



## Criteria Assessment Protocol Workgroup

May 14, 2021  
10:00 a.m. – 12:00 p.m.

Webinar\*:

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Meeting Materials:

[https://www.chesapeakebay.net/what/event/criteria\\_assessment\\_protocol\\_workgroup\\_may\\_2021\\_meeting](https://www.chesapeakebay.net/what/event/criteria_assessment_protocol_workgroup_may_2021_meeting)

Location: Conference Call

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

### AGENDA

**10:00**      **Welcome, introductions & announcements** – *Peter Tango, Chair Criteria Assessment Protocol workgroup, USGS@CBPO*

Ken Moore said when they developed the original save habitat requirements, we talked about temperature but never mentioned climate change 30 years ago. Climate and temperature especially for SAV need to be addressed.

Peter Tango said good topic when they discuss if criteria need to change based on what they are observing.

Carl Friedrichs said teams have been developed

**Outline of PSC request for monitoring program review: Setting some expectations for developing recommendations – Peter Tango**

Peter will highlight the 8 questions guiding our input to the PSC. There is perhaps 75% of the information in various corners of our daily world already, but there is a 25% where community wisdom, insight, knowledge and discussion will tune our vision for the networks going forward and fulfill guidance to the PSC. This effort is in Phase 1 of a 9-month endeavor.

Peter Tango said the end product for the PSC needs to give them actionable recommendations that are focused for each network. Information included each network portfolio is recommendations, vulnerabilities, status, financials,....

Richard Tian.....spatial coverage challenge because there is a limited number of sensors that can be implemented. Peter said this is a good point that should be covered in the STAC workshop presentation. There are a couple of venues to address his question.

Peter Tango...Ken said could need new knowledge.

The effort includes expanding capacity to meet the monitoring needs such as applying citizen-based observations. The Alliance for the Chesapeake received the grant award for another 6 years, and their proposal stresses using citizen science data to fill CBP gaps.

This effort will be accomplished by a synergy of workgroups. Two new teams have formed to help. The Hypoxia Collaborative Team focuses on..... The Bay Oxygen Research Group....STAR is taking the lead on this effort and will engage other CBP groups for input.

Peter tango went over requests for CAP during the spring and summer. Peter asked a question..

Tish said thinking about water quality standard....They are about to review their water quality standards and they are asked to come up with CHL criteria for...it is not likely they are going to do that in the near future, but it is on people's radar that there is standard no one is capturing.

Water carity can see the ....for CHL, they have a lot of chl data and have trends but not doing anything with CHL data outside the James for the state of VA. She can see people stating that they have the CHL data...Peter Tango said for MD there is a reference to max of CHL, but CBP not reporting....Bruce said they do not have a numeric criteria. MD has a narrative criteria. Peter discussion of having criteria outside the James. How to establish thresholds for the rest of the bay. Tish said VA and MD have the same language in their narrative for CHL.

Elgin Perry said there is a lot about assessing gaps in the criteria that we have so is there potential for discussion on the gaps of nutrient criteria. Peter Tango said the effort is targeted to criteria gaps they have now, but others may know of progress with other efforts to address nutrient criteria. Clarie Buchanan stated that Qian Zhang is working on nutrient limitation and creating models for it. Peter Tango said until they can get support of the nutrient limitation on the

bioassay...but looking promising and will be a key ecosystem condition to capture.

Richard Tian said overall they do a lot work on water quality criteria assessment for DO, Kd...but don't do enough on living resources or what is directly related to living resources. Peter Tango said it is part of the effort we are discussing now, but the breadth of it will not all be reached in this 9-month effort. The leads will consult with the Climate Resiliency Workgroup, Forage Fish Team, Habitat GIT, and other groups.

**Developing the Roadmap for Updating the Tidal and Nontidal monitoring and Assessment Program: Approved STAC Workshop – Peter Tango**  
The STAC proposal on “Advanced Monitoring Options and Recommendations” was approved, and Peter will provide an overview of the proposal. The workshops will begin in Fall 2021.

The objective of the workshop is to develop actionable recommendations on adaptive monitoring and assessment for the next generation CBP tidal monitoring program...not to go....but how to overcome capacity gaps. There will be individual workshops for 1 – 2 day events on multiple topics building off of research, workgroup meetings, and past workshops.

There is a report out on STAC for the SAV workshop that found satellite images can provide comparable assessment of SAV to aerial-fixed based images, but it requires a detailed process to get the images. Another key takeaway was that using AI may yield more precise results, but they need to compare what it captures compared to old hand-mapped SAV results.

Satellite information can also inform water turbidity, and the workshop on light limitation can discuss....how CBP can use the information.

Another workshop topic may discuss where and when can they apply CHLA criteria, and an additional topic is on the status of the 4-D water quality estimator to support water quality standards assessment. Peter Tango said he would like CAP workgroup's insights and recommendations for the interpolator.

Richard Tian new trends of criteria assessment thinks don't know what FL did, new trends is a transitional variable, once entered into the bay they are picked up quickly....think new trends of loading is more important than concentration....Peter tango asked if he was referencing whether or not they need to pressure a nutrient limit. Richard said in terms of criteria assessment of

nutrient concentration since the uptake is quick. Bill Richardson said progress on criteria development has been slow so he is not aware of anything new. Peter Tango asked it might be helpful if Katie came to a meeting. Bill Richardson said there are some EPA people that may be more knowledgeable of national work that is relevant to the CBP.

### **Develop outline for the summer – All**

The workgroup will work together on an outline for the summer. We need to compare our present assessment gaps and the state of the science to 1) update existing methods, 2) backfill gaps using research methods that have proven useful in the bay, 3) define work needs to move research to operation with protocols and 4) if no suitable method is available define a path and investment needed to fill the gap(s). Target topics are:

- Satellite-assessment of SAV, light limitation and CHLA
- Use of AI algorithms to improve assessment efficiency
- Interpreting Vertical Profiler output - what is the assessment protocol to use for short-duration criteria assessment? Any criteria assessment?

*Homework #1: Macrobenthic program – do we need spring and summer? June 2021 meeting discussion*

Bruce Michael stated.....

*Homework #2: Prepare for discussions the next 4 months – Summer reading on SAV, light limitation, CHLA and new geostatistical assessments*

Peter Tango commented CAP is needed to meet more frequently than quarterly. He will work with members to schedule meetings in the next coming months. He will invite Brooke Landry to one of those meetings to prepare of the STAC workshop. For the light limitation topic, he will invite....to a meeting. Peter Tango would like input from Tish Robertson on the current status of CHLA criteria and a discussion from Richard Tian on....for the CHLA CAP meeting.

Richard and Peter...Breck Sullivan will send out research papers to the workgroup related to BORG.

**12:00PM      Adjourn**

**Participants:** Breck Sullivan, Peter Tango, Ken Moore, Elgin Perry, Tom Parham, Amanda Shaver, Bill Richardson, Dustin Shull, Andrew Keppel, Gary Shenk, Bruce Michael,

Tish Robertson, Lucretia Brown, Lequrica (Academic), Juan Vicenty-Gonzalez,  
Lucretia Brown, Rebecca Murphy, Richard Tian, Claire Buchan, Thomas Barron,  
Matt Stover