Chesapeake Bay Program
Science. Restoration. Partnership.

Toxic Contaminants Policy and Prevention Indicator – 2025 Update

Toxic Contaminants Workgroup Monthly Meeting
March 11th, 2026

Petra Baldwin, TCW Staffer

Agenda

1. What is an indicator?
2. The TCPP Indicator
3. 2025 Update
4. Future Indicator(s)
5. Discussion

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What is an Indicator?

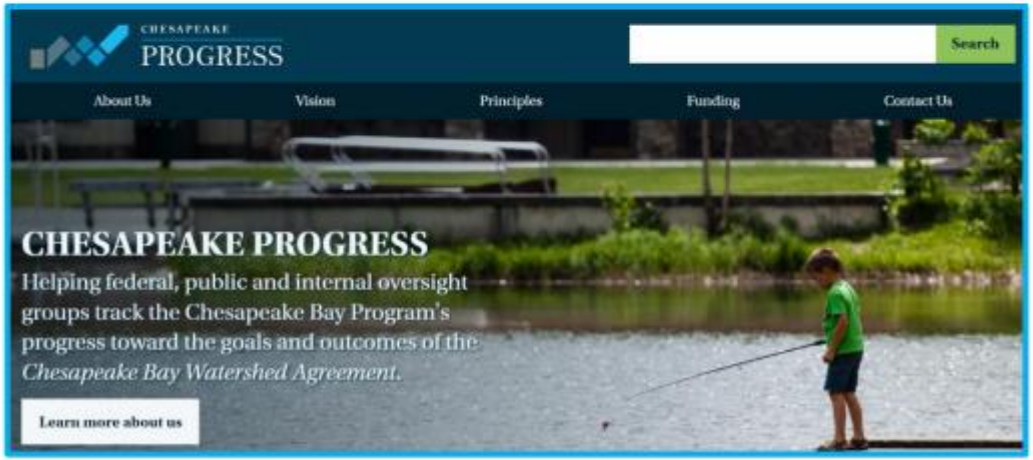
Indicator

A programmatically approved metric used to inform progress made towards an outcome.

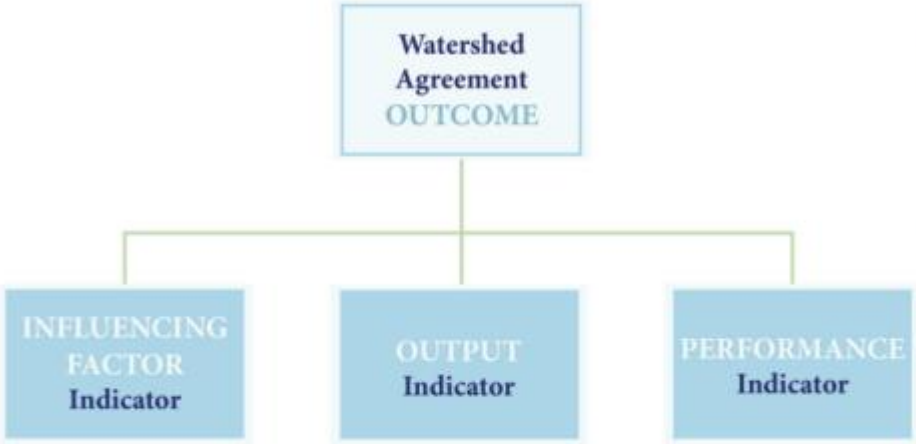
Indicators Foundational Documents

The **Indicators Framework (2015)** is a conceptual model that demonstrates the relationships between indicators and describes how they will be used. The Framework is aligned with the Agreement at the Outcome level and includes the information needed to communicate progress towards these outcomes.

CBP Indicator SOP (2025): internal document that defines procedures for updating existing Indicators, annual planning and workflow, and publishing to ChesapeakeProgress.



Current Indicators Framework



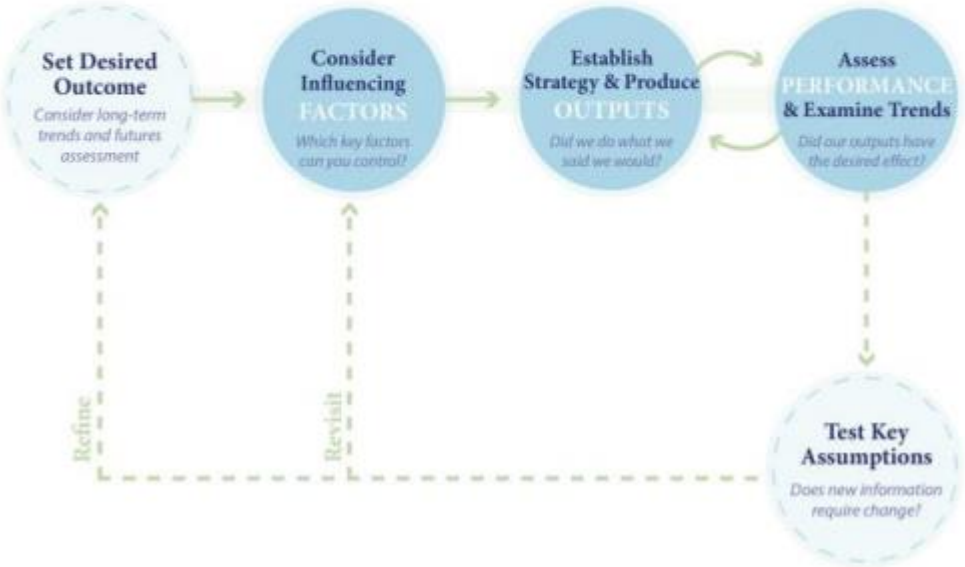
Information Support

Three information types are needed to support adaptive management and communication needs.

Influencing Factors – What KEY influencing factors are impacting the achievement of an outcome?
Outputs – Are we doing what we said we would do in our work plans and management strategies?
Performance – Are we achieving the outcome?

Using Indicators in a Simplified Decision Framework

Indicators support several steps within the Decision Framework. The blue circles denote steps within the Decision Framework that need indicators and metrics to guide implementation work.



2014 Agreement Toxics Outcomes

Policy and Prevention (TCPP)

Has an indicator.

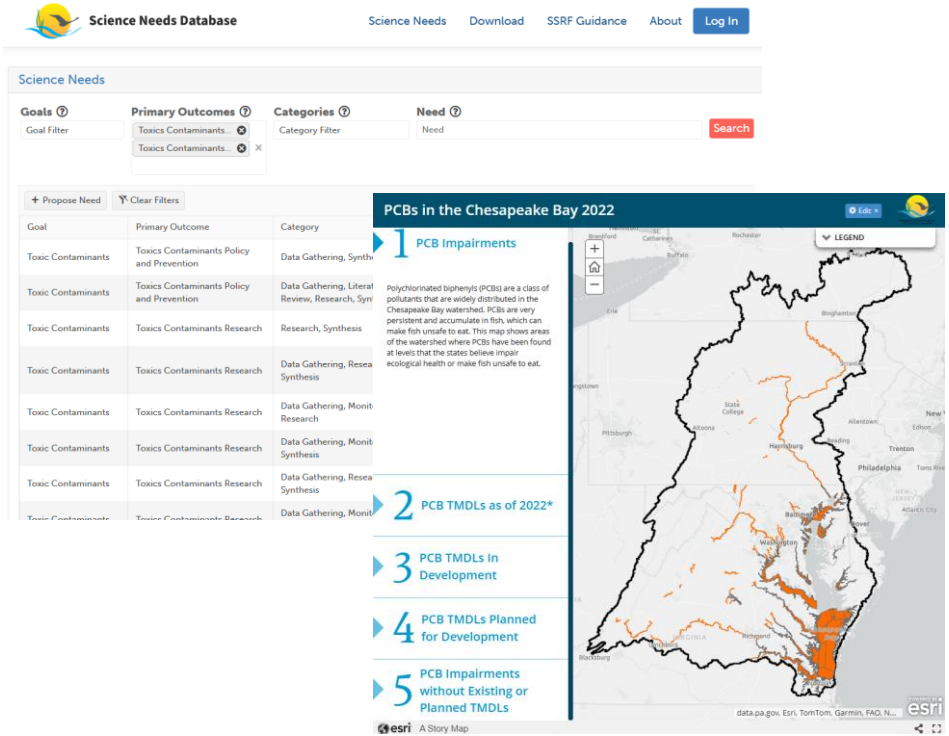
Research

No indicator.

Programmatic updates shared via Bay Barometer and other means.

Note: Other TCW Tools

- PCBs StoryMap
- Mercury StoryMap
- Science Needs Database
- The many tools, maps, and research developed by you!



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The TCPP Indicator

TCPP Indicator

The Chesapeake Bay Program tracks two main classes of contaminants—metals and organic chemicals—to assess progress toward this outcome.

The Indicator identifies the percentage of Chesapeake Bay tidal segments that were fully or partially impaired by toxic contaminants based on data from tidal jurisdictions' Clean Water Act Section 303(d) listings as reported in their biennial Integrated Reports.

Data Sources and Methods

- Listings from MD, VA, DC and DE’s biennial Integrated Reports
- Data aggregated to the 92 tidal segments
- Only covers tidal waters
- Pass/fail designation, including “partial impairments”

Contaminants

- PCBs
- PFAS
- Metals
  - Mercury
  - Lead
  - Copper
  - Zinc
  - Silver
  - Selenium
- Priority Organics
  - Chlordane
  - PAHs
  - Dioxin
  - Heptachlor epoxide
  - Dieldrin
- Unknown Toxics

Note: Two Levels of Segmentation

Percentage of Impairments

Based directly on the 92 tidal segments.

This is what the overall Outlook and Recent Progress are based on.

Map

Displays impairments at a sub-92 segment scale to better reflect the extent of impairment in partially impaired segments

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2025 Indicator Update

Process

- 2024 Integrated Reports approved by EPA
- Reaggregation to 92 tidal segments
- Confirmation with jurisdictional representatives
- Refinements to map segmentation
- Publishing on ChesapeakeProgress
- Sharing via Blog Post and Bay Barometer

Thank you!

Jurisdictional Reps

- Len Schugam, MDE
- Amanda Shaver and Cleo Baker, VADEQ
- John Cargill, DNREC
- George Onyullo, DC DOEE

CBPO Indicators and Web Teams

- Katie Ayers
- Catherine Krikstan
- Angie Wei
- Doug Bell
- Rachel Felver

Key Takeaways

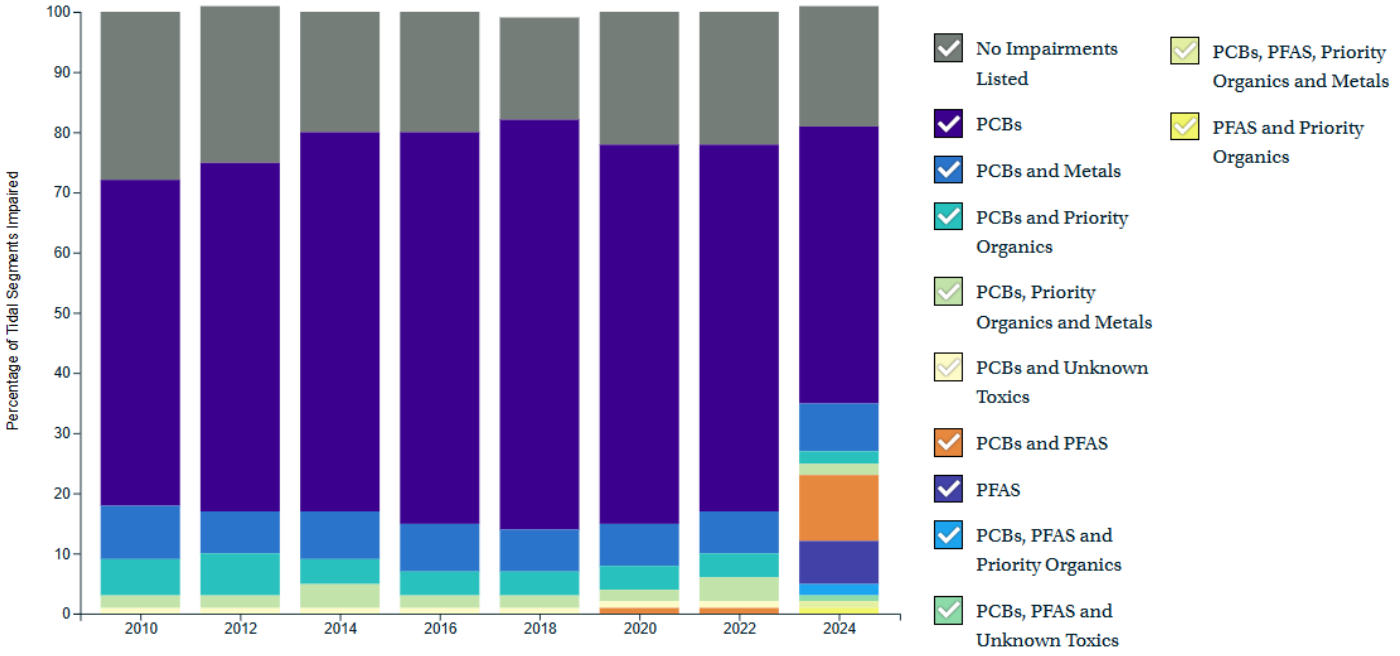
- 80.4% of tidal segments are fully or partially impaired by toxic contaminants
- PCB are present in 91% of impaired or partially impaired segments
- 5 segments delisted for PCBs in 2024
  - Upper Choptank River, Middle Choptank River, Lower Chester River, Lower Wicomino River, and Lower Patuxent River
- 22 new PFAS listings in 2024

Trends
(2010-2024)

Toxic Impairments in the Tidal Chesapeake Bay (2010-2024)

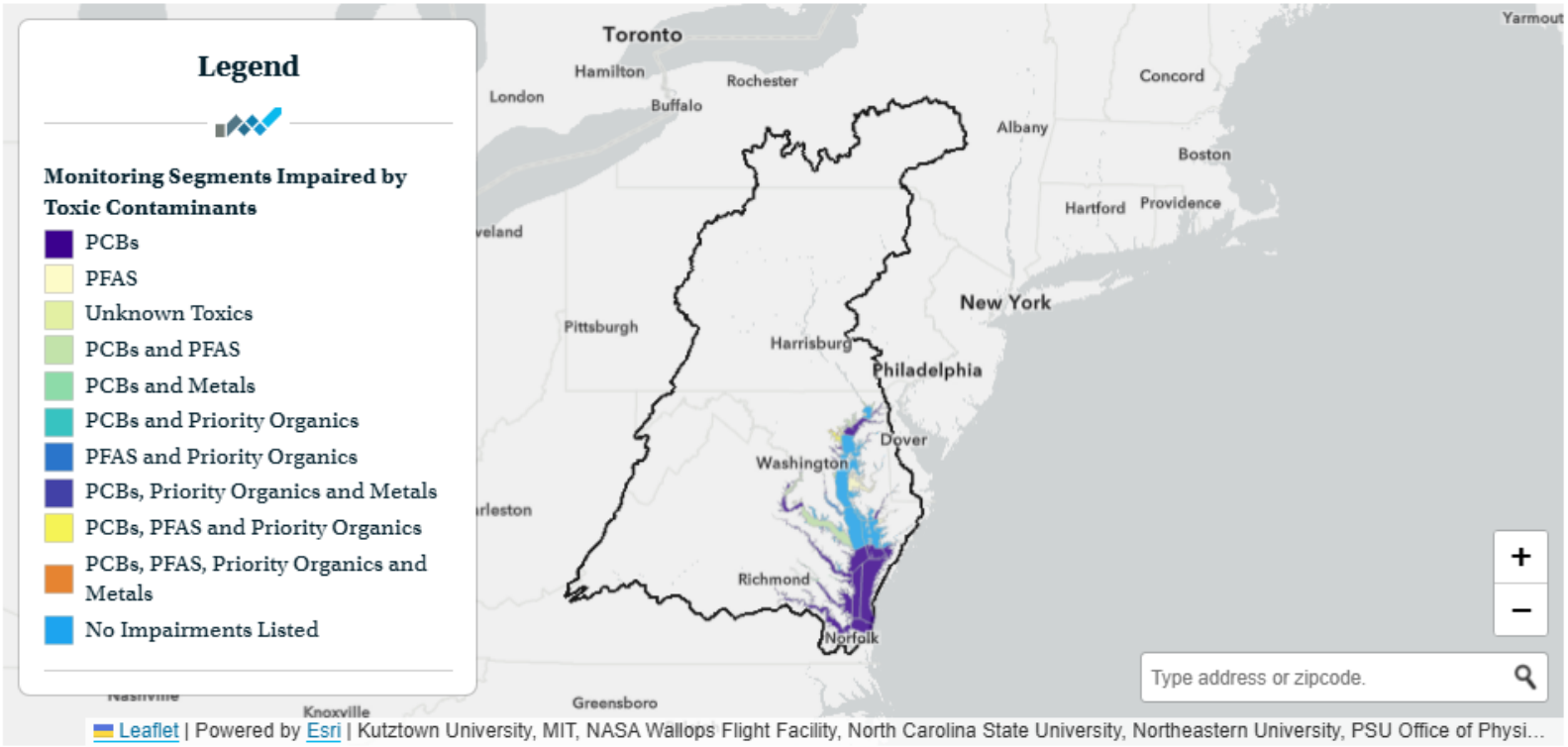
Percentage of tidal segments in Delaware, Maryland, Virginia and the District of Columbia with partial or full impairments due to chemical contaminants. Note: PFAS were not measured prior to 2020.

VIEW CHART VIEW TABLE



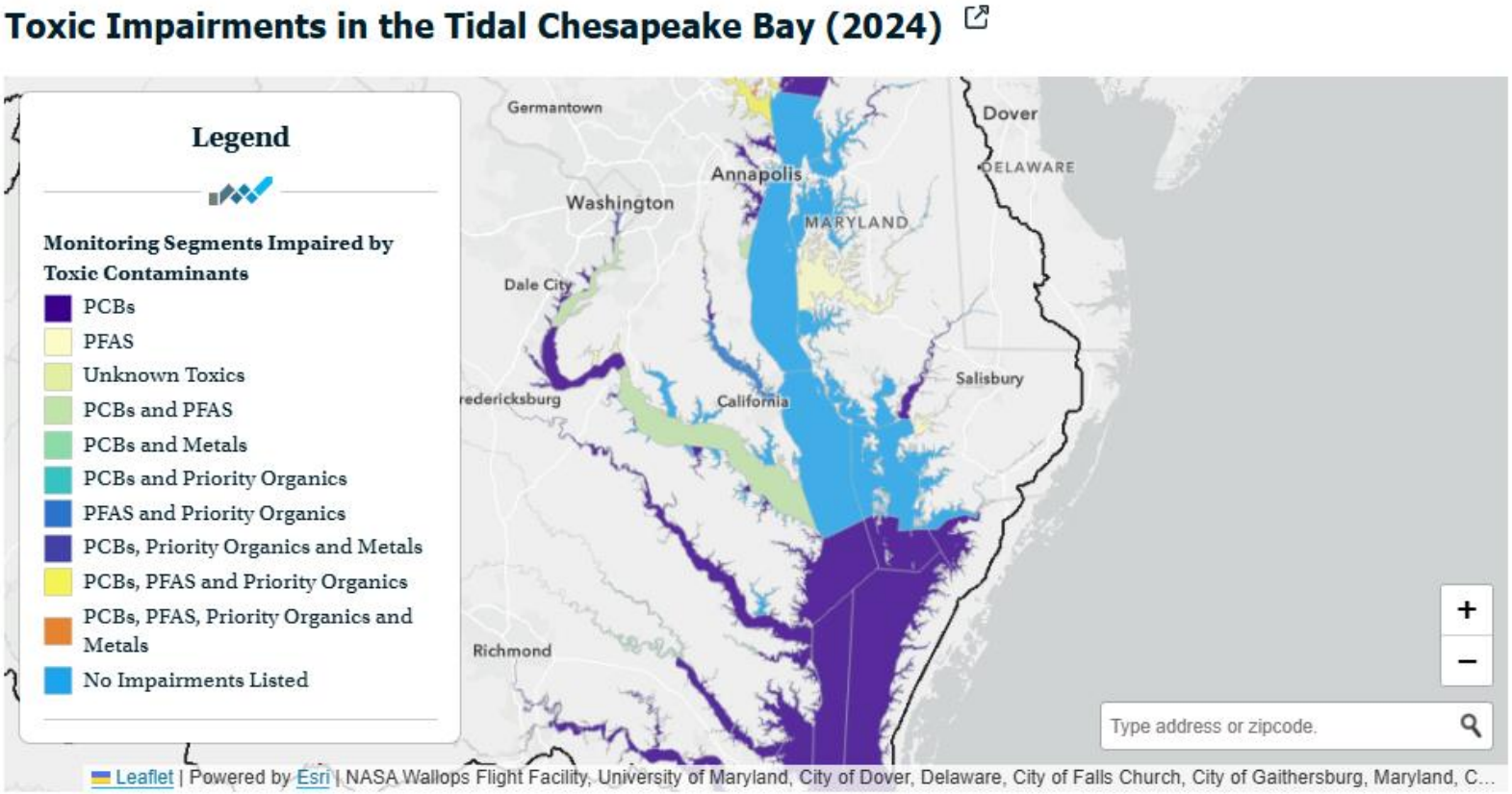
Web Map

Toxic Impairments in the Tidal Chesapeake Bay (2024)



https://gis.chesapeakebay.net/ags/rest/services/ChesapeakeProgress/cpChemical_Contaminants_2024/MapServer

Web Map



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Explore the Indicator

- Currently posted as a “2025 Snapshot” on ChesapeakeData. Includes:
  - Web Map
  - Analysis and Methods Document
  - Data File
- ChesapeakeProgress is undergoing revisions and is currently down.
- CBP Blog Post - Old chemicals, new concerns

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Indicators for the Revised Agreement

Current Reassessment Across CBP

- Indicators Team Survey
- Meetings with Outcome Leads
- Feedback and Development with Workgroups

STAR and Partnership Discussions

2025 STAR MEETINGS

- There is general interest in redefining Indicators – capture environmental metrics, reflect ecosystem response, and how program actions influence progress
- There is a need for supplemental, more relatable metrics to enhance understanding and engagement
- A need for consistent vocabulary

2026 STAR MEETINGS

- Be flexible with what is an indicator
  - There is both quantitative and qualitative outcomes/targets
- Every target/outcome doesn't need a quantitative indicator to showcase progress
- Targets can be indicators, but not all indicators are targets

https://www.chesapeakebay.net/files/documents/STAR-Discussion-Takeaways-2.26-Meeting.pdf

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What does an indicator for the new, combined Toxic and Emerging Contaminants Outcome/Target look like?

Discussion Questions

- Do you find value in the current TCPP Indicator? If so, how?
- Are there any limitations or issues with the current TCPP Indicator you would like to see improved if it continues to be used (e.g. scale, data source, frequency, etc.)?
- How could the workgroup track information sharing? Do we need to track this quantitatively?
- Do you find value in the PCB and Mercury Geonarratives? If so, how?
- What other Indicators or tools could be utilized? (This is a time for change, so all ideas are welcome!)

The York River at Riverwalk Landing. (Photo by Will Parson/Chesapeake Bay Program)