

# Integrating Science and Developing Approaches to Inform Management for Chemicals of Concern in Agricultural and Urban Settings



Scott Phillips, USGS  
WQGIT July 2020

Final report summary of the STAC Workshop held May 2019

# STAC Workshop Objectives

- Discuss contaminants related to fish consumption advisories, fish health, and emerging concern;
- Identify sources, occurrence, and transport of contaminants in agricultural and urban settings;
- Characterize opportunities to mitigate effects of contaminants in each setting by taking advantage of nutrient and sediment reductions, and other innovative approaches;
- Identify future needs for research and more integrated management approaches



# Status of CBP Response

- Workshop: May 2019
- Report: Jan 2020 released
  - request from STAC for CBP response
- Findings and draft actions shared with:
  - TCW, Ag WG, Stormwater WG, Water-Quality Goal Team
- Written response shared with WQ GIT and TCW; revised based on comments
- Approved by TCW, July 9
- Looking for approval from WQ GIT
- Present to MB

## Integrating Science and Developing Approaches to Inform Management for Contaminants of Concern in Agricultural and Urban Settings



STAC Workshop Report  
May 22-23, 2019  
Baltimore, MD



STAC Publication 20-001

# STAC Letter to CBP



- Gaps in compiling and communicating potential removal efficiencies for contaminants
  - Continued expansion and compilation of BMP studies
  - Examine known and emerging contaminants
  - Capitalize on possible co-benefits
- BMPs are necessary investment to reduce contaminant loads and improve water quality
  - Research investment to understand co-benefits or negative impacts
  - Close working relationship between researches and management community to develop tools
- [https://www.chesapeake.org/stac/wp-content/uploads/2020/01/FINAL\\_STAC-Report\\_Contaminants-of-Concern.pdf](https://www.chesapeake.org/stac/wp-content/uploads/2020/01/FINAL_STAC-Report_Contaminants-of-Concern.pdf)

# Potential CBP Responses to STAC

## STAC:

- Gaps in compiling and communicating removal efficiencies
- Close working relationship between researches and management community

## CBP Action 1: Enhance Interaction with Audiences for Contaminant Information

- Jurisdictions:
  - Implementing Phase 3 WIPs
- Water Quality GIT & workgroups
  - Ag, Stormwater, WWTP
- Local TMDL implementation
  - States, DC, and local jurisdictions
- Barriers to use of findings
- Science providers

# Potential CBP Responses

STAC: Close working relationship between researches and management community

## CBP Response 2: Take advantage of Phase 3 implementation

- Nutrient and sediment BMPs with contaminant benefits
- Jurisdictions consider BMP planning
- New findings provided 2 years
- Materials to inform decisions

2020	2021	2022	2023	2024	2025
Phase 3 WIPs	New findings		New findings		New findings



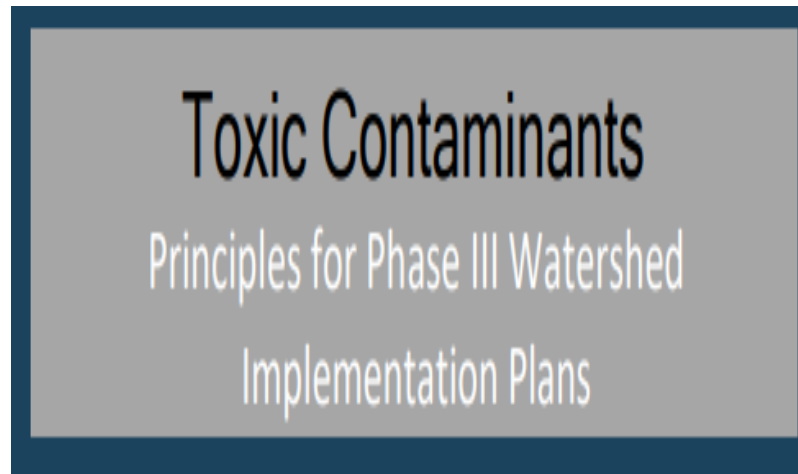
# Potential CBP Responses

**STAC:** Gaps in compiling and communicating removal efficiencies; close working relationships

## CBP 3: Enhance Communication Materials to Inform Decisions

- Stakeholder input on most useful topics
  - Ag, Urban, WWTP WGs

- Fact Sheets/  
Briefing Materials



Best Management Practices for Toxic Contaminants		
Best Management Practice	Urban Pollutants	Agricultural Pollutants
Ag Forest Buffer		4
Streamside Forest Buffers		3
Narrow Forest Buffer	3	3
Runoff Reduction	2.5	
Wet Ponds	2.5	
Urban Forest Buffers	2.5	
Filtering Practices	2	
Infiltration Practices	2	
Dry Ponds	2	
Bioretention	1.5	

# Potential CBP Responses

## STAC:

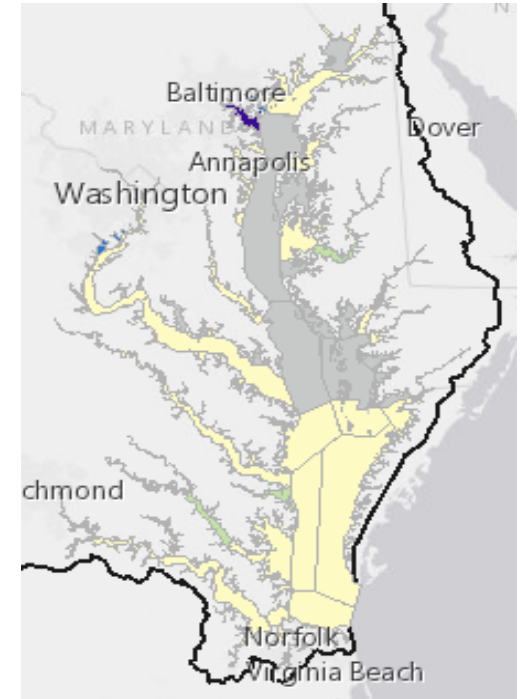
- Research investment to understand co-benefits or negative impacts;
- Gaps in compiling and communicating potential removal efficiencies for contaminants

## CBP 4: Compile results and expand BMP studies

- Science needs updated
- Synthesis of BMPs from existing studies
- Expand studies for contaminants of most concern
- Monitoring for progress in reducing contaminants/impacts

## CBP 5: Selected BMP results into CBP tools

- Watershed Dashboard, modeling, and CAST





# Next Steps and Questions

- Written response shared with WQ GIT and TCW; revised based on comments
- Approved by TCW, July 9
- Looking for approval from WQ GIT
- Present to MB
- Questions?
- Follow-up:
- Scott Phillips
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