QUARTERLY PROGRESS MEETING – AUGUST 2022
Chesapeake Bay Program

Toxic Contaminants Research Outcome

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

Goal: Toxic Contaminants

Outcome: Continually increase our understanding of the impacts of and mitigation options for toxic contaminants through **research**.

What is our Outlook and Recent Progress?

- Outcome

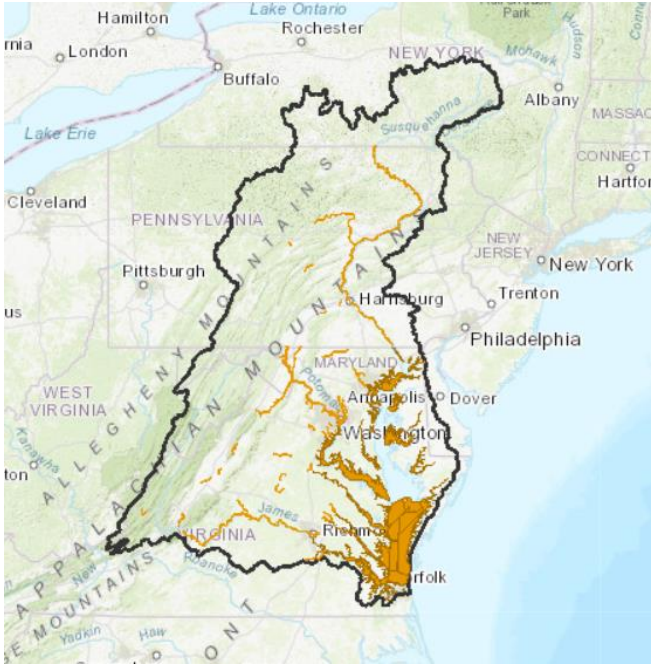
- Recent progress
- Further characterize the occurrence, concentrations, sources and effects of mercury, polychlorinated biphenyls (PCBs) and other contaminants of emerging and widespread concern.
- Identify which best management practices might provide best benefit, or multiple benefits of reducing nutrient and sediment pollution as well as toxic contaminants in waterways.

Learn

What have we learned in the last two years?

Successes

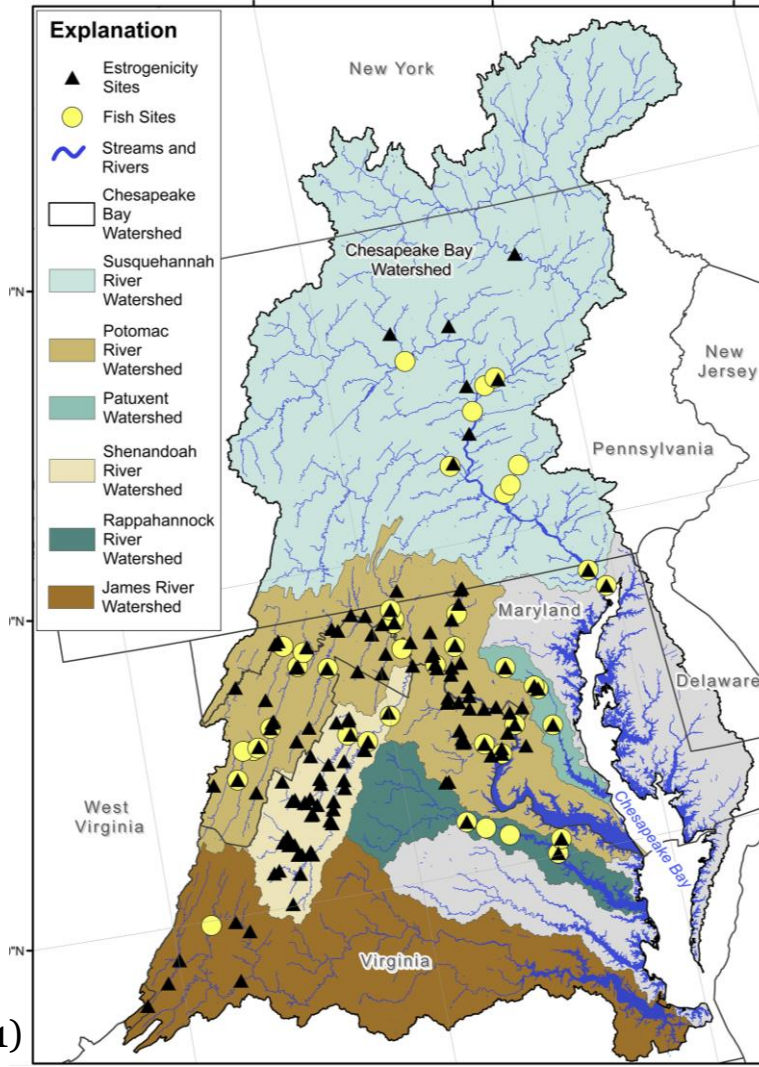
- *Synthesize scientific information to make fish and shellfish safe for human consumption - **Mercury and PCBs***
  - Updates on PCB science (best practices, source investigations)
  - PSC enhanced monitoring for PCB regional changes based on management actions



Successes

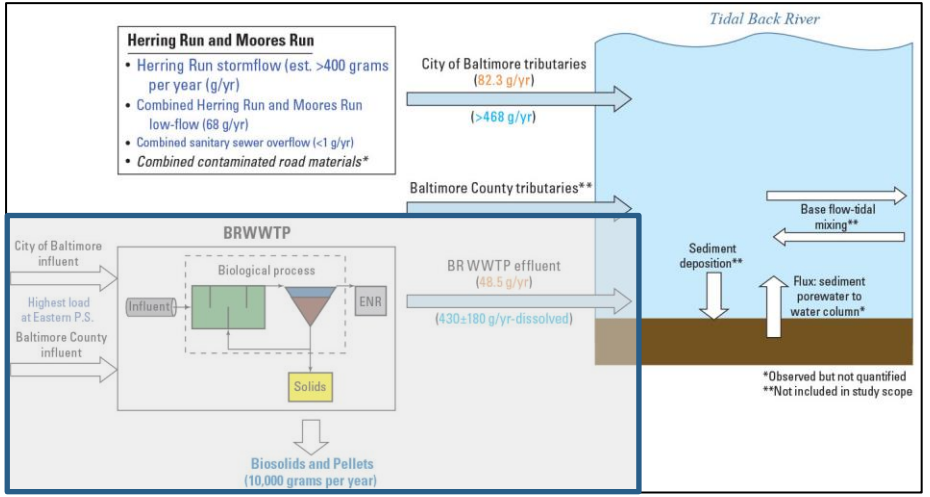
- *Understand the influence of toxic contaminants in degrading the health, and contributing to mortality, of fish and wildlife*
  - Effects of endocrine disrupting compounds (EDCs) on fish conditions
  - Relationships between fish health, land use, and estrogenicity
  - Risk modeling

(Blazer and others, 2021)



Successes

- *Synthesize and promote science to help prioritize options for mitigation to inform policy and prevention*
  - Management relevant timelines to detect BMP response
  - Wastewater (sanitary sewer) source tracking Back River

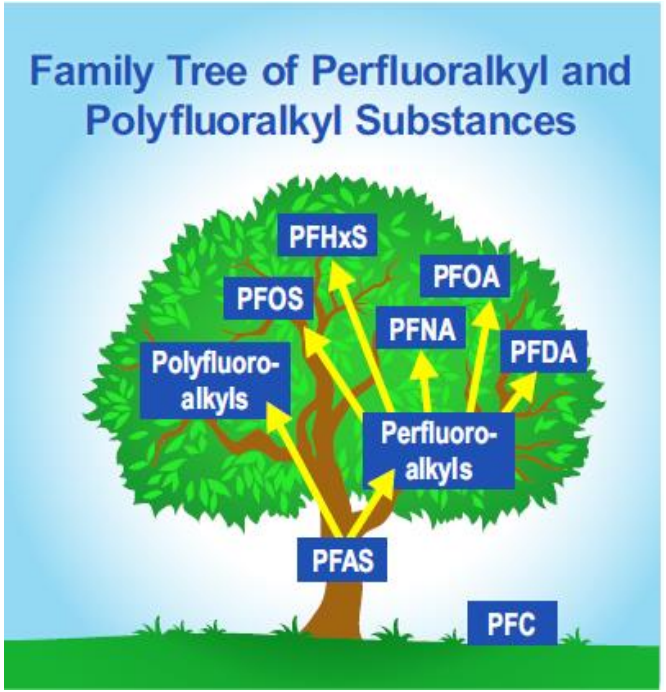


Challenges

- Cross-workgroup collaboration for actionable science
  - Interaction with SFGIT on fish consumption advisories/story maps
  - Consideration of toxic contaminants in fish habitat assessments
- Identifying appropriate method to link toxic contaminant BMP science to stakeholder tools

On the Horizon

- Science-related: PFAS studies in the watershed, microplastics risk assessment, endocrine disrupting compound study findings
- Policy-related: fish advisories for PFAS
- Fiscal-related: reduction in sampling for certain contaminants (e.g., PCBs) to allow for PFAS focus, human health prioritization by jurisdictions



[from PA DEP, https://www.dep.pa.gov/Citizens/My-Water/drinking_water/PFAS/Pages/default.aspx]

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Adapt

How does all of this impact our work?

Based on what we learned, we plan to …

- Have a larger emphasis on PFAS across most management approaches (out of emerging issues)
- Ongoing PCB TMDL implementation progress, bring forward associated science advances
- Microplastics risk assessment progress/inclusion of PPAT into TCW

Equitable and inclusive restoration …

Cross-collaboration partnerships

- Baltimore Urban Waters Partnership
- Anacostia Urban Waters Federal Partnership + Source control team
- Reimagine Middle Branch

Fish Consumption- PCBs, Hg, PFAS, microplastics

Fill the Gap

How can the Management Board help achieve the Outcome?

Filling the Gap

- Dedicate ¼-1/3 of meeting time in 2023-24 to PFAS science and coordination with members and identify how to best address STAC workshop forthcoming needs and recommendations
- Continue to transfer science and restoration management advances and evolve our working document on PCB TMDL implementation and management
- Integrate PPAT and their efforts more within the TCW

Help is Needed…

- Support for jurisdictional and federal agency participation and engagement in PFAS-focused science and coordination efforts
- Enhanced consideration by jurisdictions for reducing toxic contaminants when planning nutrient and sediment practices in 2-year milestones

Help is Needed…

- Support exploration of the PCB monitoring and assessment as proposed in the PSC monitoring report
- Identify and support opportunities for multiple benefits of toxic contaminant reductions through collaborations with other CBP workgroups including WWT, ag, stream health and the sustainable fisheries goal team

Discussion