

Chesapeake Bay Program
Watershed Technical Workgroup (WTWG)
Meeting Minutes

Thursday, January 5, 2023

10:00 AM to 12:00 PM

[Meeting Materials](#)

Summary of Actions and Decisions

Postponed to February 2023 meeting : Postponed approval of the [December 2022 meeting minutes](#) to February.

Action: WTWG members are asked to review the [PSC charge](#) and [Jamboard slides](#) ahead of the February meeting.

Action: Gary Shenk and Bill Keeling will come back to a future WTWG meeting to present on part 2 of the Dissolved Oxygen (DO) Effectiveness Factor conversation.

Action: WTWG members with a preference for how to respond to the questions raised in the [Discussion on Volkswagen \(VW\) Settlement and Associated BMP](#) should email Ruth, Cassie, and Jeff so those preferences can be explained at the February WTWG meeting, ahead of the requested decision at that meeting.

Action: Jeff Sweeney will add a clarification to the [Discussion on Volkswagen \(VW\) Settlement and Associated BMP](#) slides explaining how the Associated BMP, yet to be named, would be considered a planning BMP.

Meeting Minutes

10:00 AM – **Introductions and Announcements** – Cassandra Davis, NYSDEC/Chair (15 min).

- *Please put your name and affiliation in the chat box for attendance purposes. Thank you!*
- Approval of [December Meeting Minutes](#) – Cassandra Davis, NYSDEC
 - Cassie postponed this decision to February because a correction needs to be made to the version of the minutes that are currently posted
- CAST-2021 Management Board Meeting Update – Cassandra Davis, NYSDEC
 - [PSC charge slides](#)
 - Jeff: this will be about identifying data anomalies and establishing protocols. We don't have to do this alone, we can bring in Scientific and Technical Advisory Committee (STAC) and Scientific, Technical Assessment and Reporting (STAR)
 - Olivia: what is the timeline?
 - Ruth: our timeline is to have our policy recommendations done by June so we can get them to WQGIT and MB in time for them to make a decision by September
 - [Jamboard slides](#)
 - The ask: look at the jamboard slides between now and February meeting
- [Upcoming CAST Webinar](#) – Helen Golimowski, Devereux Consulting

- Focus will be another case study: Shore Rivers will demonstrate how to quantify the benefits of one of their projects
- Progress Update/Announcements - Olivia Devereux, Devereux Consulting
 - [2022 Progress Data Analysis](#)
 - Updated as of Tuesday, 1/3 with the data that was submitted by December 30th
 - 2022 Progress Data updated Tuesday, 1/3.
https://public.tableau.com/views/DataReview20221205/Introduction?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link

10:15 AM – [Dissolved Oxygen \(DO\) Effectiveness Factor: Part 1](#) – Gary Shenk, USGS/CBPO (30 min).

Gary presented on how and why the effectiveness factor was derived and a general understanding of what those values indicate or mean (the PSC's effort to create an equitable way of allocating target loads for the TMDL effort). Following the presentation, there was time for discussion and questions from the group.

Discussion

- Bill Keeling did not have a comment because he was on vacation.
- Cassie: It was helpful for my understanding to see the map.
- Dave: this was good for reminding people what was done in the past, especially as the work on planning targets for 2035 gets underway
 - Gary: good point. I will note the exchange ratios have changed due to changes in the estuarine model. Phosphorus has become less important for making reductions compared to what it used to be. The shallow water areas in the 2017 model are relatively coarse, but in the Phase 7 Main Bay Model and Multiple Tributary Model, these shallow water areas will be much smaller. The reason behind this is the CBP is interested in moving towards a better assessment of water quality in the areas that are relevant to how people experience the Bay. In the areas I presented on today, deep water & deep channel, very few people experience those areas.
 - Dave: What I am hearing is we are facing sub-par assessments in new areas of focus (shallow water areas), so these models will improve the assessments.
 - Gary: we may be able to model shallow waters in such a way that improve planning target calculations. The key word here is may, as we have not yet decided or fully explored those methods.
- Dave: will nutrient limitation in the Bay be changed and how will that affect the next model?
 - Gary: I think you are correct, there is work by Qian Zhang to incorporate new research on nutrient limitation into the model. You should check in with Lew.
- Cassie: will the same methodology be used for the next set of geo-runs for the next model? Or will we have a chance to change things?
 - Gary: there is a chance to change everything. We may or may not change, there is no proposal on the table, but everything is up for discussion

10:45 AM – [Discussion on Volkswagen \(VW\) Settlement and Associated BMP](#) – Jeff Sweeney, EPA, All (20 min).

At the [December](#) meeting, Jeff Sweeney presented on the proposed BMP associated with the VW settlement and the recommendation from the Modeling Workgroup on applying credit for reductions in atmospheric nitrogen emissions and deposition. He presented [two proposals](#) for

the WTWG to consider. This time will be dedicated to discussion and questions regarding the proposals, which will be voted on by the WTWG at a future meeting.

Discussion

- Cassie: no decision is being requested on this today, this is an informative presentation. A decision will be requested at the February meeting
 - o Olivia: to clarify, once a decision is made in February, this reduction can be included in the PA WIP and then be made available to other states as a BMP?
 - Jeff: yes
 - o Cassie: so PA will then be able to report this BMP and they could use NOx
 - Jeff: for Progress, this would theoretically be captured in monitoring data for NOx and deposition to the watershed. I'm not sure what mechanism the state has to track this BMP
 - Cassie: I'm not sure how this would be considered in CAST
 - Dave: I'm kind of confused. I am thinking of this relevant to groundwater lag times. How do we ensure that everything PA is submitting is over and above the Clean Air Act amendments? How do we ensure they are not double counting? I am concerned about this
 - Jeff: Yeah, that is a good point
- Cassie: in response to slide 12 about the name of the BMP, Emission Reductions BMP was suggested
 - o Jeff: I like the idea, but we already have a BMP called Ammonia Emission Reductions.
- Alicia Ritzenthaler: Maybe you covered this last month and I've forgotten - would this likely be a single BMP or multiple BMPs for each of the eligible NOx reduction activities?
 - o Jeff: you cannot look at single BMPs
 - o Jeff: state WIPs do get credit for atmospheric deposition reductions. This was separated because it was not considered in model in previous runs
 - o Gary: The recommendation from the Modeling WG was for Phase 6 and resulted in the table that was presented. It wasn't done specifically for VW. For the two options presented - a general rule is that half of the reductions that you get from edge-of-tide go directly to the tidal waters. Taking it from tidal water would not be less accurate than taking it from the entire watershed. New work is underway from atmospheric modelers to redevelop the "crediting load reductions from emissions reductions" table to be state specific and sector specific
 - Dave: a portion of that load also comes off the land in different jurisdictions, so that poses a problem. Is there a way we can just assign these reductions to loads to tidal waters?
 - Jeff: I don't think so because EPA is charged with deposition to tidal waters. To do this, it would not show up automatically in the results from the scenario run
 - Jeff: so maybe Dave would be more in favor of proposal 2 on slide 10 since the negative shoreline load would show up in the model run results
 - o Alicia: So this BMP would also only apply to activities funded by the settlement correct?

- Jeff: yes
- Samuel Canfield: I think this has been a question in the past, but would this BMP be applicable to other similar settlement situations?
 - Jeff: I am not sure of the legal status of the other companies using these devices and uncertain how that money will be distributed. This was one of the most blatant offences. So I am not sure of the answer to this question
- Cassie: how would we report, in pounds, something like a vehicle recall for states?
 - Jeff: that would be impossible to figure out. We should count these as planning credits, similar to Progress deposition
 - Cassie: so this would only be a planning BMP
 - Jeff: in my mind, yes
 - Alicia: Noting this specifically as a planning BMP is very helpful to think about this
 - Cassie: maybe someday we should have a BMP expert panel on emission reductions since we expect this trend to continue in the future
 - Olivia: When a formal decision is made, it would be good to include the specifics that it is only a planning BMP, not eligible for progress. That will help us implement it correctly in CAST
 - Cassie: Jeff, can you update the slides accordingly to make this note it will only be a planning BMP with this option
 - Jeff: yes

11:05 AM – [Integration of FieldDoc](#) - John Dawes, The Commons (50 min).

The FieldDoc Platforms helps practitioners set conservation goals, model impact, track progress, and map grant-funded restoration projects. Restoration investors leverage FieldDoc to gain site-specific information on where their dollars are making a difference. This presentation will provide an overview of the platform's current functionality available for use in BMP tracking and reporting workflows and share specific use cases for how FieldDoc can be deployed to collect robust information on project implementation.

Discussion

- Samuel Canfield: I think I heard you say that grantees can send in their data, is that correct?
 - John: yes, correct. A number of non-profit groups in MD are doing BMPs like forest plantings through organizations like the Heart of Maryland, and that can be integrated. They can associate programs and grants with BMPs to create a chain of custody. A lot of the data models in BMP reporting are in different contexts, not just the TMDL, and that tends to be an area with issues from a technical point.
- Alicia: If the endpoint is an ESRI-based application like a storymap or experience builder what is the advantage of using FieldDocs as opposed to FieldMaps or Survey123?
 - John: FieldMaps and Survey123 are focused on data collection, but do not have integration with model outcomes, which FieldDocs offers. FieldDocs helps with planning. Additionally, FieldDocs has a standardized nomenclature that is synchronized with CBP standards, which gives FieldDocs a chance to shine.

FieldDocs should be viewed as complimentary to ESRI based tools and assists with standardizing data management and structural BMP reporting, which can be a challenge with ESRI tools given the variable options available.

- Cassie: does FieldDoc have an ability to report to NEIEN directly?
 - o John: we do not report to NEIEN directly, but we are capable and interested in doing this. However, based on feedback from VADEQ and PADEP, our number one goal is to adhere to the state templates.
- Cassie: this tool is very exciting, especially the ability to verify using VR technology and images. Can someone use a mobile device to upload this information?
 - o John: yes, mobile devices do work
- Olivia: for the states, do they foresee being able to do this with agriculture given confidentiality? This looks excellent for developed land and urban BMPs since they are given in lat, long, but I am wondering if it can be harnessed for agriculture.
 - o Lisa Beatty: there is a limitation on the state's end, at least in the case of PA, about data collection for agriculture because of right to know laws around data collection. So, we have to keep Ag data separate
 - o Emily Dekar: Olivia, in NY, we are not able to use the FieldDoc system for Ag BMP's due to the farm and practice location information being protected and required to remain confidential under the New York State Agriculture Environmental Management program.
- Ruth: What is John's contact information?
 - o Phone: 814.386.2565. Email: dawes@ourcommoncode.org

11:55 AM – **Recap of Actions and Decisions (5 min).**

12:00 PM – **Adjourn**

Next Meeting

Thursday, February 2, 2023 from 10:00 AM – 12:00 PM.

Participants

Alex Gunnerson, CRC/STAR Staffer
Ruth Cassilly, UMD/CBPO
Cassie Davis, NYSDEC/Chair
Olivia Devereux, Devereux Consulting
Emily Dekar - Upper Susquehanna Coalition
Samuel Canfield, WVDEP
Alicia Ritzenthaler, DC DOEE
John Dawes - The Commons
Kevin McLean, VA DEQ
Arianna Johns, VA DEQ
Nicole Christ - MDE
Jessica Rigelman - J7 Consulting
Gary Shenk, USGS/CBPO
Dave Montali, tetra tech, wv , mwg
Tom Butler, EPA CBPO
Helen Golimowski, Devereux Consulting
Mark Dubin, CBPO/UME

Jeff Sweeney, EPA/CBPO
Scott Heidel PA DEP, also on phone ending in 9740, for audio
Greg Sandi, MDE
Alana Hartman, WVDEP
Lisa Beatty, PA DEP
Leon Tillman, USDA-NRCS
Jennifer Walls, DE DNREC
Holly Walker, DE DNREC
Eugenia Hart, Tetra Tech, DE
Norm Goulet, NVRC
Barry Evans, PSU
Charlotte Weinstein
Elizabeth Hoffman, MDA
Sue Buyaskcas, Chesapeake Commons
Chris Brosch, DDA
Camille Liebnitzky

Douglas Austin, EPA
 Elliott, Chesapeake Conservancy
 Julia Wakeling, DC
 Katie Walker, Chesapeake Conservancy

Lucinda Power, EPA/CBPO
 Karl Blankenship, Bay Journal
 KC Filippino, HRPDC
 Lin Perex, Drexel

Acronym List

AgWG- Agriculture Workgroup	BMPVAHAT- BMP Verification Ad Hoc Action Team
BMP- Best Management Practice	CBP- Chesapeake Bay Program
CAST- Chesapeake Assessment Scenario Tool (user interface for the CBP Watershed Model)	CRC- Chesapeake Research Consortium
CBPO- Chesapeake Bay Program Office (houses EPA and myriad contractors and grantees working towards CBP)	DOEE- [DC] Department of Energy and Environment
CBW-Chesapeake Bay Watershed	EPA- [United States] Environmental Protection Agency
DNREC- [DE] Department of Natural Resources and Environmental Control	FFWG- Federal Facilities Workgroup
DoD- [United States] Department of Defense	MB- Management Board
FWG- Forestry Workgroup	NFWF- National Fish and Wildlife Foundation
LUWG- Land Use Workgroup	PA DEP- Pennsylvania Department of Environmental Protection
NEIEN- National Environmental Information Exchange Network	PSU- Pennsylvania State University
NYSDEC- New York State Department of Environmental Conservation	UMCES- University of Maryland Center for Environmental Science
PSC- Principals' Staff Committee	USDA-ARS- United States Department of Agriculture- Agricultural Research Service
STAC- Scientific & Technical Advisory Committee	States Department of Agriculture-Natural Resources Conservation Service
TMDL – Total Maximum Daily Load	VW – Volkswagen
UMD- University of Maryland	VA DEQ- Virginia Department of Environmental Quality
USDA-NASS- United States Department of Agriculture- National Agricultural Statistics Service USDA-NRCS- United	WTWG- Watershed Technical Workgroup
USWG- Urban Stormwater Workgroup	WV DEP- West Virginia Department of Environmental Protection
WQGIT- Water Quality Goal Implementation Team	WWG – Wetlands Workgroup