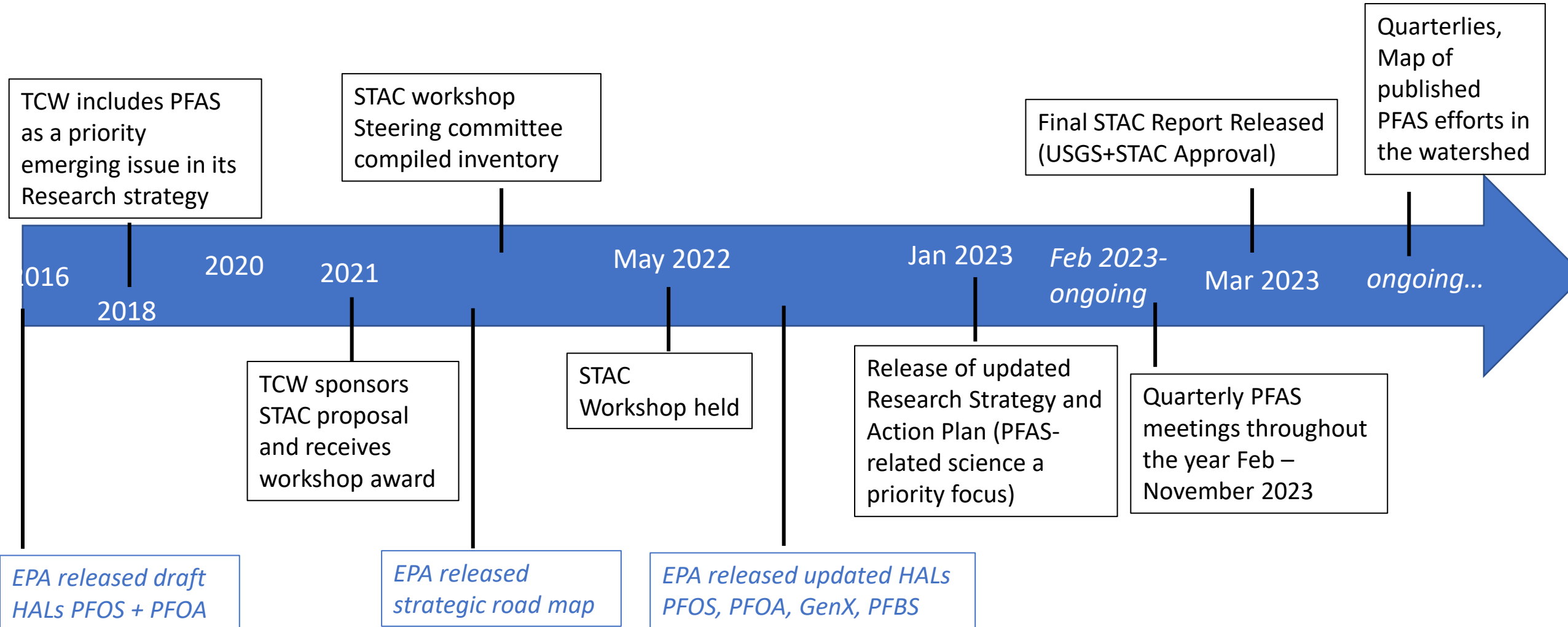


# *Toxic Contaminant Workgroup*

## *PFAS Related Activities*



# *Improving the Understanding and Coordination of Science Activities for PFAS in the Chesapeake Watershed- STAC Workshop*



[FINAL STAC-PFAS-Report-2.pdf \(https://www.chesapeake.org/stac/wp-content/uploads/2023/03/FINAL STAC-PFAS-Report-2.pdfchesapeake.org\)](https://www.chesapeake.org/stac/wp-content/uploads/2023/03/FINAL_STAC-PFAS-Report-2.pdf)

# *High priority science needs from Improving the Understanding and Coordination of Science Activities for PFAS in the Chesapeake Watershed*

## **Urgent, short-term**

- ✓ Temporal and spatial assessment in tributaries
- ✓ Coupled fish and surface water sampling

## **Near-term**

- ✓ Regionally uniform approach for consumption advisories.
- ✓ Effects on different life-stages of fisheries.

## **Near- to mid-term**

- ✓ Land-use impacts.
- ✓ Biological effects are low concentrations.
- ✓ Movement through the food web.

## **Long-term**

- ✓ Multiple stressor studies
- ✓ Non-lethal toxicity with emphasis on long term exposures
- ✓ Interface between water and land.



# *Actionable Recommendations from Improving the Understanding and Coordination of Science Activities for PFAS in the Chesapeake Watershed*

## **Study Design and Approaches**

- ❖ Consider a monitoring network and uniform approaches to directly assess PFAS.
- ❖ Design studies that relate PFAS occurrence and effects in different land-use settings.

## **Consistency in Data Collection**

- ❖ Develop and adopt similar methods to better compare data among studies.
- ❖ Collect standardized data for ecological risk assessments across a range of species to better protect aquatic resources.

## **Communicate and Collaborate**

- ❖ Enhance integration to facilitate broad coordination across the Watershed.
- ❖ Collaborate amongst jurisdictions to develop data needs for fish consumption advisories.



# We face common challenges in a rapidly evolving, complex topic...

## Objectives of quarterly meetings include:

- Knowledge transfer
- Maximize leveraging and collaboration
- Discuss and identify priority areas for unified approaches across the watershed
- Identify tangible ways the CBP partnership (TCW) can assist with promoting consistency





# Quarterly PFAS Meetings within TCW 2023

## Priority topics

- Working towards common analytical and field methods and approaches
- Development of fish consumption advisories and aquatic species criteria
- Improving our understanding of land-applied biosolids
- Tools and monitoring to inform source assessment

## Outcomes/Actions from

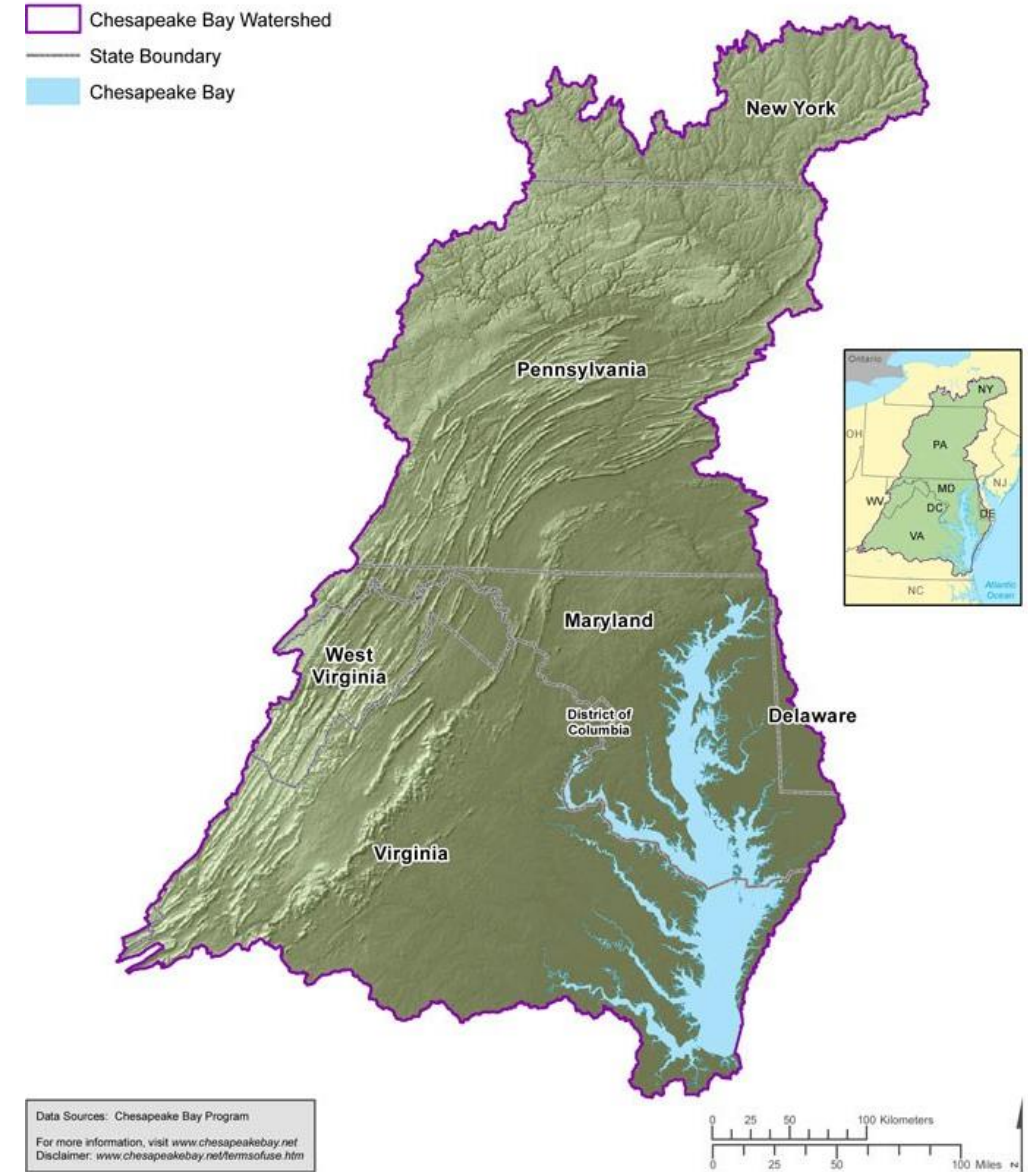
### *Working towards common analytical and field methods and approaches*

- Inventory of SAP/QAPP methods for CBW
- Decision trees for method selection based on study objectives
- Method variability documentation (same analytes different methods, same methods different labs)
- Facilitate partnering opportunities for nontargeted methods with academia or other researchers

# PFAS Quarterlies 2024

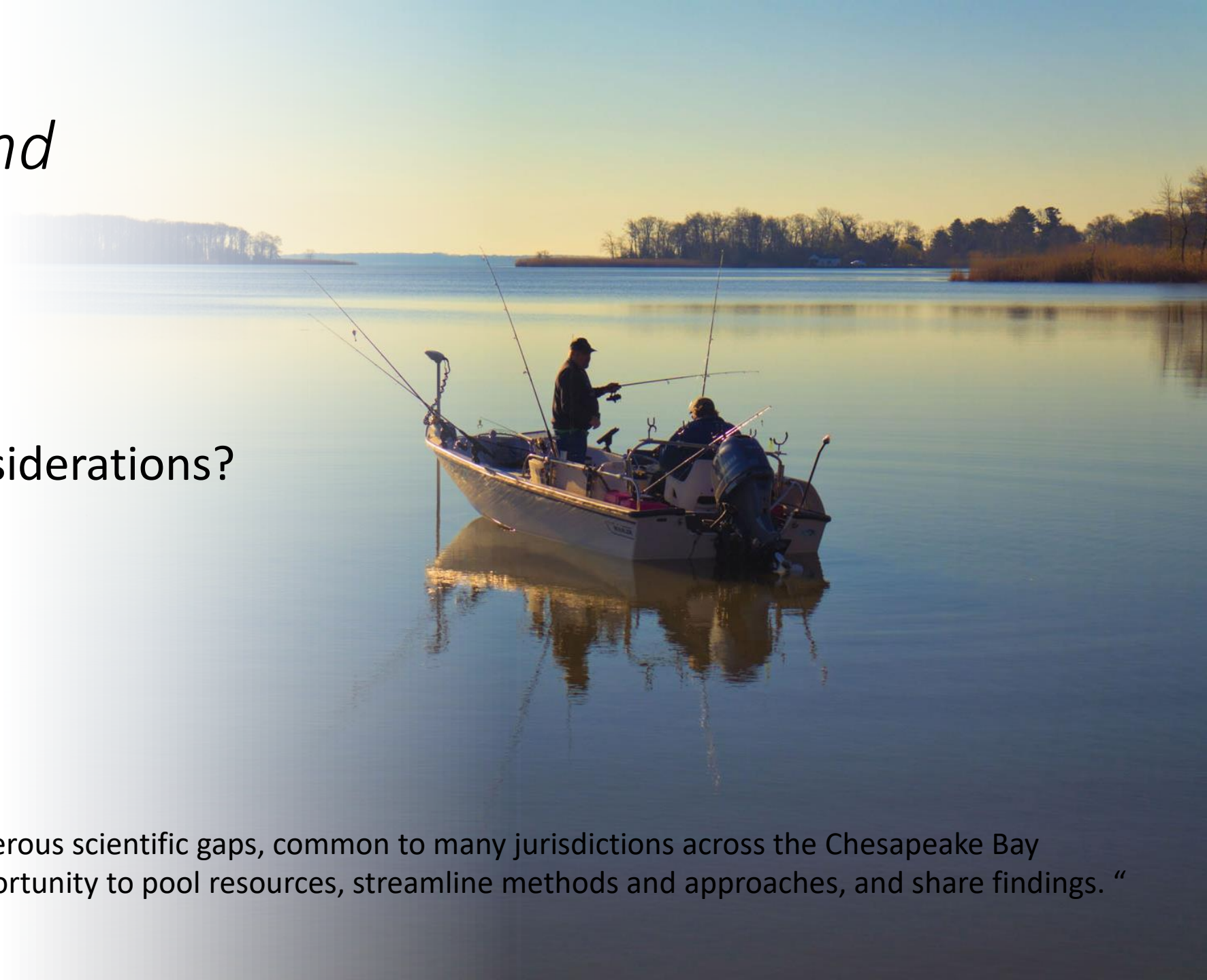
- Follow up from 2023 meeting topics?
  - FCA development
  - Agriculture
- Data interpretation tips, including QC
- Capacity building
  - Exploring EPA ORD collaboration (ROAR funding)
  - Exploring Small disadvantaged communities – Emerging contaminants (SDC-EC) funds – regional source water study
  - Leveraging academic/federal collaborations
- Discussions and lessons to be learned from other watersheds (for example DRB, CRB) and researchers from outside the watershed (ORD, academic)

## Chesapeake Bay Watershed



# *Take Aways and Next Steps*

- Meetings in 2024
- Beyond 2025 considerations?



“The current circumstance of numerous scientific gaps, common to many jurisdictions across the Chesapeake Bay Watershed, presents a unique opportunity to pool resources, streamline methods and approaches, and share findings. “