TOXIC CONTAMINANTS POLICY AND PREVENTION

WATER QUALITY GOAL IMPLEMENTATION TEAM TOXIC CONTAMINANT WORK GROUP

2014 WATERSHED AGREEMENT: GOAL & OUTCOME LANGUAGE

GOAL: Toxic Contaminants

Ensure that the Bay and its rivers are free of effects of toxic contaminants on living resources and human health.

OUTCOME: Toxic Contaminants Policy and Prevention

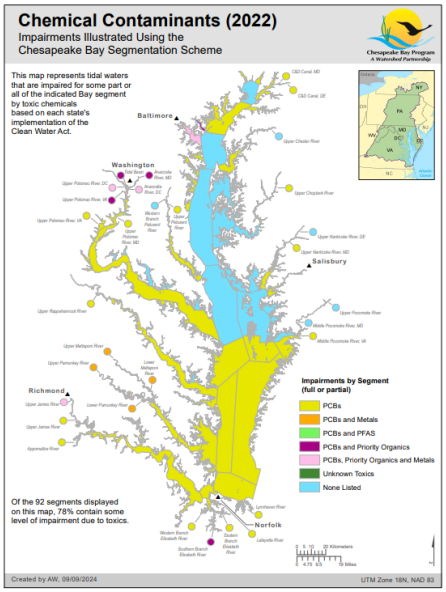
Continually improve practices and controls that reduce and prevent the effects of toxic contaminants below levels that harm aquatic systems and humans. Build on existing programs to reduce the amount and effects of polychlorinated biphenyls (PCBs) in the Bay and watershed. Use research findings to evaluate the implementation of additional policies, programs and practices for other contaminants that need to be further reduced or eliminated.

OUTCOME DISPOSITION ADVICE TO MANAGEMENT BOARD: Update

Recommendation

The Toxic Contaminants Workgroup (TCW) and the Water Quality Goal Implementation Team (WQGIT) recommend that the Toxic Contaminants Policy and Prevention Outcome is **updated** to ensure that the Chesapeake Bay Program (CBP) continues to apply its extensive expertise in water quality management to advance PCB Total Maximum Daily Load (TMDLs) in the watershed to reduce PCBs and other contaminants in fish. For example, in such an update the outcome could be reworded to describe a commitment to making continual progress toward achieving water quality standards related to the "fishable" designated use.

78% of the Bay's tidal segments are fully or partially impaired by a toxic contaminant



How does the CBP add unique value in achieving the outcome?

As required by Section 117.1.c of the Clean Water Act, the CBP maintains a strategy for reduction of toxic contaminants. The CBP elected to primarily focus on PCBs because PCBs are often the highest human health risk pollutant in fish tissue in the estuarine portion of the Chesapeake Bay system. The value-added activities conducted by the TCW are mostly designed to help the Bay jurisdictions optimize PCB TMDLs.

The TCW provides:

- a forum for any needed interstate coordination among the watershed jurisdictions on PCB TMDLs
- opportunities for the jurisdiction PCB TMDL leads to learn from other programs within the watershed and around the country who are actively working to reduce PCBs
- watershed wide story maps, indicators, and communications products
- resources and coordination for projects to fill information gaps related to management actions

- results of recent research that can inform the design and implementation of PCB TMDLs

What Have We Learned?

The loading of PCBs in the Chesapeake Bay system is dynamic and ongoing. Stormwater and wastewater sources as well as contaminated in-stream sediment and atmospheric flux create a classic pollutant biogeochemical processing cycle. There are extensive jurisdiction-listed water quality standard impairments driven mostly by PCBs in fish tissue and many local PCB TMDLs, some of which are large-scale covering hundreds of river miles. Dozens of fish species across the watershed have related fish consumption advisories including a substantial number of "Do Not Eat" advisories.

Progress can be made to reduce PCBs in fish. The TCW has featured and interacted with other programs including Delaware Bay, the Great Lakes and Puget Sound where there are seeing improving trends because of deliberate prioritized work to reduce PCB loading.

Extensive impairment listings in the Chesapeake watershed due to PCBs

The progress and direction taken by the tidal states with PCB TMDLs is encouraging. Maryland is working with local governments in MS4 areas where there is a PCB TMDL to conduct controllable-source tracking and create mitigation plans. Virginia is completing a large scale TMDL on the James River with a strategic direction to use permit limits to drive PCB reductions. The District of Columbia is earnestly working to remediate Anacostia River sediments while working with Maryland Department of Environment to identify and act on PCB sources in the river. Delaware recently completed an innovative Advance Restoration Plan focused on toxic contaminants in Delaware's portion of the C&D canal. Pennsylvania has experienced a decrease in PCB tissue concentrations and has also now included PFAS into ongoing monitoring, assessment and permitting efforts to address both toxic contaminants.

High Impact Activities Underway and Anticipated in the Toxic Contaminants Policy and Prevention Outcome Work Plan

The TCW serves as a forum to highlight and synthesize activities underway by jurisdictions and other partners. Example value-added activities underway across the partnership include:

- Large-scale PCB remediation activities (James River PCB TMDL, Anacostia Remediation)
- Assessing the effectiveness of the Advance Restoration Plan Framework
- Providing a forum for jurisdiction/EPA regulatory coordination in PCB TMDLs.
- Local government collaboration as stakeholders have indicated needs related to PCBs and PFAS

Summary

To fulfill the CBP chartered mission and achieve the partnership's vision of "an environmentally and economically sustainable Chesapeake Bay watershed with clean water" as well as partner agencies' duties to protect human health and the environment, the CBP must continue to apply itself to risks from toxic contaminants.

In updated language, the partnership could replicate the wording used in the Water Quality Outcome, emphasizing the attainment of water quality standards. Incremental progress in de-listing PCB-related impairments could be the basis of such re-wording. Another option is to combine toxic contaminant prevention with fisheries goals to make a clear connection to fish health and human health.