QUARTERLY PROGRESS MEETING – AUGUST 2022
Chesapeake Bay Program

Toxic Contaminants Research Outcome

Emily Majcher,
USGS, vice-chair Toxic Contaminant Workgroup

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

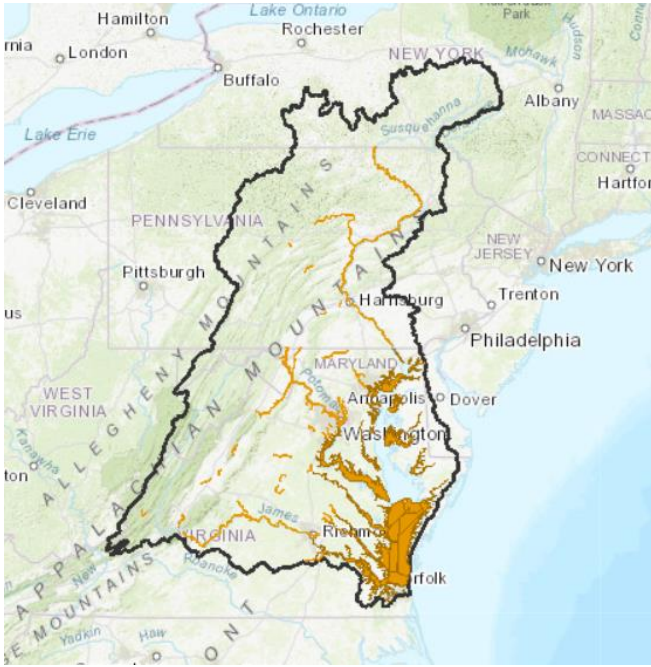
- Recent progress
  - Further characterize the occurrence, concentrations, sources and effects of mercury, polychlorinated biphenyls (PCBs) and other contaminants of emerging and widespread concern.
  - Identify which best management practices might provide best benefit, or multiple benefits of reducing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

Learn

What have we learned in the last two years?

Successes

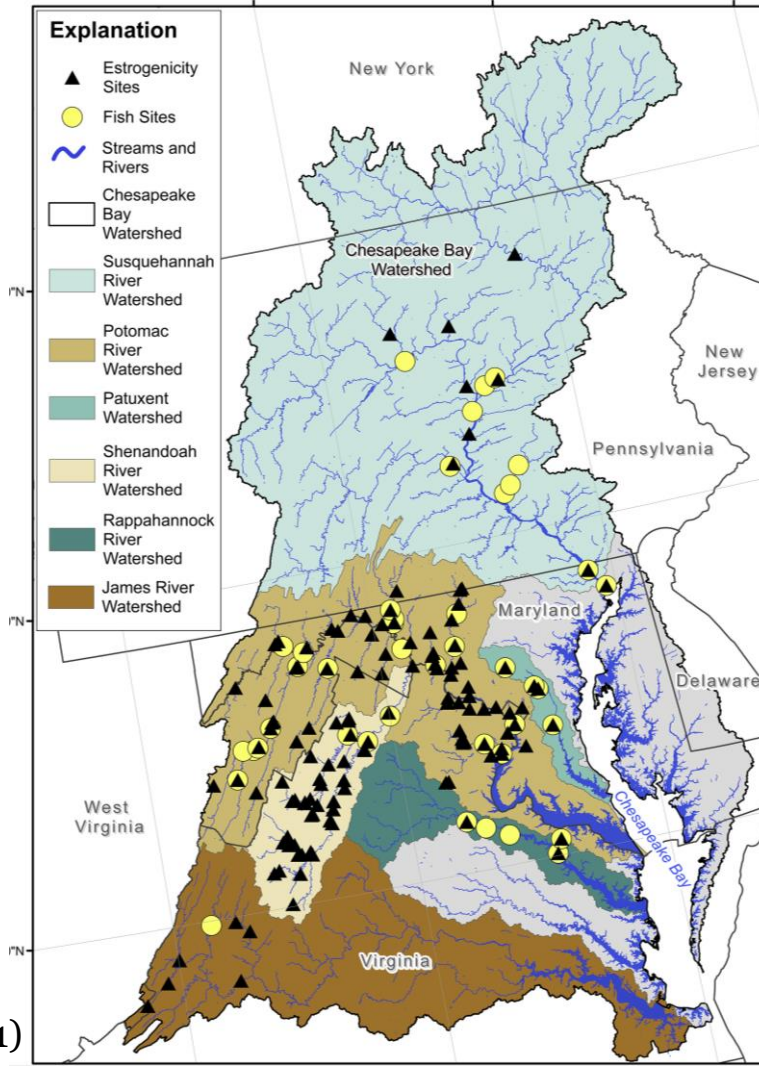
- *Synthesize scientific information to make fish and shellfish safe for human consumption - **Mercury and PCBs***
  - Updates on PCB science (best practices, source investigations)
  - PSC enhanced monitoring for PCB regional changes based on management actions



Successes

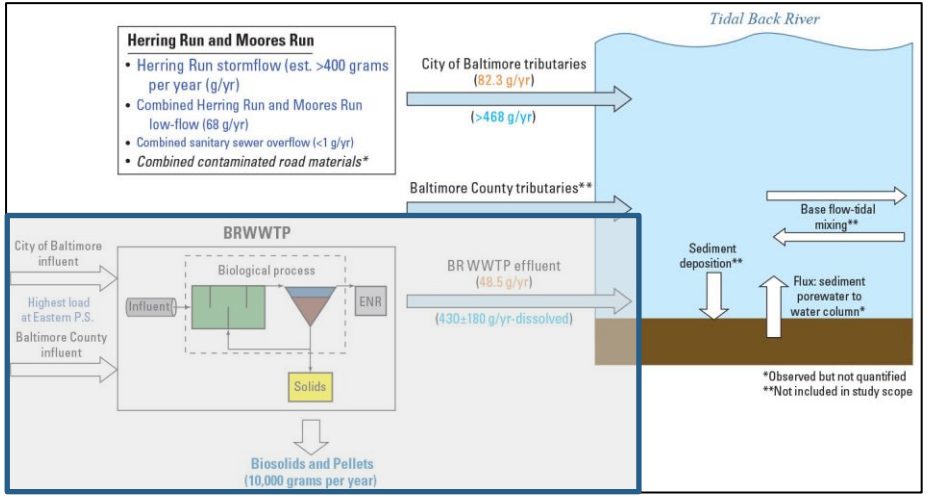
- *Understand the influence of toxic contaminants in degrading the health, and contributing to mortality, of fish and wildlife*
  - Effects of endocrine disrupting compounds (EDCs) on fish conditions
  - Relationships between fish health, land use, and estrogenicity
  - Risk modeling

(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

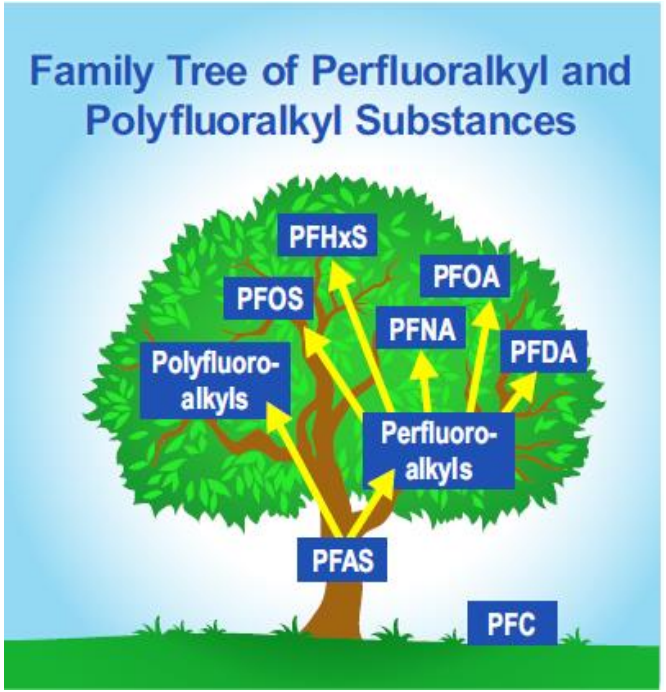


Challenges

- 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
- 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 Communication - PCBs, (PFAS, microplastics)

Fill the Gap

How can the Management Board help achieve the Outcome?

Help is Needed…

- Support for jurisdictional and federal agency participation and engagement in PFAS-focused science and coordination efforts
  - *Capacity to address forthcoming needs and recommendations from the STAC workshop report*
  - *With adequate notice, make appropriate staff available to engage in quarterly TCW PFAS discussions*

By February 2023, Emily Majcher

Management Board Response Options

1. Acknowledge that the MB is not committing to take specific action; Express gratitude for the work and information.
2. Handle the outcome request
3. Elevate to the PSC
4. Refer to another team/workgroup

Help is Needed…

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- Enhanced consideration by jurisdictions for reducing toxic contaminants when planning nutrient and sediment practices in 2-year milestones
  - *Identify and facilitate opportunities for collaborations with other CBP workgroups including WWT, ag, stream health and the sustainable fisheries goal team*

Prior to final SRS document submittal, Emily Majcher

Help is Needed…

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- Support opportunities to advance PCB enhanced monitoring and assessment as proposed in the PSC monitoring report by allowing staff to contribute to this effort
  - *Feasibility**
  - *Funding*
  - *Implementation*

In coordination with PSC Enhanced Monitoring Requests, Emily Majcher or Scott Phillips

Discussion