

# Improving Chesapeake Bay Program Monitoring Networks



## PSC Monitoring Review: May 2021

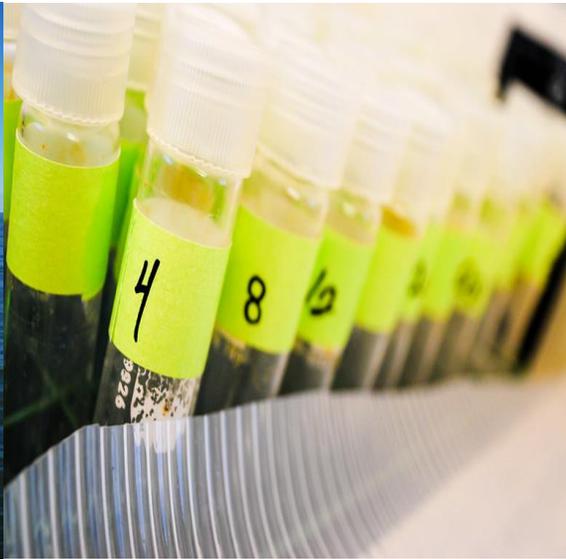


Photo Credit: Will Parsons (CBP)

### Overview

An overview was provided to the Principal Staff Committee (PSC) at their March 2, 2021 meeting about the status of, and potential reductions to, the current Chesapeake Bay Program (CBP) monitoring networks. The CBP monitoring programs presented included the nontidal nutrient and sediment network, tidal water-quality monitoring network, submerged aquatic vegetation (SAV), tidal benthic monitoring network, and Citizen Science monitoring. In response to the status report, the PSC requested information be provided on what is needed to improve the CBP monitoring networks which has led to a 9-month review centered around 8 questions of status, vulnerabilities, innovations, and costs to sustain and grow network operations underpinning decision-support in the Chesapeake Bay Program Partnership. A team for each CBP network will address these questions and develop recommendations for the PSC. The review is being coordinated under CBP-STAR.

*Materials:* [Discussion Paper to Improve CBP Networks](#)

*For more information, contact:*

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## CBP Network Teams: Update on efforts to address PSC request

### Nontidal Network Workgroup

- Developing an inventory of partner support behind funding of each of 123 stations. The first round of information gathering is near complete.
- Due to level funding operations, an optimization exercise is being planned to consider prioritizing decisions for adjusting the network size on a 5-year time horizon.
- **Team homework:** Be prepared to contribute insights on vulnerabilities impacting our ability to sustain network size and operations. Information will be collated and added to the summary document to the PSC regarding network status and capacity challenges.
- **The next meeting is [May 19, 2021](#).** The tentative agenda for the meeting is:
  - **Web-based meeting materials** – Breck Sullivan CRC. Where to find and work with materials for the NTN WG
  - **Vulnerabilities to maintaining stations and network support** (e.g. COLA impacts, partner loss, in-state budget capacity, etc.) – Round robin to collate insights.
  - **Provide NTN status summary draft for review** – Peter Tango/Joel Blomquist USGS
  - **Watershed Science: A challenging WV Cacapon River filamentous algae issue.** – Mike Selckman ICPRB

### Bay Oxygen Research Group, BORG (4-D Water Quality Estimator Team)

- **NEW Team!** The first meeting of the 4D-BORG occurred in April 2021.
- Proposed project timeline is 2 years of development of the initial tool (2021-23), and 2 years of application and education (2023-25).
- Methods underpinning the tool will occur in upcoming meeting discussions.
- **Team Homework:** Return in May 2021 with 1) stakeholder requirements for the new tool and 2) any method alternatives to the GAMS + simulation approach discussed during the first meeting.
- **The next meeting is [May 20, 2021](#).** The tentative agenda for the meeting is:
  - **Stakeholder tool requirements** - Round robin
  - **Alternatives for the underlying estimator approach** – Elgin, Rebecca
  - **Data needs – infrastructure development.**

### Hypoxia Collaborative (Vertical Profiler Network Development Team)

- **NEW Team!** The first meeting occurred April 30, 2021.
- The group briefly reviewed the pilot study and project data applications.
- Recommendations were discussed on sensor arrays and their location for 2021.
- A survey was provided to participants regarding 2 options for deployment of 2 NOAA sensor arrays during 2021. Results will be shared soon. The findings of the survey will support permit applications for the deployment locations in Chesapeake Bay.
  - Further discussion is underway regarding the distribution of individual sensors on each array.
- **The next full team meeting** is being developed for late May 2021.

## Criteria Assessment Protocol Workgroup

- The next meeting is [May 14, 2021](#). The tentative agenda for the meeting is:
  - Lay out the PSC monitoring program review request; Phase 1= 9 months.
  - Highlight – Tidal program core needs, desired data, available methods, new options
  - New STAC Workshop overview and preparation– Advanced monitoring
  - Homework #1 = Macrobenthic program – do we need *spring* and summer?
  - Homework #2 = Prepare for discussions the next 4 months - Papers to read for summer on SAV, light limitation, CHLA and new geostatistical assessments.

## CBP Supporting Groups

- **Data Integrity Workgroup (DIWG):** A presentation regarding the monitoring review, guidance DIWG can provide the effort, and approved 2021-22 STAC Workshop on advanced monitoring approaches was presented at the [April 13, 2021 meeting](#).
- **Climate Resiliency Workgroup (CRWG):** A presentation regarding the monitoring review and summary of what the current monitoring networks can provide to support CRWG monitoring needs will be provided by Peter Tango and Breck Sullivan on [Monday, May 17, 2021](#).
- **Water Quality Goal Implementation Team (WQGIT):** A presentation regarding the monitoring review and approved 2021-22 STAC Workshop on advanced monitoring approaches will be provided by Peter Tango on [Monday, May 24, 2021](#).
- **Submerged Aquatic Vegetation (SAV) Workgroup:** Meeting schedule will be updated when they schedule their next meeting. No meetings are on the SAV WG calendar at this time.

## STAC 2021 – 2022 Advanced Monitoring Workshop

A workshop proposal was submitted to the Scientific and Technical Advisory Committee (STAC) in February 2021 and approved in March 2021 with Peter Tango as the chair of the proposal. Official work under the proposal begins in July 2021. This workshop will be used to evaluate opportunities to use research findings for assessing key water quality parameters supporting water quality standards attainment assessments in the tidal waters of the Chesapeake Bay.