Responding to the PSC Request to Improve the CBP Monitoring Networks: Interaction with the Toxic Contaminant WG

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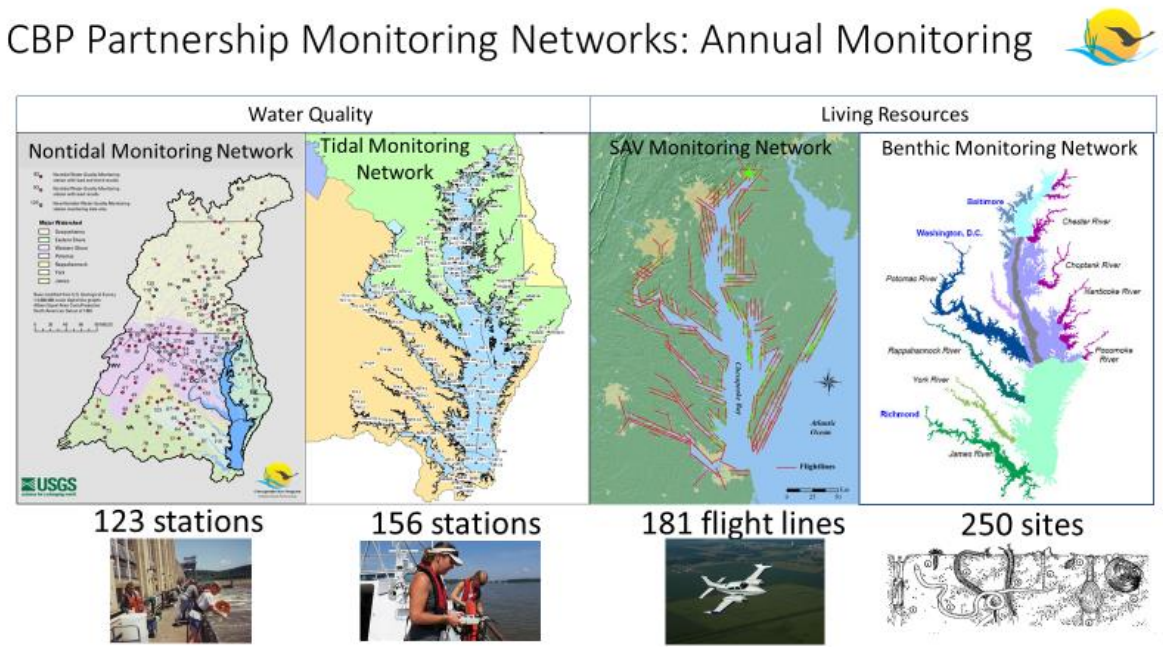
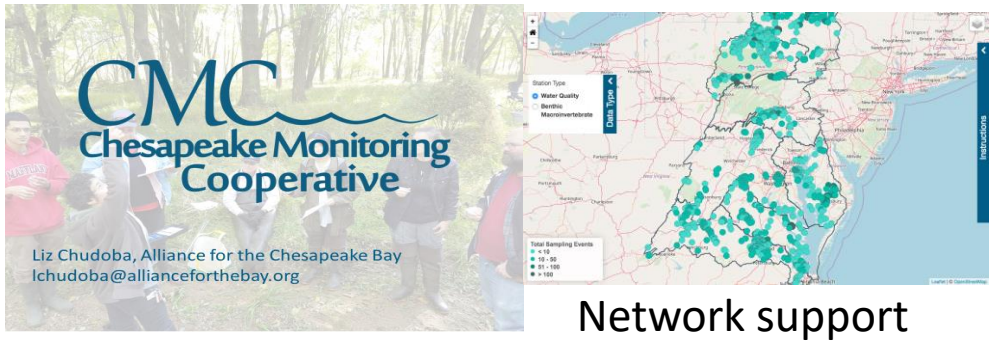
STAR Meeting

August, 2021

Principal Staff Committee: Enhance CBP Networks

- Help CBP better understand CBP budget and funding for monitoring
- *CBP Monitoring Networks*:
  - Tidal water quality
  - Nontidal nutrients and sediment
  - SAV
  - Tidal Benthic organisms
  - Citizen Monitoring
- Current Funding:
  - CBP $5M and partners >$7M





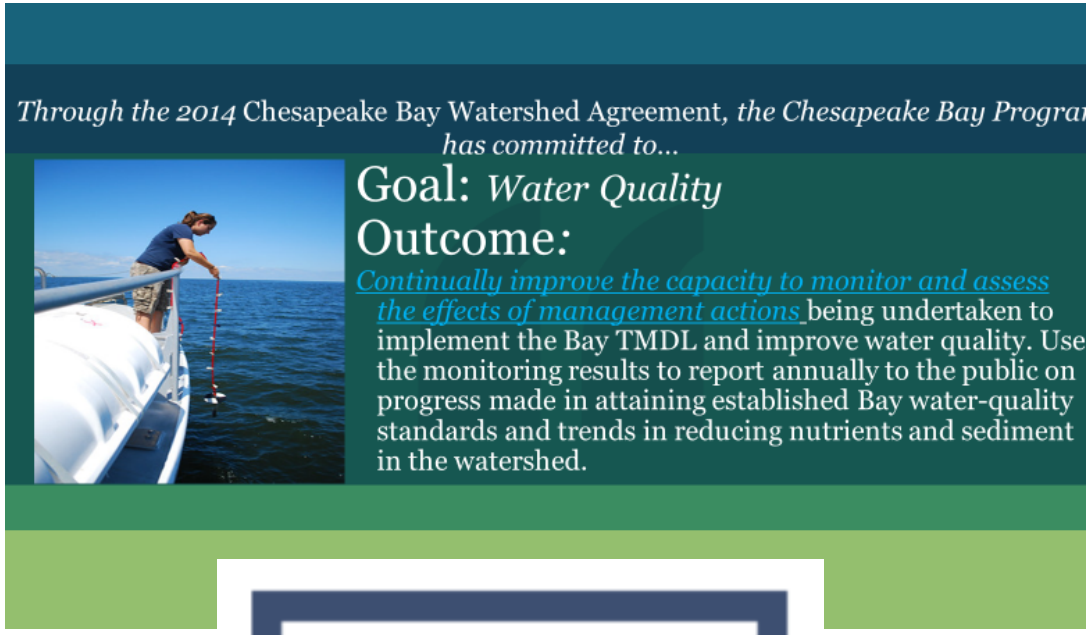
Network support

PSC Monitoring Request

- Enhance existing CBP monitoring networks
- Current CBP networks:
  - Water-Quality Focus

- What about monitoring needs of other CBP outcomes?
  - Input from Goal Teams/Workgroups
  - Selected outcomes

- PSC response will have two parts
  - Part 1: Existing CBP monitoring
  - Part 2: Needs of additional outcomes



CBP Goal: Reduce Effects of Toxic Contaminants

Severity of Contaminants

Widespread: PCBs and mercury

Localized:

- Dioxins/furans, PAHs, petroleum,
- Insecticides
- Metals

Uncertain:

- Pharmaceuticals, care products, flame retardants, biogenic hormones
- Herbicides

Some Guiding Principles for TCW Monitoring Discussions

A monitoring network for a wide range of contaminants would be extremely difficult and costly, so we need to prioritize the contaminants to be addressed.

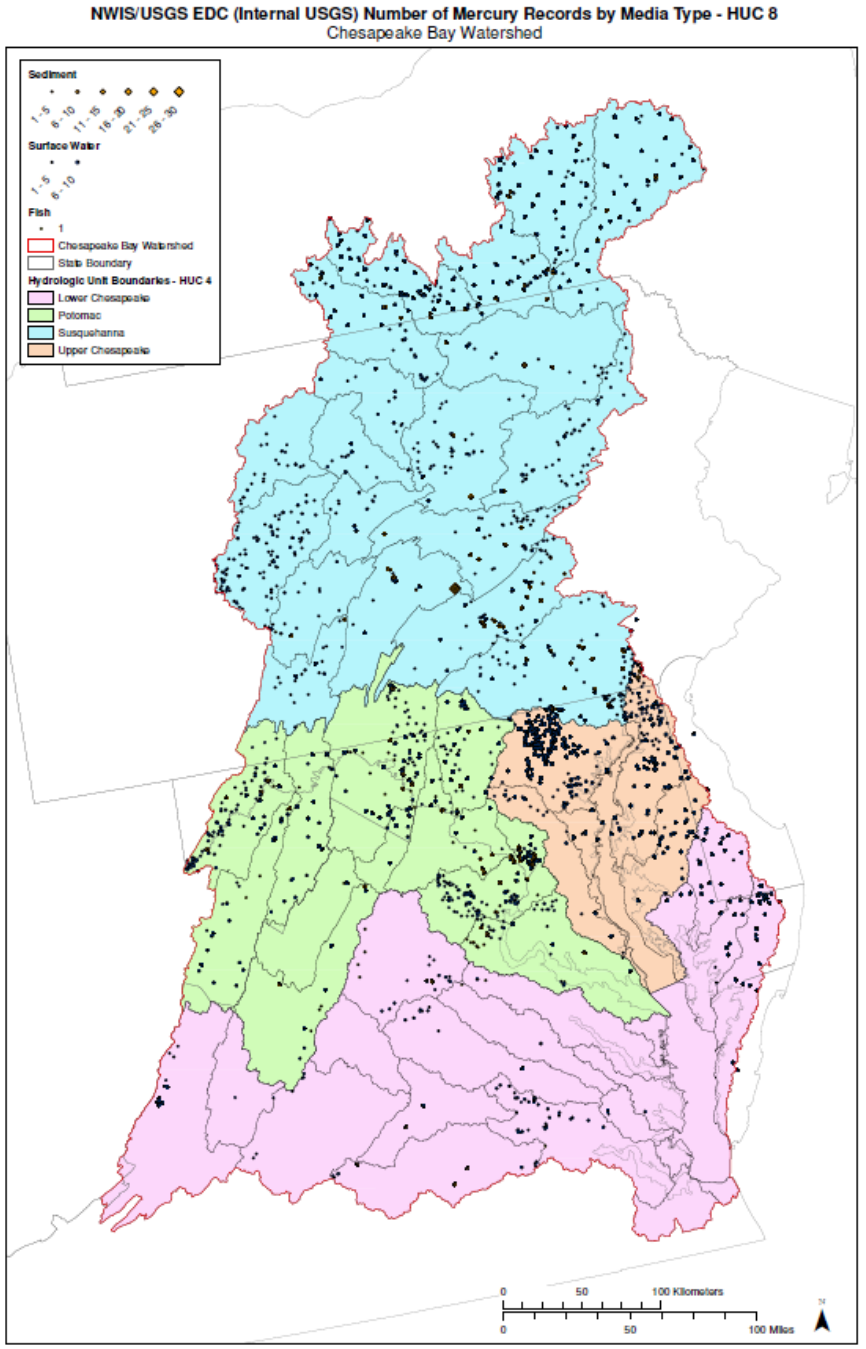
The monitoring objectives need to be specific to help focus types of monitoring that is proposed.

We need to take advantage of ongoing monitoring as a foundation for a network.

There will be limited CBP funding

Issues to Discuss: Toxic Contaminant Outcomes

- Needs for new monitoring
- Monitoring objectives
- Network design considerations
- Existing monitoring
- Remaining gaps
- Options to address gaps



Toxic Contaminants Monitoring Needs

- Two CBP outcomes reviewed to develop monitoring needs

- Policy and Prevention 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.

- Research Outcome….
  - Continually increase our understanding of the impacts and mitigation options for toxic contaminants
  - Occurrence, concentrations, sources and effects of…
  - Mercury, PCBs and other contaminants of emerging and widespread concern.

Developed Monitoring Objectives

- Developed four objectives based on monitoring needs

- Determine if work in non-tidal zones due to remediation and management actions are resulting in downstream reductions of PCBs in fish in key tidal tributaries (impaired for PCBs) through consistent assessment methods (field and analytical).
- Determine occurrence or status of PFAS and microplastics in surface waters of the major tributaries of the CB with varied land use to establish a baseline to track concentration and loading changes through time using consistent methods and analytes.
- Determine if implementation of BMPs and conservation practices over time results in declines in pesticide concentrations using a prioritized/standardized list of pesticides, and consistent sampling and analytical methods.
- Are reductions in air deposition of mercury reflected in fish tissue declines, specifically focused on food/recreational fish trends in urban and non-urban areas

- TCW prioritized objectives to limit scope of next steps:
  - PCBs
  - Emerging Contaminants

Process and Next Steps for TCW

- June: Overview by P. Tango
- July: Priorities and Objectives
- August-Sept: Design considerations; current monitoring
- Oct-Nov: gaps and options
- 2-page summary with supporting materials ready by Dec

Lessons Learned So Far: Toxic Contaminant Outcomes

- Monitoring needs based on outcomes
- Develop specific monitoring objectives
- Prioritize objectives so next steps focused on limited number

- Discussions range widely on level of detail
- Capture decisions and input in evolving discussion paper
- Use discussion paper for 2-page summary that will be part of PSC report