TOXIC CONTAMINANTS GOAL

Toxic Contaminants Policy and Prevention Outcome

2025 PROGRESS
OFF COURSE

OUTCOME: 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 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.

PROGRESS AS OF 2021: The Toxic Contaminants Policy and Prevention Outcome is off-course. Since 2010, each biennial update has seen the number of tidal segments in the Chesapeake Bay that are listed as fully or partially impaired due to toxic contaminant increase, with the number reaching 82% in 2016. Chesapeake Bay Program partners are building off current state programs to implement local Total Maximum Daily Loads (TMDLs) to advance the remediation efforts of polychlorinated biphenyls (PCBs) in localized areas (e.g., Patapsco River, Anacostia River), as well as making improvements to wastewater treatment plants and increasing implementation of land-based best management practices. Despite these efforts, overall water quality standards and attainment in the Chesapeake Bay and its tidal tributaries, which contributes to waterways being listed as impaired for PCBs and other contaminant-related impairments, continues to decline. In addition to PCBs and mercury which are the leading causes of fish consumption advisories, the Toxic Contaminant Workgroup is interacting with jurisdictions to formulate a coordinated approach in assessing per—and polyfluoroalkyl substances (PFAS), which have begun to appear in concentrations that are resulting in new fish consumption advisories throughout the watershed.

BACKGROUND: Chesapeake Bay Program partners came together to focus this outcome on high-priority pollutants. Although there are many contaminants of potential concern, it was decided that they would focus first on PCBs, in part because they often trigger fish consumption advisories, and committed to reduce other contaminants in the future as further priorities were identified. The partnership applies its collective abilities to reduce inputs of PCBs, though the same inputs often contain other contaminants of concern, such as mercury, pesticides, polycyclic aromatic hydrocarbons, known and suspected endocrine disruptors and microplastics.

BASELINE: The baseline for toxic impairments in the tidal Chesapeake Bay was recorded in 2010 and found that 74% of the Bay and its total tributaries were fully or partially impaired by a toxic contaminant listed on a state's 303(d) list. Fifty-eight percent of the impairments came from PCBs. Watershed jurisdictions provided the following data to inform the baseline: Widespread contamination of fish and extensive fish consumption advisories; extensive impairments of both tidal and non-tidal waters due to PCBs; and numerous existing PCB TMDLs across the watershed as well as those under development.

DATA SOURCE: Data in this outcome is obtained from 303(d) lists for Delaware, the District of Columbia, the Environmental Protection Agency, Maryland and Virginia. It is notable to mention that these jurisdictions use raw data regarding chemical contaminants found in fish tissue samples to develop their lists of impaired waterways.