
DANGER!
EATING FISH FROM THIS RIVER
MAY CAUSE
CANCER

PCB Facts

- >1 million tons produced
- US largest producer
- 40% still in use

- PCBs continue to load into the Chesapeake Bay watershed
- Stormwater, wastewater and atmospheric deposition
- Some inadvertent production is possible
- Legacy and new inputs!

Chesapeake Bay Program
Science. Restoration. Partnership.

Toxic Contaminants Policy and Prevention

Scott Phillips (USGS) and other members of the Toxic Contaminants Workgroup

Through the Chesapeake Bay Watershed Agreement*, the Chesapeake Bay Program has committed to…*

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

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.

What We Want

Toxic Contaminants – Policy and Prevention (PCBs)

Requests:

- Support to investigate feasibility of PCB consortium
- Acknowledgement of toxic contaminants management in Phase III WIPs

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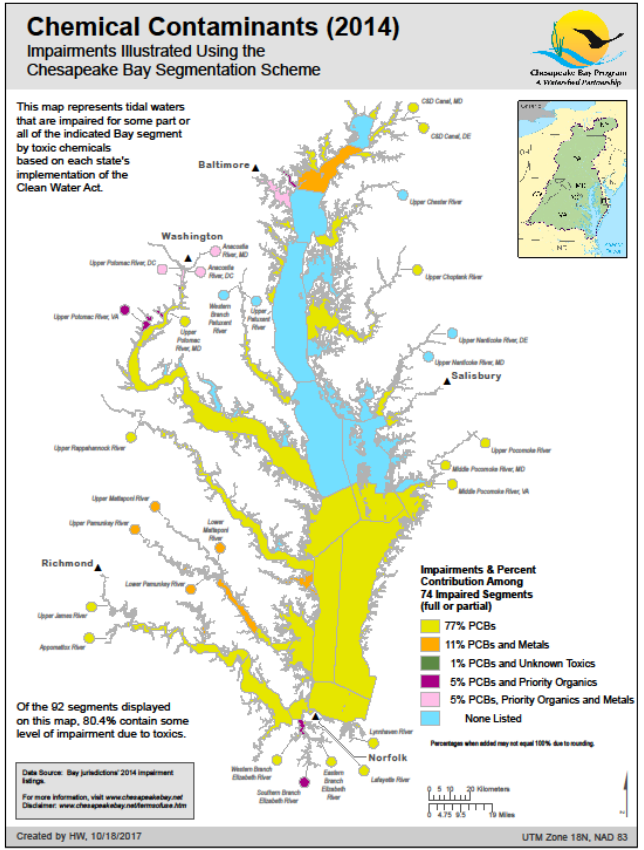
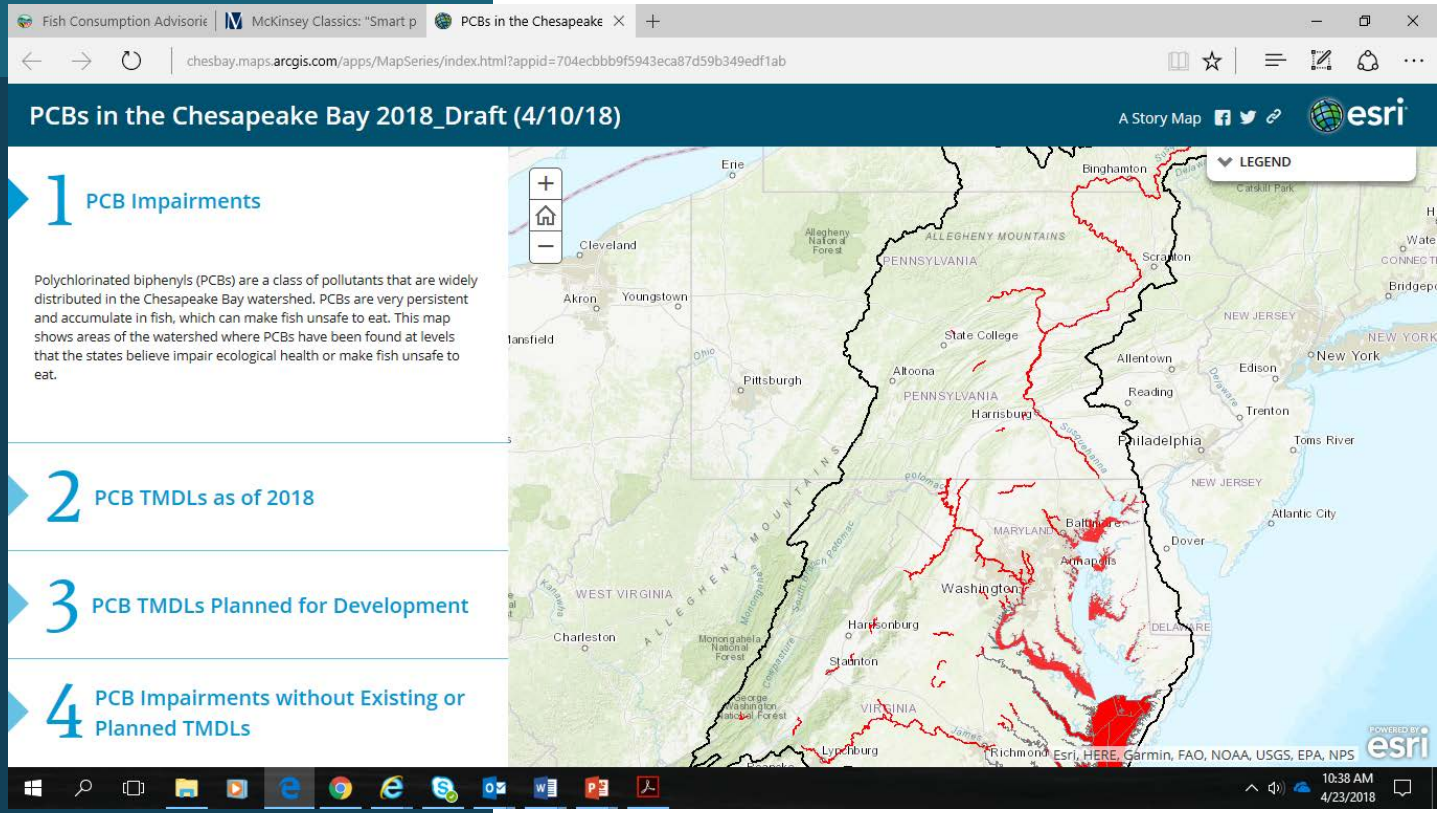
Setting the Stage:
Indicator and Story Map: Where are we now?



Tidal Waters Full or Partial Overlay with Toxic Impairments



PCB Story Map

Documents PCB impairments and stats of TMDLs

Logic Behind Our Outcome

Following the Decision Framework:

Factors Influencing Success

Toxic Contaminants – Policy and Prevention (PCBs)

- Broad geographic extent and distribution of PCBs
- Political will to modify regulatory programs and/or create voluntary programs
- High cost of remedies and testing
- Variety of sources and pathways for PCBs entering the environment that necessitate a wide-range of different management responses
- Knowledge gaps on relative sizes of PCB sources
- Need to shift paradigm to acknowledge that there are ongoing sources of PCBs not static “legacy” contaminants
- New factor: Need for a larger-scale forum to connect science and management and advance interstate collaboration and implementation of PCB TMDLs

Current Efforts and Gaps

Toxic Contaminants – Policy and Prevention (PCBs)

Current efforts center on excellent work by the jurisdictions to develop PCB TMDLs

Major rivers have or will have large-scale PCB TMDLs:

- Multi-jurisdiction tidal Potomac in place; non-tidal Potomac under development
- Conowingo Pool and Lower Susquehanna in development
- James scheduled for development

Gaps

- Lack of forum of appropriate scale for TMDL coordination
- Air deposition and flux data for use in PCB TMDL modeling

Management Approaches

Toxic Contaminants – Policy and Prevention (PCBs)

- Regulatory programs
- Education and Awareness
- Voluntary programs
- Science
- New management approach: **PCB Consortium**

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Progress:

Are we doing what we said we would do?

What is our progress?

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Due to lack of comprehensive monitoring, there is no available data set to determine environmental progress. Estimate is that PCB levels in fish are level or slightly declining. Some local areas may be declining.

Output Progress:

Regulatory Management Approach

- Substantial progress by jurisdictions to advance PCB TMDLs (e,g, MS4 monitoring for WLAs)
- Progress on PCB track-down guidance
- PCB Story map
- USGS-sponsored workshop on PCB science and management implications

What is our progress?

Toxic Contaminants – Policy and Prevention (PCBs)

Output Progress:

Education and Awareness Management Approach
- Fish Consumption Advisory Infographic (GIT Funding)

Voluntary Programs
- 2018 Study on the feasibility and value of a voluntary PCB removal (GIT Funding)

Science
- Estimating reduction of PCBs in effluent following upgrade of wastewater treatment plants (GIT Funding)

Workplan Estimate: 30% complete; 40% some progress; 30% no progress
CBPO campus invests approximately 0.7 FTE in toxic contaminants strategies

Analysis

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All previous management approaches still valid.

Regulatory/TMDL still thought to be most critical and provides greatest leverage point.

Addresses factor related to many different point and non-point sources

All management approaches will be carried forward and proposing new management approach – PCB Consortium to fill need for TMDL coordination at a scale commensurate with wide distribution of PCBs in the watershed

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Challenges:

Are our actions having the expected effect?

Challenges

Toxic Contaminants – Policy and Prevention (PCBs)

Scientific, fiscal or policy-related developments or lessons learned (if any) have changed logic or assumptions:

- Toxic contaminants Workgroup is not a sufficient platform to achieve the level of coordination and support needed to advance PCB TMDLs
- Low investment slows progress
- High cost of PCB analysis limits availability of low-detection data needed to track sources

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Adaptations:

How should we adapt?

Based on what we've learned, we plan to…

Toxic Contaminants – Policy and Prevention (PCBs)

- Continue to support the jurisdictions with their needs for PCB TMDLs
- Explore the PCB consortium concept
- Roll-out the FCA infographic and determine next action for education and awareness
- Conduct voluntary program feasibility analysis
- Science – complete WWTP study and identify new project – air deposition/flux is a science gap

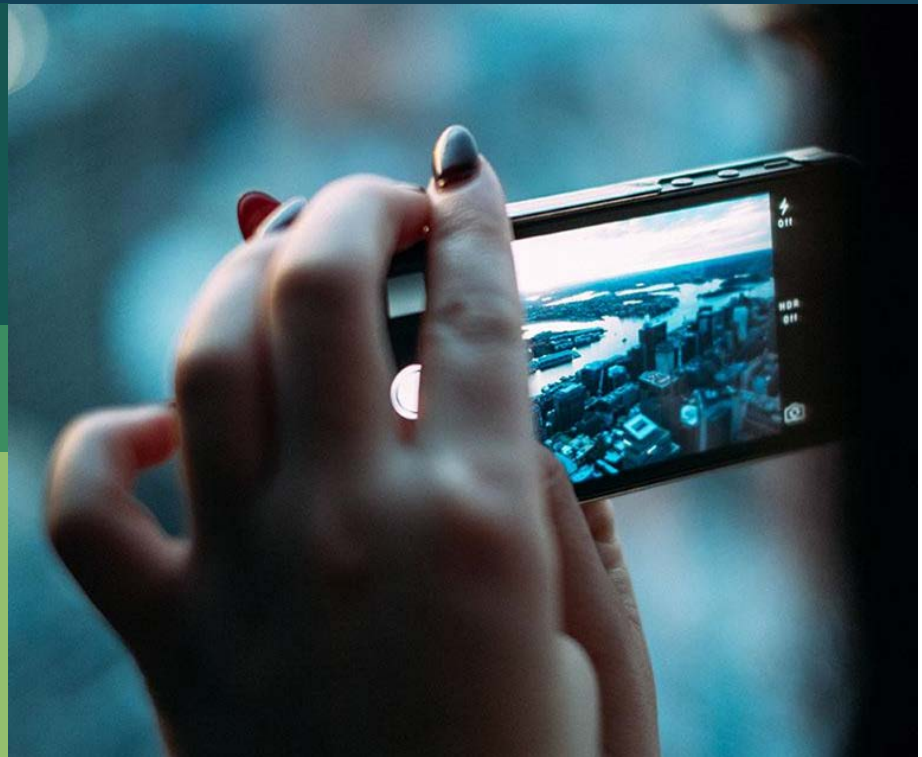
Cross-Outcome Considerations

Toxic Contaminants – Policy and Prevention (PCBs)

Cross-Outcome Projects

- BMP cross-benefit scoring and WIP III Fact Sheet
- Wastewater Workgroup – WWTP upgrade project
- Climate Resiliency Workgroup – Pilot for climate resiliency method
- Diversity Workgroup – EJ Screen demonstration: FCA infographic

What We Want



Toxic Contaminants – Policy and Prevention (PCBs)

- Support to investigate feasibility of PCB consortium
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PCB Consortium MB Ask

- Exploratory team will form on volunteer basis
- Participants could be EPA and other CBPO staff, EPA R3, USGS, Baltimore Urban Waters, Jurisdictions, Academics
- Back to MB in June with a plan
- Subsequent MB meeting with findings

Discussion