

Criteria Assessment Protocol (CAP) Workgroup Meeting

Monday, August 11, 2025 1:00 – 5:00 PM

Hybrid Meeting

Join the meeting in-person at the Chesapeake Bay Program Office, (1750 Forest Dr., Annapolis, MD) in the Oyster Room. Find more information about <u>in-person meeting</u> <u>logistics</u> on the meeting webpage.

Join the meeting virtually via Microsoft Teams.

Meeting ID: 236 479 581 993 9 | **Passcode:** e6At6aH6 **Call:** +1 469-208-1525 | **Phone Conference ID:** 483 982 524#

Meeting Materials

This meeting will be recorded for internal use to assure the accuracy of meeting notes.

*Closed captioning will be available for this meeting. To turn on the closed captioning, click on the 3 ellipses (More actions), then click on "Turn on live captions" (preview).

Meeting Goals:

Gain a mutual understanding of our combined efforts in this project to create guidance that informs community monitoring strategy needs. Guidance aims to offer options in locating monitoring resources while understanding trade-offs, i.e., to limit uncertainty in assessing habitat conditions, considers limitations imposed by availability of monitoring resources, optimizing sampling location options within select segments given deployment limitations.

Coincidentally, the monitoring community needs a better understanding of the process UMCES colleagues will use in sharing back options and opportunities for siting monitoring resources with a blend of monitoring resources available (e.g., long term monitoring stations sampled monthly, biweekly, or other, offshore arrays, offshore bottom con-mons), what scenarios can be designed, how many scenarios can be requested, what the output will look like to show the effect of different scenarios on accuracy of assessing dissolved oxygen conditions using the model framework.

AGENDA

1:00 PM Welcome, Introductions & Announcements – Peter Tango (USGS), Co-Chair 1:15PM Practical Applications of Monitoring for Designated Use Assessments – Tish Robertson (VA DEQ) Co-Chair.

Introduction to the workshop on designated use monitoring needs and constraints.

1:30 PM Previous Segment Prioritization Findings from the Hypoxia Collaborative,

Additional Perspective on Infrastructure Distribution – Peter Tango
(USGS)

During 2021 and 2022, the CBP Hypoxia Collaborative Team held a series of community meetings to support a needs assessment for areas to target for deploying new vertical sensor water quality monitoring arrays. Represented were monitoring community, modeling community, fisheries community and the bay interpolator development team. Recommendations were developed to guide the Hypoxia Collaborative Team on its early phase of infrastructure acquisition and plans for deployment. The findings remain relevant to planning the next 5-10 years of deployments following the 3-year assessment protocol for criteria assessments as well as broader community habitat assessment targets. Peter will review the survey activities and findings on recommendations to consider during the segment prioritization discussion in this workshop.

1:45 PM Review of the modeling process and output expected for evaluating sampling site distribution scenarios that will be used to develop guidance back to the community on sampling strategy options – Dong Liang, Jeremy Testa, and Lora Harris (UMCES)

This work aims to incorporate new technologies and sampling strategies to better assess living resources in Chesapeake Bay. We will apply a previous approach that combines process and statistical modeling approaches to assess sampling designs for deploying new technology, such as profilers, in the monitoring assessment of tributaries of the Chesapeake Bay.

2:20 PM BREAK

2:30 PM Considerations for Maintaining Vertical Arrays and Lessons Learned Presentation – Bruce Vogt (NOAA)

The NOAA team has deployed and maintained a series of vertical arrays since 2022 in multiple geographies to understand costs and issues with sustaining high integrity, consistent network water quality data collections. Issues encountered have included appropriate site selection, time on the water to manage network resources when managing deployments in multiple regions, and internal levels of capacity support. Bruce will review NOAAs experiences in these early years of deploying the new technology to help guide considerations on resource density and distribution in monitoring strategies for the future.

3:00 PM Discussion of State and Participant Priorities for Segment Selection and Segmentation Design – All

The first part of the discussion here will focus on coordination with the community to obtain a short list of priority segments to target with model scenarios for deployment schemes. We would like to provide UMCES project leads with this list of approximately 10 segments that represent interest across the community. Estimated time 30 minutes. Action – establish a list of target segments from community input.

The second part of this discussion is to work with our UMCES project leads to ensure we collectively understand the boundaries on monitoring resource deployments for scenarios. Preparation for the meeting suggests there are some questions on options monitoring frequencies (e.g., what if we just enhance existing monitoring intensity to weekly or sub-weekly over monthly, how much better are our habitat assessments for estimating conditions), also, what is the effect of sensor densities in the offshore deployments – we have a minimum number of sensors needed to define a pycnocline, but the Modeling WG suggested a reference array with sensors at 1m intervals. Can we request scenarios that inform the value in measuring and tracking habitat conditions by adjusting vertical sensor density. Estimate discussion time 45 minutes. Action – create an outline of standard scenario expectations for testing in all segments being evaluated.

The last part of today's discussion is to work toward a collective understanding of what limits the location of any monitoring infrastructure. E.g., it might be optimal to deploy and offshore vertical array unit in the deepest part of the channel in a segment but such locations conflict with Coast Guard rules and commerce travel lanes, therefore, is there a rule we have for the next best almost deepest water location? Other rules might include how far up small tributaries a con-mon can be located, do we need docks or bridges to attach sensors, can we deploy sensors on oyster beds, should we be aware of clamming bottom to avoid conflicts with watermen, it is a pro or con to have a duck blind to attach a sensor package to, does channel sinuosity or number of tributaries entering a segment impact options for testing – do you want to test the impact on assessment of these features? Estimated discussion time. Agencies with field experience in siting monitoring resources should contribute their experience on what creates a filter on site selection when they are looking to place a new sensor in the field. Estimated discussion time 45 minutes. Action – create a list of field characteristics that limit choices in deployment locations of monitoring resources. The list will

be used to look at each segment and limit where monitoring resources can be placed in model-world to inform assessment accuracy and uncertainty.

5:00 PM Adjourn