Criteria Assessment Protocol Workgroup

November 18, 2020
1:00 p.m. – 3:00 p.m.

Webinar*:

https://umces.webex.com/umces/j.php?MTID=m136185c67fdfa012bc863d09b73472a1

Meeting Number: 120 387 6758 Password: CAPWG

Or Join by phone:
Conference Line: +1-408-418-9388 Access Code: 120 387 6758

Meeting Materials:
https://www.chesapeakebay.net/what/event/criteria_assessment_protocol_workgroup_november_2020_meeting
Location: Conference Call

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

AGENDA

1:00 **Welcome, introductions & announcements** – *Peter Tango, Chair Criteria Assessment Protocol workgroup, USGS@CBPO*

- Maryland Water Monitoring Council Annual Conference, December 3 – 4, 2020. Virtual. Free registration by November 25th at noon or until they meet their capacity, whichever occurs first.
- National Monitoring Conference, Providence, R.I. April 20 – 22, 2021.

1:10 **Dissolved oxygen Criteria and Climate - Do criteria need to change as a function of temperature increases in our region? An initial discussion - Peter Tango (USGS)**

Water temperatures are rising in the bay. Temperature affects dissolved oxygen saturation which relates to oxygen resources available to aquatic life. The Modeling WG scenarios with future climate projections have shown temperature is the largest climate factor influencing attainment of water quality standards. A question has been raised as to whether we need to consider climate-adjusting DO criteria. An initial discussion here should reflect on how dissolved oxygen criteria were established and give consideration on impacts of changing criteria associated with the TMDL.

1:35 **MD DNR - Assessing Short-duration criteria: Pilot study discussion - Matt Stover and Becky Moynihan (MDE)**

MD DNR is pursuing a monitoring effort to address short duration DO criteria assessment. Questions for the group surround issues of the type of monitoring and how to assess the criteria once we have higher temporal frequency data.

2:05 **Exploring satellite image assessment for SAV surveys in Chesapeake Bay - Preliminary STAC workshop findings - Brooke Landry (MDNR)**

For 2018, multiple factors significantly affected normal aerial survey coverage for SAV in Chesapeake Bay. Satellite imagery was evaluated and used to fill some of the gaps in data collection. From 2019-2020, Brooke Landry and Peter Tango co-chaired a 2019-2020 STAC Workshop exploring the lessons learned from that gap filling work by VIMS, the options, availability and cost for satellite data, protocols for acquiring, and accessing satellite data, and options for enhancing data interpretation between the existing program approaches and AI/Machine learning algorithm interpretation of imagery. A final report has been drafted and preliminary findings of the workshop will be provided.

2:30 **Hypoxia Monitoring 2019-2020 GIT funded project using vertical profiling technology - update on testing and results. Doug Wilson.**

2020 saw a successful two-deployment test of a new, cost effective vertical water quality monitoring array operating in the challenging open water habitats of Chesapeake Bay. This form of data collection is needed to better support short-duration (i.e., instantaneous minimum, 1-day mean, 7-day mean) dissolved criteria assessments. Such data would provide further research value and model calibration and verification support. Doug is preparing a report on profiler performance, costs for investment and lessons learned in the deployments.

2:45 **Developing the roadmap for updating the tidal monitoring and assessment program - a STAC Workshop Proposal outline - Peter Tango (USGS)**

Limited new resources for traditional monitoring support have been stable or declined, support and infrastructure costs have increased and 17 years since the publication of Chesapeake Bay water quality criteria we have not adapted the program to effectively account for the monitoring and assessment needs to address complete water quality standards attainment assessments. However, new data streams and new assessment tools have matured to assist assessment of Chesapeake Bay water quality criteria. Peter will present an outline that provides at least six lines of inquiry for establishing recommendations that, when adopted, should update monitoring investments, update assessment approaches, update interpretation and reporting of results. Peter will ask for community discussion and input on these and other lines of inquiry that should be addressed in the workshop proposal to produce effective recommendations that address gap-filling data needs of assessing the dissolved oxygen, water clarity/SAV and CHLA criteria for completing our water quality standards attainment assessments.

3:00PM **Adjourn**

Next Meeting/Future Topics:

Results of the next update to the Water Quality Standards attainment indicator assessment.
Designated Use revision for Segments CB6 and CB7
Deeper dive into the method behind derivation of dissolved oxygen criteria
Review proposal for final comments on the STAC Workshop call in early 2021
Other approaches for using satellite-derived data to assist bay water quality assessment Water temperature indicator - who needs it and what form of output do you need to inform management?