.

These projects are highlights of some of the many activities at ICPRB.

For more information, contact:

Interstate Commission on the Potomac River Basin
30 West Gude Drive, Suite 450, Rockville, MD 20850
(301) 984-1908; info@icprb.org;
www.potomacriver.org