



Criteria Assessment Protocol Workgroup (CAP) Meeting

Wednesday, April 12, 2023

10:30 AM – 12:00 PM

Join by Webinar

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Meeting Number: **2621 357 1624**

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Meeting Materials

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

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AGENDA

10:30 AM Welcome, Introductions & Announcements – Peter Tango (USGS), Chair

Upcoming Conferences, Meetings, Workshops and Webinars

- National Water Quality Monitoring Council's 13th [National Monitoring Conference](#) - April 24-28, 2023, Virginia Beach, VA.
 - [Species on the Move](#) – May 15-19, 2023, Everglades National Park, FL.
 - [Interagency Conference on Research in the Watersheds \(ICRW8\)](#) – June 5-8, 2023, Corvallis, Oregon.
 - [Citizen Science Association conference, C*Sci 2023](#) - May 22-26, 2023, Arizona State University campus in Tempe/Phoenix, Arizona.
 - [CERF 2023 Conference: Resilience & Recovery](#) – November 12-16, 2023, Portland, Oregon. [Abstracts](#) due May 10, 2023.
- Brief overview of issues for the workgroup's attention and ongoing projects.

10:45 AM Updates – Peter Tango (USGS)

- 4-Dimensional Interpolator –
 - *Updated timeline of activities.*
 - *Latest progress – short duration dynamics with Wavelet analysis, Patuxent River test of GAMs used on mainstem for D.O. dynamics.*
 - Needs –

- *Sampling strategy support, nearshore and offshore.*
 - *Documentation.*
 - *Updated assessment protocol.*
 - *Probability of attainment approach details needed.*
 - *Temperature-adjusted D.O. criteria?*
 - *Work will need to run through STAC Review, WQGIT for comment and approval.*
- *Hypoxia Monitoring – 2023 deployments, 2024 +, guidance on sampling strategy to support deployments is being developed.*
 - *April 2023 – shallow water monitoring strategy to link with offshore sensors – exploratory discussion.*
 - *2023-24 GIT funded proposal to support guidance development?*
 - *USGS sampling design statistics support?*
- *Satellite-based SAV assessment –*
 - *2022 PSC Monitoring Report recommendations – EPA target of support.*
 - *Algorithm tuning.*
 - *Drawing polygons from pixel data.*
 - *Calibration of AI/ML assessment with existing aerial survey-hand drawing beds methods for historical comparison.*
 - *New image acquisition costs?*
 - *Meeting notes – work continues on cost relationship with commercial service providers with EPA, USGS, NASA.*
- *Satellite-based CHLA and HABs assessments –*
 - *Insights and opportunities for CHLA and HABs monitoring from the 2023 Applying novel techniques to assess and forecast HABs in Chesapeake Bay to protect fisheries, aquaculture and human health workshop held over two half-days, on January 18 and 19, 2023.*

11:15 AM Next Steps/Brainstorming – Discussion, all

- How do we address consideration for temperature adjusted dissolved oxygen (DO) criteria?
 - *Historical methods and decisions focused on sensitive species to drive criteria.*
 - *Increasing evidence that warming temperatures impact bay and watershed – Hinson et al, 2021, Tian et al. 2021, and others.*
 - *Variances have played a role in accommodating challenging conditions – need someone to speak to this as an option.*
 - *Do we plan for a workshop in 2024 to answer this question of do we adjust the criteria going forward, and if so, how do we adjust the criteria?*
 - *Can we do some pre-proposal planning within CAP WG?*

- *STAC Workshop proposal submit at the end of the year.*
- How do we expand criteria for HABs assessment support?
 - *Need to discuss translating the narrative to quantitative criteria.*
 - *James River study findings revisit.*
 - *MD state protection translation.*
 - *New HAB-quantification – what is needed to implement monitoring with satellite resources to support decision-making.*
 - *CHLA criteria assessment with satellite imagery – latest NOAA products using 20m imagery.*
 - *Need to lay out the questions – what questions are needed to be addressed so we can:*
 - *Have acceptable quantitative HAB assessment criteria?*
 - *Use satellite imagery for criteria assessment?*
 - *And given those questions – how would you like to step forward in creating the updated criteria and documenting the assessment protocol for review and approval?*
- Where do we get support to address these questions: STAC, contractor support, GIT funding, ORD funding, other sources?
- Satellite-based SAV Assessment –
 - *Request SAV WG to develop documentation, provide timeline of activities.*
 - *Issue of image acquisition costs – we will need a champion for tracking the government relationships with service providers.*