Chesapeake Bay Program's (CBP)
Scientific and Technical Advisory Committee (STAC)

Improve the Understanding & Coordination of Science Activities for PFAS in the Chesapeake Watershed

May 17-18, 2022

In person participation: Historic Inn of Annapolis
Virtual participation: Zoom Registration
Workshop Webpage

****Exact Times Are Subject to Change****

DAY 1: Tuesday, May 17, 2022

9:15 am **Coffee & Light Breakfast (Provided)**

9:30 am **Welcome & Opening Comments** – *Kelly Smalling (USGS)*

Session 1: Current Understanding & Efforts to Address PFAS

This session will provide an overview of what is known in the Chesapeake Bay watershed while highlighting PFAS studies in other large watersheds with the purpose of understanding other comparable national efforts that may be considered.

9:35 am **Assessing the Ecological Risks of PFAS: Overview of an International Workshop** –*Jeff Steevens (USGS)*
Jeff Steevens will provide a summary of PFAS effects and current understanding of potential effects.

10:00 am **Summary of Current Understanding & Overview of Inventory Response** – *Michelle Lorah (USGS)*
Michelle Lorah will present an overview of current understanding and analyses of sources, occurrence, and fate of PFAS in the Chesapeake, including a literature review of relevant research.

10:25 am **Quantifying the Risk Panel: Investigations into Other Watersheds**
This panel will examine what investigations in other watersheds have discovered about PFAS and its ecological burden on fish and wildlife.

- **Great Lakes** – *Brian Lenell (EPA Region 5)*
- **Delaware Basin** – *Ron MacGillivray (Delaware River Basin Commission)*
- **PFAS Occurrence and Concentrations in Puget Sound Aquatic Life** – *Louisa Harding (WA Dept of Fish and Wildlife)*

11:05 am **Break**

11:20 am **Q&A for Panelists**
Question and answer session with invited speakers from the 'Quantifying the Risk Panel'.

11:35 am **Large Group Discussion**
The Steering Committee will lead participants in a focused discussion on questions, gaps and research needs.

12:00 pm **Lunch (Provided)**

Session 2: Considerations for Establishing PFAS Thresholds: Consumption Advisories & Identifying Potential Effects on Aquatic Organisms

This session will provide information and discuss options for developing PFAS fish consumption advisories and provide information on studies designed to assess the potential effects of PFAS on aquatic organisms in the Chesapeake watershed.

1:00 pm **Components to Develop Chesapeake Fish Consumption Advisories**

A series of short talks discussing approaches to develop consumption advisories and tools to support their development.

- **1:00 pm PFAS and NJ Fish Consumption Advisories** – *Sandra Goodrow (NJDEP)*
- **1:20 pm An Integrative Modeling Approach to Support Consumption Advisories** – *Tom Ihde (Morgan State), Lee Blaney (UMBC)*
- **1:40 pm Tissue Sampling in Maryland** – *Amy Laliberte (MDE)*

2:00 pm **Studies of Potential Toxic Effects on Aquatic Organisms**

A series of talks exploring the species of most concern in the Bay and watershed.

- **2:00 pm Fish Plasma** – *Heather Walsh (USGS)*
- **2:20 pm PFAS Toxicity to Aquatic Animals** – *Jamie Suski (EA Engineering, Science and Technology, Inc.)*
- **2:40 pm Overview of SERDP PFAS Ecotox Projects** – *Hunter Anderson (US Air Force)*
- **3:00 pm Summary of NOAA/NCCOS Research on PFAS** – *Marie DeLorenzo (NOAA)*

3:20 pm **Break**

3:35 pm **Small Group Discussion**

Participants will split into breakouts both virtually and online. Discussion will focus on identifying gaps and research/monitoring priorities with an emphasis on development of consumption advisories and studies addressing effects on aquatic organisms.

4:15 pm **Report Outs & Large Group Discussion**

Participants will report out on identifying gaps (and actionable recommendations) that should be considered for research and coordinated monitoring related to ecotoxicology.

4:45 pm **Recess**

DAY 2: Wednesday, May 18, 2022

9:00 am **Coffee & Light Breakfast (Provided)**

9:15 am **Synthesis of Day 1 & Focus of Day 2 –** *Kelly Smalling (USGS)*

Kelly Smalling will provide opening comments, highlights and key takeaways from Day 1, and the focus of Day 2.

Session 3: Considerations for Developing a Coordinated Monitoring Effort for PFAS in the Chesapeake Bay: Sampling & Analysis

Currently, jurisdictions and researchers are independently making decisions about sampling and analysis methods. Appropriate selection, pros and cons (or benefits/drawbacks) of various methods in water and tissue are common questions. Coordinating these approaches now will support coordinated monitoring effort and allow for assessment of data at a broader scale.

9:30 am **Summarize Study Design & Method Information**

A series of talks summarizing existing methods currently being utilized by jurisdictions and researchers within the Chesapeake Bay and elsewhere.

- **9:30 am** Overview of Inventory — *Michelle Lorah (USGS)*

- Common Approaches Being Adopted
  - **9:40 am Tissue Methods** – *Anna Robuck (Mt Sinai School of Medicine)*
  - **10:00 am Water Sampling and Analysis** – *Joe Duris (USGS)*

10:30 am **Small Group Discussion**
Participants will split into breakouts both virtually and online. Discussion will focus on sampling and analysis methods.

11:10 am **Break**

11:20 am **Report Outs & Discussion**
Participants will report out on current methods being utilized and recommendations that support a coordinated monitoring effort and allow for assessment of data at a broader scale.

12:00 pm **Lunch (Provided)**

Session 4: Develop Recommendations to Address Science Gaps for a More Coordinated Research & Monitoring Effort for PFAS in the Chesapeake

This session will discuss options and develop actionable recommendations for research and coordinated monitoring of PFAS in the Chesapeake watershed.

1:00 pm **Small Group Instruction –** *Kelly Smalling (USGS)*

1:15 pm **Small Group Discussion**
Participants will discuss the high priority science gaps identified during Session 1 and 2 and develop actionable recommendations for a more coordinated monitoring of PFAS including an integrated and cost-effective approach for monitoring, modeling, and innovative methods across the watershed. There will be a built-in break participants will take in their groups.

2:45 pm **Break**

3:00 pm **Report Outs & Discussion**
Breakout groups will report out and then the entire group will work to identify and discuss recommendations for research and monitoring.

3:45 pm **Wrap Up, Next Steps & Closing Comments**

4:00 pm **Adjourn**

4:00 pm **Steering Committee Meets**
After the workshop adjourns, the Steering Committee will meet to discuss workshop takeaways, next steps, and a timeline for writing the STAC report.