



Chesapeake Bay Program's (CBP)
Scientific and Technical Advisory Committee (STAC)
Workshop – April 22, 2022

**Advancing Monitoring Approaches to Enhance Tidal Chesapeake Bay
Habitat Assessment on Monitoring Water Clarity and Chlorophyll a**

Virtual Meeting
[Workshop webpage](#)

Friday, April 22nd

[Register in advance](#)

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

- 9:00 am** **Welcome, Introduction and Overview of Workshop Goals**
- 9:30 am** **State Water Clarity Assessment Review**
- **9:30 am** **MD and VA Water Clarity Assessment** —
Mark Trice (MD DNR), David Parrish (VIMS)
 - **9:45 am** **DC Water Clarity Assessment** — *Nicoline Shulterbrandt (DOEE)*
- 9:55 am** **Resources and Insights for Extending to Baywide Annual Clarity-related Analyses**
- **9:55 am** **Short and long-term station-specific water clarity secchi trends** —
Rebecca Murphy (UMCES)
 - **10:15 am** **Remote sensing of Water Clarity in the Chesapeake Bay: Advantages and disadvantages** — *Jessie Turner (UConn and VIMS)*
- 10:35 am** **Break**
- 10:50 am** **Resources and Insights for Extending to Baywide Annual Clarity-related Analyses (Continued)**
- **10:50 am** **Merging Landsat-8, Sentinel-2, and in situ data to improve coastal water clarity monitoring** — *Sarah Lang (University of Rhode Island)*
 - **11:10 am** **NOAA satellite-based Products for Chesapeake Bay Water Clarity**—
Ron Vogel (NOAA Satellite Applications & Research/CoastWatch)
- 11:30 am** **Group Discussion**
- Participants will discuss in a group what products available for decision-making they are currently utilizing. This conversation is aimed at working through the following questions:
- Are advances in water clarity monitoring suitable to adopt as an update for our programs?
 - What advantages or limitations if any do you see to adapting our monitoring to use outputs of recent research to advance our assessment of water clarity in the bay?
 - Cost
 - Spatial coverage
 - Temporal frequency of location coverage
 - Image resolution
 - Habitat considerations
 - Satellite continuity and comparability
 - Policy considerations
 - What monitoring efforts can we recommend to enhance calibration and accuracy of assessments with satellite based approach.
 - Does satellite-based assessment offer an option for annual frequency baywide water clarity assessments?
 - What analyses updates or changes might be necessary?

- 12:00 pm** **Lunch**
- 1:00 pm** **Recommendations for Satellite-based Assessment of Water Clarity**
Participants will develop draft recommendations on steps toward a satellite-based assessment of water clarity for:
- Research needs
 - Monitoring needs
 - Management needs
 - Policy needs
- 1:45 pm** **State Chlorophyll a Assessment Review**
- **1:45 pm** **MD Chlorophyll a Assessment** — Slides prepared by *Matt Stover (MDE)*
 - **1:55 pm** **VA Chlorophyll a Assessment** — *Tish Robertson (VA DEQ)*
- 2:05 pm** **Break**
- 2:15 pm** **Resources for Chlorophyll a-related Analyses**
- **2:15 pm** **Short and long-term station-specific CHLA secchi trends** — *Rebecca Murphy (UMCES)*
 - **2:35 pm** **USGS satellite-based CHLA assessment for Chesapeake Bay** — *Kendall Wnuk (USGS)*
 - **2:55 pm** **NOAA satellite-based CHLA assessment for Chesapeake Bay** — *Michelle Tomlinson (NOAA)*
- 3:15 pm** **Break**
- 3:25 pm** **Group Discussion/Recommendations:**
This discussion is aimed at what recommendations are needed from the current assessment to expand criteria, develop new criteria, and possibly new assessment protocols.
- Are you using any of the products available for decision-making? If not, why not?
 - Temperature sensitivity: Do we have the right definitions of spring and summer?
- Participants will develop draft recommendations on steps toward a satellite-based assessment of Chlorophyll a for:
- Research needs
 - Monitoring needs
 - Management needs
 - Policy needs
- 4:25 pm** **Adjourn**