Potomac River Basin Comprehensive Water Resources Plan

Annual Implementation Highlights (July 2024-June 2025)

Summary

The past twelve months represent the seventh year of implementing the 2018 Plan and the first year of implementing the updated 2023 milestones, measures of success, and communication plan (see the 2023 Plan Report). During this performance period, progress has been made implementing all areas of the plan including scientific work, outreach and education, and building the tools to evaluate environmental progress over time. As a result, staff have furthered scientific understanding of the basin, enhanced communication of those findings, and engaged stakeholders at all levels. Selected accomplishments from the past twelve month period are highlighted in the sections below along with key next steps.

Adaptive Management

Accomplished

Implementation of activities called for in the 2023 Plan Report is underway. The Advisory Committee was invited to attend related ICPRB events and review comprehensive plan products. Stakeholder feedback was invited on various aspects of implementation in an effort to continually improve the products and process of comprehensive plan implementation.

Next Steps

The short-term milestones described in the 2023 Plan Report are expected to be completed by the end of 2025. At that time, implementation focus will shift to the long-term milestones. The next five-year Plan review will occur in 2028. The full plan will be reviewed in 2033.

Overarching Activities

Accomplished

A revised Tracking Environmental Progress Storymap was published to assess achievement of the desired comprehensive plan environmental outcomes. A pamphlet on roles, responsibilities, and areas of authority in the basin was published by ICPRB. ICPRB signed on to the 2024 Interstate Council on Water Policy's streamgage letters and participated with NOAA's Mid-Atlantic Drought Assessment and Building Early Warning Capacity process.

Next Steps

Staff will perform an initial trend analysis of the plan's environmental metrics to understand changes in basin conditions since the plan's inception. ICPRB will continue to support and promote long-term USGS gages and other essential monitoring efforts in the basin.

Communications

Accomplished

ICPRB staff presented on the comprehensive plan to various audiences such as the PA Statewide Water Resources Committee and the PA Potomac Regional Committee. Staff updated stakeholders and the general public via timely updates to the website, press releases, social media posts, and ongoing updates to the One Basin, One Future collection (a one-stop-shop of planning products). The ICPRB CO-OP Section published two manuscripts in the peer-reviewed literature.

Next Steps

Comprehensive plan outreach will continue over the next twelve months, prioritizing stakeholder engagement and education about the events and products associated with plan implementation. A peer-reviewed manuscript is being developed on the process, progress, and lessons learned from plan implementation. Staff are preparing web page content related to the water-energy nexus. Brief "how-to" videos for the water quality data inventory are being planned.

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Water Use & Supplies

Accomplished

The ICPRB CO-OP Section prepared the 2025 demand and availability forecast, including an assessment of the current and future projected water use by data centers and updated projections to inform future water supply planning. A web-based version of ICPRB's time of travel spill model was developed and a new flow-dependent forecasting feature was added to the Potomac River and Reservoir Model. A DroughtTriggers application was launched to communicate drought conditions to water suppliers. Phase 3 of the Potomac River bathymetric LIDAR data collection project, conducted in partnership with the U.S. Geological Survey, was completed.

Next Steps

ICPRB will update its basin-wide withdrawal and consumptive use database, per the scope of work developed in FY25. ICPRB will also encourage consistent water use reporting and will advance shared drought planning and water supply management. Opportunities will be explored to enhance spill modeling, adding capabilities to ICPRB's Emergency River Spill Model (ERSM), to continue progress on the WRDA Feasibility Study for a Secondary Water Source, and to work on drought contingency planning for Jennings Randolph Reservoir.

Water Quality

Accomplished

Staff updated the Potomac Water Quality Data Inventory user interface. ICPRB provided ongoing coordination of the Potomac Drinking Water Source Protection Partnership, including facilitation of events like the Small Systems Roundtable and providing contaminant modeling expertise. ICPRB participated in inter-agency initiatives like the Chesapeake Bay Program, AWRA, and AWWA. ICPRB published the Regional Salt Hub.

Next Steps

ICPRB will continue coordination of the DWSPP Partnership. ICPRB staff will also prepare a summary report for the Potomac Water Quality Data Inventory. A microplastics webinar is slated for summer 2025. ICPRB staff are developing a web page to communicate energy issues related to sustainable water resources management in the basin.

Human Land Use

Accomplished

ICPRB held two land use webinars for decision-makers. Updates to the impervious cover tool, including additional explanatory text and development of a cumulative index, are complete. Two stakeholder meetings and an end-user focus group were held as part of updating the land prioritization tool.

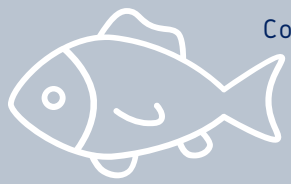
Next Steps

Updates to the land prioritization tool will be complete this fall. The land use webinar series will continue in FY26. ICPRB staff will identify updates related to local regulatory and programmatic approaches to managing human land use in the basin, including identifying innovative, creative, and effective land use management tools (regulatory, programmatic, and financial).

Ecological Health

Accomplished

ICPRB hosted the 2024 Potomac River Conference on the topic of invasive species. River sampling by the ICPRB field crew included PFAS, Harmful Algal Blooms (HABs), freshwater mussel distribution, and habitat refugia throughout the basin. ICPRB staff recently assembled Chesapeake stream macroinvertebrate, habitat, and water quality data.



Next Steps

Planning is underway for the 2025 Potomac River Conference on the topic of HABs. ICPRB is working with partners to restore populations of American eel and freshwater mussels to its historic habitat in the western Potomac River watershed. ICPRB staff will calculate and report the Chessie BIBI stream health indicator for 2018-2023 and further investigate Biological Stressor Identification processes.

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Photo top of page, ICPRB PFAS sampling site at Edwards Ferry Boat Ramp on the Potomac River in Poolesville, Maryland, December 2024 by Heidi Moltz.