



CONTROLLING PCBs IN MARYLAND THROUGH EFFECTIVE PARTNERSHIPS AND SHARED EXPERTISE

Location: Baltimore UWFP Location

Project Date: August 2017; September 2018

Overview

Many Maryland watersheds are listed as impaired for polychlorinated biphenyls (PCBs). PCBs are a toxic legacy chemical that bioaccumulates in fish and can have carcinogenic effects in humans. Once listed as impaired, local jurisdictions have to develop Total Maximum Daily Loads (TMDLs) for the impairing contaminant that describe how they will reduce loadings and achieve Clean Water Act standards.

The Maryland Department of the Environment (MDE) has been working collaboratively with local cities, counties and municipalities to develop these TMDLs to reduce PCB loadings in Maryland waters. The Baltimore Urban Waters Partnership, through its Actionable Science workgroup, pulled together a wide variety of stakeholders and partners for two technical workshops in 2017 and 2018 on TMDL development and implementation, including a technical overview of monitoring and remediation of PCBs. By bringing together the technical expertise of MDE with the outreach and engagement strengths of the Urban Waters Partnership, these workshops significantly enhanced local partners' knowledge of how to monitor and control PCBs to meet the goals of the TMDLs.

Background: Baltimore UWFP

The Patapsco River Watershed Partnership is a substantive and sustainable collaborative network that has participation from the government, public, nongovernmental organizations (NGO), and private sectors. The major impact of the Partnership has been vertical and horizontal integration of federal, state, local, and NGO partners and networks. This integration has facilitated:

- completion of the Green Pattern Book, a tool to assist the City of Baltimore's residents, administration, and community and nongovernmental organizations in "greening" the vacant land and improving the quality of life in the city;
- initiation of the Green Pattern Registry that maps existing and potential Green Pattern Book projects,

- completion of the \$300,000 Growing Green Design Competition based on the Green Pattern Book; and
- connection to the National Science Foundation's Baltimore Ecosystem Study to provide actionable science decision support to partners.

Sharing Expertise and Strengthening Partnerships through Collaborative Workshops

The first PCB Workshop, held in August 2017, introduced the problems many jurisdictions face in trying to implement their PCB TMDL and provided a technical overview of monitoring and remediation of PCBs. Staff from MDE and the Delaware River Basin Commission highlighted the TMDL development and lessons learned in the initial implementation of the Delaware Bay TMDL. Other presenters covered technical aspects of monitoring approaches for source identification and remediation techniques in the stream and in the watershed.

The second PCB Workshop, held in September 2018, was planned with leadership from MDE and support from the Baltimore Urban Waters Partnership. The workshop, which included new partners like the Maryland State Highway Administration and more local jurisdictions, provided an update from all MS4s about status of implementation of the PCB TMDL, and focused on source identification and remediation of PCBs both in the watershed and in the streambed. Lessons learned from the Anacostia Sediment Project - particularly related to source identification - were highlighted, as well as consideration of contaminated sites (by DRBC) and WWTPs. An update on remediation approaches was provided.

Both of these workshops were highly successful and engaged a wide range of partners working to address PCB contamination in Maryland. The technical expertise of MDE and the convening power of the Baltimore Urban Waters Partnership helped allow local jurisdictions move beyond simply complying with the TMDL to more actively focusing on source trackdown and remediation activities to achieve results. Moreover, through the Urban Waters Federal Partnership, the activities and lessons learned in the Patapsco were shared with organizations working in the Puget Sound on similar toxics reduction work. This model of state agencies working closely with local urban water partnerships on technically complex environmental challenges such as PCBs can both achieve great results in their watersheds while also being transferable to other cities facing similar challenges.

State Agency Contact:

Leonard Schugam (Maryland Department of the Environment)
leonard.schugam@maryland.gov
410-537-3935

Local Contact:

Mike Galvin (UWFP Ambassador – Patapsco River)
mgalvin@savatree.com
914-403-8959