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

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

What is our Outlook and Recent Progress?

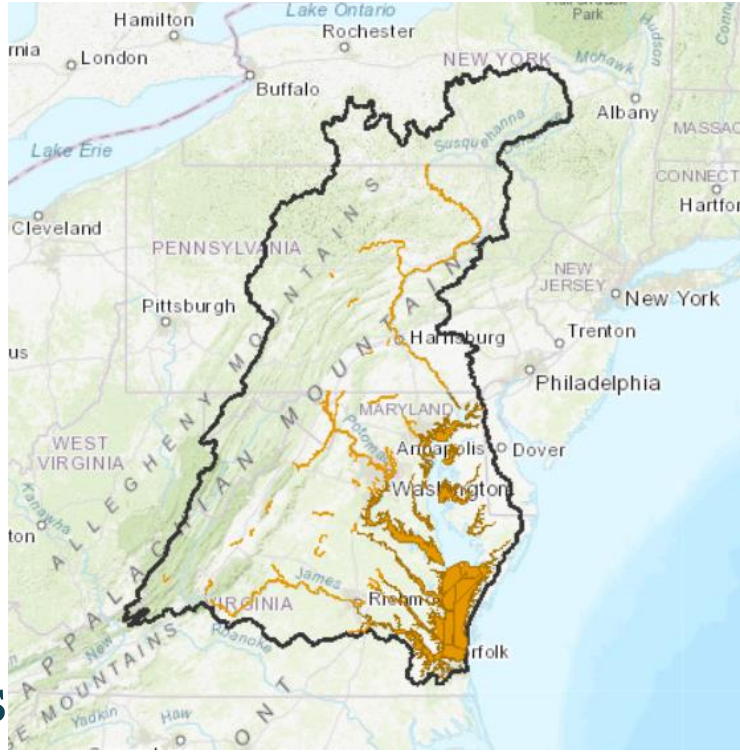
- Further characterize the occurrence, concentrations, sources and effects of mercury, polychlorinated biphenyls (PCBs) and other contaminants of emerging and widespread concern.
    - **Progress: Good,** progress has been made on mercury across the watershed and contaminants in local areas, but ability characterize more regional occurrence and concentrations of contaminants has been limited.
- 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.
    - **Progress: Fair,** progress has been made to better understand reduction in specific contaminants in specific management actions (PCBs in gray infrastructure, management relevant timelines from BMP implementation), but stormwater BMP studies continue to be limited. Additionally, jurisdictions WIPs don't have much emphasis on addressing co-benefits for contaminant reduction

Learn

What have we learned in the last two years?

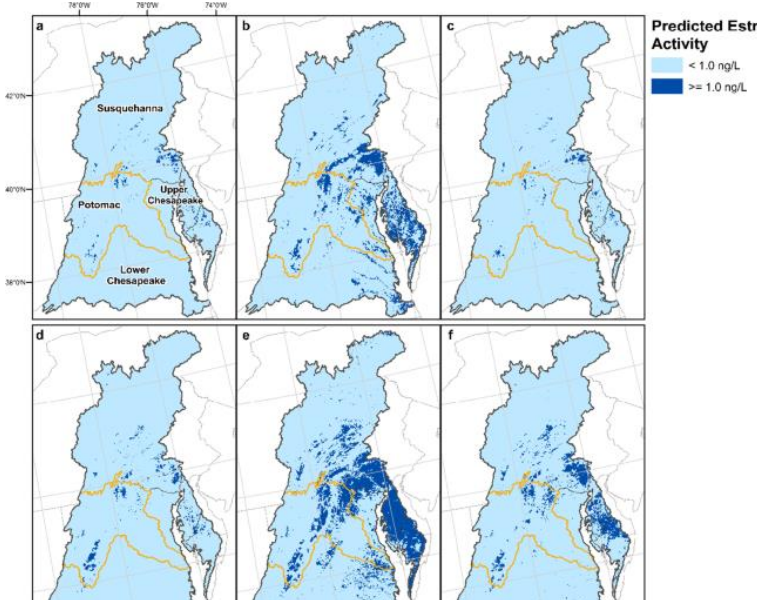
Successes and Challenges

- MA1: Supply information to make fish and shellfish safe for human consumption - **Mercury and PCBs**
  - Success: Further consideration of mercury coordinated monitoring
  - Success: Updates on PCB science (best practices source investigations)
  - Challenge: Interaction with SFGIT on fish consumption advisories/story maps



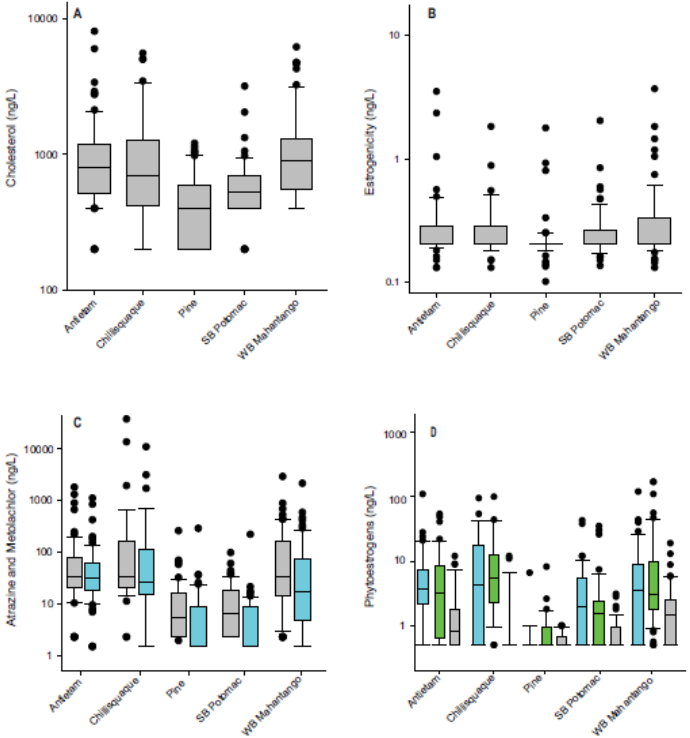
Successes and Challenges

- MA2: Understanding the influence of contaminants in degrading the health, and contributing to mortality, of fish and wildlife
  - Success: Effects of EDCs on fish conditions, relationships between fish health, land use, estrogenicity, risk
  - Challenge: Interfacing with SFGIT to consider contaminants in fish habitat assessments



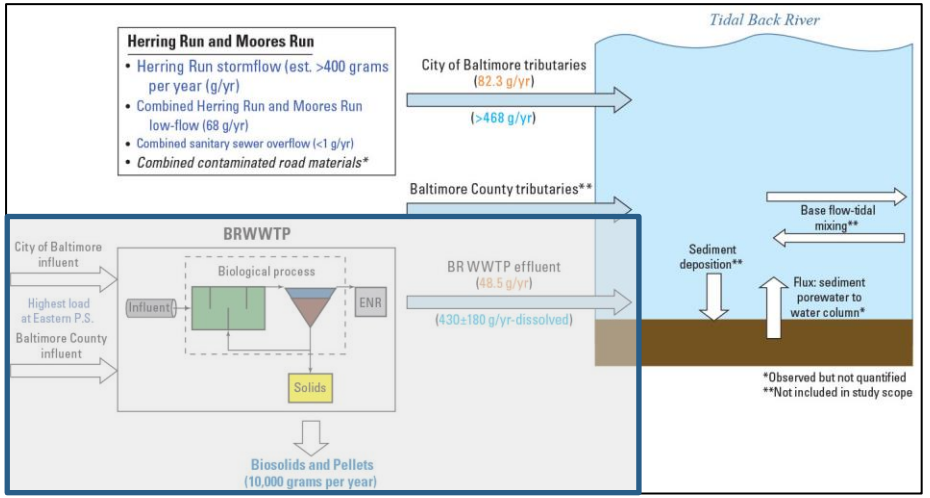
Successes and Challenges

- MA3: Document the occurrence, concentrations, and sources of contaminants in different landscape settings
  - Success: PFAS inventory effort, drive of contaminants in ag watersheds
  - Challenge: Examine the co-occurrenc of toxic contaminants with nutrients and sediments to inform co-benefit analysis



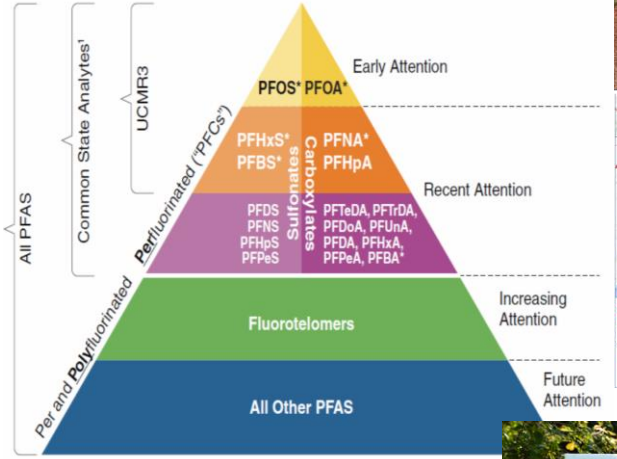
Successes and Challenges

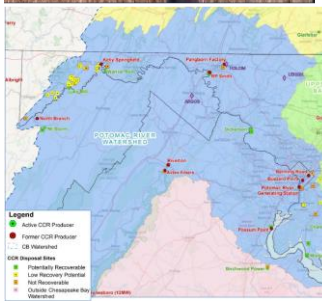
- MA4: Science to help prioritize options for mitigation to inform policy and prevention
  - Success: management relevant timelines – response to BMPs, WW source tracking Back River
  - Challenge: Identifying appropriate method to link BMP science to stakeholder tools



Successes and Challenges

- MA5: Gather information on issues of emerging concern
  - Success: PFAS workshop
  - Success: PPAT briefing
  - Challenge: Even with reduced number of emerging issues, challenge to address all (limited transfer related to chloride/road salt)





On the Horizon

- PFAS integration into management approaches based on evolving science gaps and needs identified in STAC workshop
- Science advances in PCB TMDL implementation/restoration activities
- Microplastics risk assessments

Adapt

How does all of this impact our work?

Based on what we learned, we plan to …

- Larger emphasis on PFAS in order to be responsive – up to 1/3 of meeting time, this could be through current
- Ongoing PCB TMDL implementation progress
- Microplastics /inclusion of PPAT into TCW

Equitable and inclusive restoration …

Cross-collaboration partnerships

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

Fish Consumption- PCBs, Hg, PFAS, microplastics

Fill the Gap

How can the Management Board help achieve the Outcome?

Filling the Gap

- With increased priority on PFAS by our members and opportunity to coordinate the science efforts, TCW will dedicate ¼-1/3 of meeting time in 2023-24 to this topic.
- With ongoing PCB TMDL implementation, ARP pilot and restoration via other efforts (e.g., Anacostia sediment project), TCW will continue to transfer science and restoration management advances and evolve our working document on implementation and management.
- With increased priority by the CBP, PPAT will become more integrated with the TCW

Filling the Gap

- Capacity is lacking to move action items identified by the group beyond simply technology transfer and into relevant and meaningful actions to achieve goals. Specifically,
  - Additional time with staffer, or additional staffer
  - Technical support for PFAS coordination and needs identified by STAC workshop
- Cross-workgroup and GIT benefits are apparent (US, WWT, SFGIT) but capacity is lacking to make this meaningful.

Discussion

ChesapeakeProgress Icons

RECENT PROGRESS
INCREASE

RECENT PROGRESS
DECREASE

RECENT PROGRESS
NO CHANGE

RECENT PROGRESS
COMPLETED

OUTLOOK
ON COURSE

OUTLOOK
OFF COURSE

OUTLOOK
UNCERTAIN

OUTLOOK
COMPLETED