

# *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**

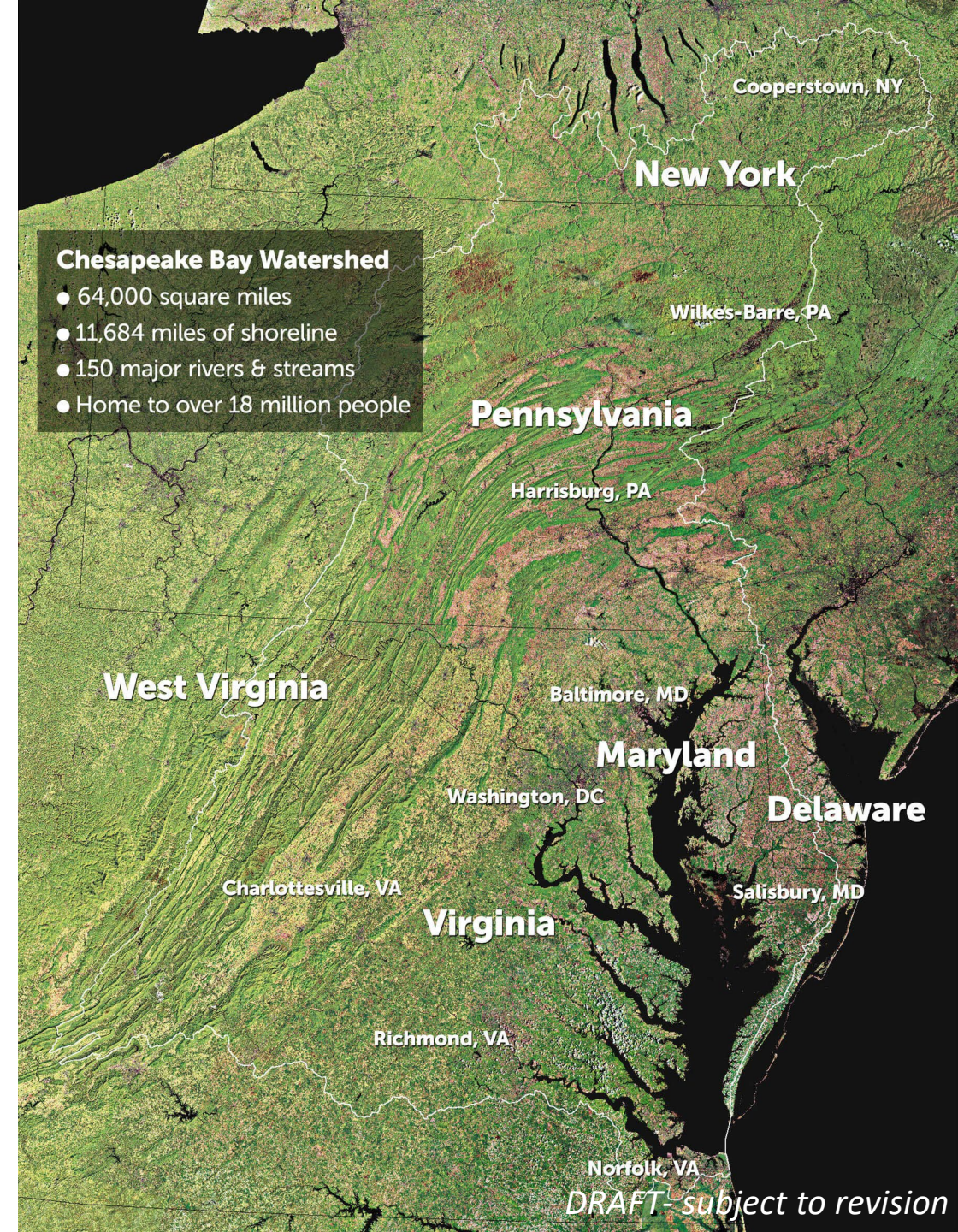
- ❖ Enhance integration to facilitate broad coordination across the Watershed.
- ❖ Collaborate amongst jurisdictions to develop data needs for fish consumption advisories.



# 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, promote consistency and advance science gaps
- *Continue to inventory and compile data for assessment at Partnership-relevant scale*





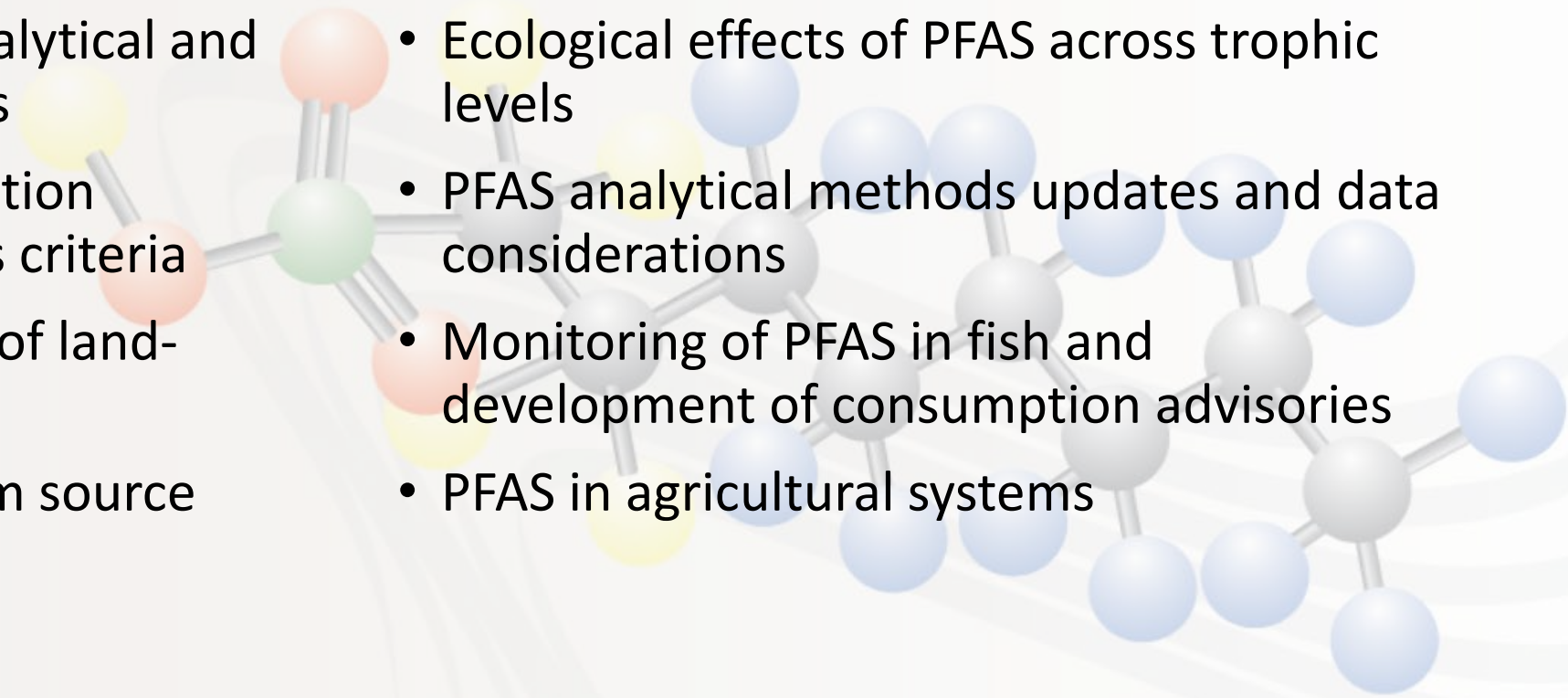
# *Quarterly PFAS Meetings within TCW*

## Priority topics covered in 2023

- 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

## 2024 + Jan 2025

- Ecological effects of PFAS across trophic levels
- PFAS analytical methods updates and data considerations
- Monitoring of PFAS in fish and development of consumption advisories
- PFAS in agricultural systems



# *2025 Next Steps*

- Continue to hold?
- Some Suggested Topics – July, October
  - Pesticides+PFAS
  - Biosolids
  - BMPs
  - Atmospheric deposition, air monitoring
  - Analytical methods (which ones?)
  - Others??

