



## Criteria Assessment Protocol Workgroup

Monday, March 11, 2013

10:00AM – 11:00AM

<http://www.chesapeakebay.net/calendar/event/19324/>

### Participants:

Peter Tango-USGS/CBPO (Chair)	Liza Hernandez-UMCES/CBPO (Coordinator)	Lea Rubin-CRC/CBPO (Staff)
Ken Moore-VIMS	Bruce Michael-MD DNR	Tom Parham-MD DNR
Cindy Johnson-VA DEQ	Diana Muller-SRF	Tish Robertson-VADEQ
Sherm Garrison-MD DNR	Andrew Muller-USNA	Don Smith-VA DEQ
Jackie Johnson-ICPRB/CBPO	Mark Trice – MDDNR	

### Minutes

#### Action Items

- Review options for tracking incremental progress and contact L. Hernandez with comments (CAP WG)
- Send L. Hernandez the VA tracking progress methods for reporting (T. Robertson)
- Review upcoming workshop materials for April 4 UCAT meeting to discuss the implications of separating shallow-water and refining the open-water designated use for DO assessments

#### Welcome, Introduction, Announcements – P. Tango (USGS-CBPO, CAP Chair)

- 04/04: Umbrella Criteria Assessment Team (UCAT) reconvening to discuss the implications of separating shallow-water and refining the open-water designated use for DO assessments
- 04/24: SAV workgroup plans to focus a good portion of its agenda on water clarity criteria

#### Issue Paper: A Case Study on Separating Shallow Water from the Open Water Designated Use: Support, Options and Implications – P. Tango (USGS-CBPO)

[2013Shallow water Workshop](#)

Peter provided a summary of an issues paper he authored, to help begin the discussion related to the implications of separately assessing shallow-water from offshore water. This paper will be the foundation of one of the 2014 technical addendum chapters and will be used to present the issues to the UCAT at the [April 4, 2013 workshop](#).

- His paper argues two positions -
  - To maintain the existing protocol
  - To separately assess the two habitats

#### Question and Discussion

- Case for separating shallow water –
  - In most cases shallow-water and open-water are quite similar, but during/under certain conditions (e.g. seasonal), significant differences may occur.
  - Separate criteria for management to show sub-estuary improvement

- Communication Concern –
  - From a management and restoration focus, how does one explain when a single segment meets the shallow-water designated use but not the open-water designated use?
    - Consider what a shallow-water designated use would capture that the open-water does not.
    - The habitat value for living resources, such as fisheries, is more prevalent in shallow-waters than offshore.
    - Under the TMDL there is a boundary between designated uses in open-water vs. deep-water, however in the open-water and shallow-water there is overlapping use.
- Possible case-by-case basis dependant on pollution source, and the spatial distribution of a sampling area.
- In large portions of the Bay where there was no historical SAV, may benefit from being labeled as different designated use zones for criteria such as DO, clarity, SAV habitat.

**Reaching a Consensus for Assessing the Open Water, summer, 7-day mean DO Criteria – L. Hernandez (UMCES-CBPO)**

[MonthWeekResampSummary](#)

Liza provided a status update on where we are in the process of reaching a consensus for assessing the 7-day mean DO criteria.

The purpose of this study was to look at the additional uncertainty when using small data sets to validate that the 30-Day mean is protective of the 7-Day mean criterion. E. Perry concluded that the 30-Day mean is not protective of the 7-Day mean criterion when using a small sample size. Estimates of the monthly mean would have to exceed a threshold of 6.22 to insure that the risk of violating the 7-day criterion is 10% or less.

Next steps include finalizing conclusions at the April 4 UCAT meeting, and drawing up recommendations for a briefing document to bring to the WQGIT.

**Questions and Discussion**

- Using spectral analysis T. Robertson did a similar analysis; the two came to similar conclusions.

**Measuring Incremental Progress towards the Attainment of WQS – L. Hernandez (UMCES-CBPO)**

[Incremental Progress CAP 03.07.2013](#)

Liza briefly discussed exploratory options she's considering for measuring incremental progress towards the achievement of water quality standards.

**Dissolved Oxygen**

**Option 1: Uses Criteria Assessment Results reported in Stoplight Plots –**

- a. Obtain or produce stoplight plots for each round of criteria assessments for each of the designated uses (1985-present)

- b. Develop a time series plot for each segment using the above information.
  - Option 1 procedure assumes that the umbrella criteria assumption is valid; based on the assessment of the 30-Day mean for open water and deep water and does not assume that non-attainment for designated uses that cannot be fully assessed.

**Option 2:** Calculate the WQS Indicator numbers for each segment for the 1985-2011 dataset

- a. Create a time series plot for each segment
- b. Determine the particular trend for each segment
- c. Incorporate the [dynamic maps developed by John Wolf](#)

#### **Water Clarity/SAV:**

- Calculate percent attaining overtime for segments with SAV aerial photography.
- Beyond that, L. Hernandez requested thoughts and ideas for next steps

#### **Chlorophyll a:**

- L. Hernandez requested thoughts and ideas

#### **Questions and Discussion**

- **ACTION:** Review options for tracking incremental progress and contact L. Hernandez with comments.
- Do any of the tidal jurisdictions currently do this on an independent basis? If so, what methods do you use?
  - VA:
    - **ACTION:** T. Robertson will send L. Hernandez the VA tracking progress methods for reporting.
    - SAV is presented combined with water clarity
    - Chlorophyll criterion is reported similar to dissolved oxygen criterion indicating the percent violation in space and time.
  - MD:
    - Uses narrative to report criteria
- Between the two options for DO, any opinions?
  - L. Hernandez, B. Michael, P. Tango for Option 1

Concluding comments:

- **ACTION:** Review upcoming workshop questions for April 4 UCAT meeting to discuss the implications of separating shallow-water and refining the open-water designated use for DO assessments.

#### **NEXT CAP CONFERENCE CALL**

April 8, 2013

10AM-12PM