

**Chesapeake Bay Program
Watershed Technical Workgroup (WTWG)**

Meeting Minutes

Thursday, May 4, 2023

10:00 AM to 12:00 PM

[Meeting Materials](#)

Summary of Actions and Decisions

Decision: The WTWG approved the [April Meeting Minutes](#).

Action: Please reach out to Sushanth Gupta (Gupta.sushanth@epa.gov) by **Friday May 26th** if you have nomination suggestions for one or both open At-Large membership positions in the WTWG.

Action: The group should review and provide feedback on the Animal Mortality BMP Technical Appendix via email to Auston Smith (Smith.auston@epa.gov) or Jeremy Hanson (Hansonj@chesapeake.org). A copy of the Animal Mortality BMP Technical Appendix can be found on the May WTWG Meeting [calendar page](#) and at [this link](#). We will bring this item back for discussion at the June WTWG meeting.

Action: Jeff will edit the request for a decision on the VW Settlement BMP to include the request for an Expert Panel. The WTWG will be asked to vote on it at the June meeting.

Action: The group will provide any additional feedback via email on the comprehensive CAST review process, building on last month's discussion. Please reach out to Ruth Cassilly (rcassilly@chesapeakebay.net), Cassie Davis (rcassilly@chesapeakebay.net) or Sushanth Gupta (Gupta.sushanth@epa.gov) with feedback. The materials are available for review on the May WTWG Meeting [calendar page](#).

Decision: The WTWG approved the Oyster BMP Expert Panel Technical Appendix.

Meeting Minutes

10:00 **Introductions and Announcements** – Cassie Davis, NYSDEC (15 min).

- **Decision:** The WTWG approved the [April Meeting Minutes](#).
- **Nominations for new At-Large members** – Cassie Davis, NYSDEC
 - The WTWG has **two open At-Large positions** due to the departure of Jessica Rodriguez (DoD) and Jordan Baker (HRC Inc.) and requested nominations via email for terms ending in December 2023, at which point members could ask to be considered for a subsequent two year term.
- **Action:** Please reach out to Sushanth Gupta (Gupta.sushanth@epa.gov) by **Friday May 26th** if you have nomination suggestions for one or both open At-Large membership positions in the WTWG.
- **Previous and Upcoming CAST Webinars** – Helen Golimowski, Devereux Consulting

- Helen went over last month's CAST webinar on BMP Targeting Maps, which will be posted to the CAST free training videos page soon. The upcoming CAST webinar on the Trends Over Time App will most likely take place on Thursday, May 18th at noon. Information will be on the CAST free training videos page and in the CAST newsletter.
- **Progress Update/Announcements** – Jeff Sweeney, EPA / Olivia Devereux, Devereux Consulting
 - Jeff explained that the 2022 progress scenario has been finalized, although about a month is needed before the Reducing Pollution Indicator is published on the Bay Program website. Jurisdictions should expect an email from Jeff expressing appreciation and explaining any minor issues that were encountered. The 2022 Progress Scenario will be released after publication of the Reducing Pollution Indicator in the interest of everyone getting it at the same time. Jeff mentioned that if you have a pressing need for the 2022 progress scenario you can email him individually and state your case.
- **BMP Reporting Transparency and Updates to NEIEN node** – Olivia Devereux, Devereux Consulting
 - Olivia shared a slide from the WQGIT April meeting the redesign of the NEIEN backend submission process. Olivia explained that the redesign would give states more options for how to submit their data, work more smoothly, and offer more transparency. The redesign will allow upload via Excel instead of XML and have API integration, which is something PA wanted. The changes won't affect how the process currently works.

Discussion:

Bill Keeling: Can you confirm that these changes will only apply to 2023 and beyond, and that the 2022 process will remain as is?

Olivia Devereux: Yes, additionally the changes for 2023 going forward will not remove any currently available options, just give states more flexibility.

Alana Hartman: I would appreciate keeping these updates as an item in the agenda because it is useful to be kept apprised and this is the appropriate workgroup for that.

Cassie Davis: I'm excited to eventually submit only to NEIEN and not CAST as well.

Emily Dekar: Thanks Olivia! I'm looking forward to not dealing with XML again.

- **Animal Mortality BMP Technical Appendix review announcement** – Auston Smith, EPA
 - Auston went over changes to the Animal Mortality BMP Technical Appendix (TA). Auston explained that the changes would be a planning BMP in CAST 21 and some may not be applicable until Phase 7. Auston requested feedback from WTWG members to either him or Jeremy Hanson on the Animal Mortality BMP TA changes. The TA is available on the calendar page or by reaching out to Auston.

Action: The group should review and provide feedback) on the Animal Mortality BMP Technical Appendix via email to Auston Smith (Smith.auston@epa.gov) or Jeremy Hanson (Hansonj@chesapeake.org). A copy of the Animal Mortality BMP Technical Appendix can be

found on the May WTWG Meeting [calendar page](#) and at [this link](#). We will bring this item back for discussion at the June WTWG meeting.

10:15 **Quantifying the Effects of Transportation Settlement (e.g., Volkswagen) Actions as a Planning BMP** – Jeff Sweeney, EPA, All (25 min).

Jeff provided an update and overview of next steps regarding the proposed Transportation Settlement BMP. Jeff explained that he was asking for a decision to approve the settlement as a planning BMP and went through the mechanics of how nitrogen reductions were credited (as an edge of tide [EOT] reduction). Jeff went into detail about different choices for measuring and crediting and explained why the final ones were settled on. PA was used as an example for measurement and mitigation of nitrogen reduction.

Decision: The WTWG will be asked to vote on whether to approve the Transportation Settlement Emission Reduction as a Planning BMP.

Discussion:

Ruth Cassilly: Several jurisdictions wanted to know what's already accounted for in the CMAQ model. Lew Linker and Gary Shenk will be presenting on that at the [August WTWG meeting](#) so if you're interested plan on attending.

Norm Goulet: Concerns have been raised about double counting. Could someone explain the process for moving from a planning BMP to a progress BMP? Also, since the CMAQ model is a black box for the most part, how do we know that these mitigations won't be included in the next CMAQ round?

Jeff Sweeney: It will take lots of collaboration between the states, CBPO and air modelers at Research Triangle Park. It's a side by side comparison between what's in the state's action plan, what they've actually implemented from the plan and then comparing that to estimates of Clean Water Act actions and projections of those used in the TMDL. Formally, it would be proposed from a jurisdiction and then CBPO and the modelers would help get at the differences that you're concerned about, Norm.

Norm Goulet: I respect that it's not a simple process. It just seems to me that this might be short cutting the process, in that CBPO and modelers would work with a jurisdiction directly, versus going through an Expert Panel process like the other BMPS.

Jeff Sweeney: If you want to propose an Expert Panel process that works well for us. Here's the specifics of PA's proposed mitigation actions. Lots in here but essentially it comes down to figuring out what has been implemented and what hasn't been and then what of the implemented actions is accounted for in the clean water act scenario and what isn't.

Cassie Davis: Would it be correct to say that this would be a planning BMP until we had an

Expert Panel and then it would become an approved BMP?

Jeff Sweeney: Yes, if someone is going to propose an Expert Panel the sooner the better. The sooner EPA gets direction on how you want to do this, the sooner we can get a group formed for the Expert Panel. We do need to verify that we have funding to support an Expert Panel. It's a quite complicated process.

Cassie Davis: Without a way to make it an approved BMP other than through an Expert Panel, it would remain a planning BMP?

Jeff Sweeney: Yes

Cassie Davis: Maybe it makes sense to leave it as a planning BMP. If there were large reductions as a planning BMP that would be an incentive to move forward with the Expert Panel.

Jeff Sweeney: Good idea, these percentages are low but can be significant enough to make an Expert Panel worth it. Once we're on Phase 7 this work and these tables would be updated.

Olivia Devereux: This is already in the PA WIP so isn't it already a planning BMP?

Sarah Lane (in chat): It's also in MD WIP.

Olivia Devereux (in chat): Why is DC not in the table with the reductions?

Jeff Sweeney: It's written in PA WIP but not credited in the model scenario. Approval as a model BMP would allow us to incorporate it into PA WIP model scenario.

Gregorio Sandi: I want to make sure we're thinking longer term beyond the VW agreement. Maybe Expert Panel charge can be not just the VW agreement, but additional regulations passed out by states since.

Ruth Cassilly: I'm hearing two things here, that we go ahead with an Expert Panel and then Cassie said we make it a planning BMP and see if an Expert Panel is worth it. Which of the two do we want to do?

Gregorio Sandi: Speaking for MD I would advocate for an Expert Panel. I don't know what the schedule, budget, and willingness are like on their end but we've run some numbers on our end and feel it's a significant reduction potential for the future.

Norm Goulet: Right now I would be a hold unless an Expert Panel was part of the process.

Ruth Cassilly: Are you a hold on making it just a planning BMP as well?

Norm Goulet: Unless there's a guarantee of an Expert Panel. I have too many reservations about double counting.

Jeff Sweeney: The only thing we don't know about yet is funding the panel, which we'll get into in the office.

Ruth Cassilly: It seems like we need to hold off the vote on making it a planning BMP until we can get information on whether an Expert Panel is a possibility, correct? Norm is a hold and that's all it takes. Maryland expressed the desire for an Expert Panel as well.

Norm Goulet: I can't speak for Cassie and this WG but I can tell you that USWG doesn't get money for Expert Panels and we still bring them forward.

Cassie Davis: When USWG has an Expert Panel are you involved with that? I'm familiar with reviewing TAs but not the steps for creating an Expert Panel.

Norm Goulet: There's a large spectrum from bringing in outside experts to the coordinator doing it by themselves. I recognize this one is particularly complex because of the additional EPA office [Research Triangle Park], modelers etc. and the cost associated with that, but I don't think that should stop us. If any other WG came forward with a BMP without approval from an Expert Panel vetted by the states and partners, hell would have to be paid. I don't think we should be the group that short circuits this process.

Ruth Cassilly: Jeff, does it sound like a workable plan to amend the description and add the request for an Expert Panel? We can then bring it back for a vote next month.

Gregorio Sandi (in chat): Whatever gets this BMP moving.

Jeff Sweeney: It would be great to have one or two reps from each jurisdiction who actually develop these plans in the states and have a good sense of what's being executed as far as these plans go.

Ruth Cassilly: We don't hear any objections to that plan, Cassie are you okay with moving forward with it?

Cassie Davis: Yes that makes sense, and we can come back with more information for our next meeting.

Action: Jeff will edit the request for a decision on the VW Settlement BMP to include the request for an Expert Panel. The WTWG will be asked to vote on it at the June meeting.

10:40 **Charge from the Water Quality GIT/Management Board on Phase 6 Data Processing Protocols**
– Ruth Cassilly, UMD/Coordinator (45 min).

Last month, Ruth presented on the proposed path forward for addressing the Management Board charge to the Water Quality GIT/WTWG: *“Work with the Watershed Technical Workgroup and others as appropriate in the development of a policy for the partnership regarding safeguards, triggers, and protocols to prevent future data analysis variations and how they are applied (Addresses PSC 8/29/22 Decision #3).”* The group confirmed the Track 1 decision. This

month the group will have time to discuss feedback on the CAST review process. Next month, additional protocol recommendations will be voted on.

Action: The group will provide feedback on the CAST review process, building on last month's discussion

Ruth: Ruth explained that she incorporated feedback from last month's discussion into her presentation and the Track 2 CAST Update Process document. She reviewed progress on Track 1 from February to the vote in April where we approved not pursuing Track 1, although many voting members stood aside or agreed with reservations. Ruth went over some of the concerns accompanying the vote about how dynamic QA/QC processes are, Cassie had suggested handling this by incorporating a QA/QC review into the CAST Update Process within Track 2. Ruth then presented a revised Draft Phase 6 CAST Update Review timeline that incorporated Cassie's suggestion and asked the group for additional feedback. Discussion on the need for additional protocols to resolve the contention of anomalous CAST output was also revisited. Feedback from the May discussion will be incorporated into final draft recommendations for the members to review and approve before elevating to the WQGIT.

Discussion:

Olivia Devereux (in chat): Clarified that IET is the Implementation and Evaluation Team, Lucinda is the leader of IET.

Dave Montali: You need to emphasize that for the jurisdictional review for anomalies to be effective states must be on it right off the bat. If on May 31 a jurisdiction claims that something is illogical, finalizing and getting it out by June 30th doesn't seem realistic.

Ruth Cassilly: That's a good point. I don't know what we can do, does anybody have suggestions on how to emphasize that when your data becomes available to start reviewing ASAP?

Jeff Sweeney: As an example on USDA's website, they're saying the 2022 Census of Agriculture will not be released until spring or summer of 2024. Originally, they had predicted February 2022 but it has already been pushed out to spring or summer 2024.

Olivia Devereux: The reason USDA did that is they extended the time period to respond to their survey so that they could get a better response rate. That extension increased their time for analysis etc.

Ruth Cassilly: This timeline is under ideal circumstances and obviously things will shift and change. Hopefully this will be better than before when review wasn't formally integrated into the process. We hope to have a way to say that 'the data is in; review should begin now'. Even if Agricultural Census data is not available in February, review of documentation and QA/QC of data could still be happening. When we get data we will have those types of issues worked out ahead of time. Dave, we will try to incorporate your comments and emphasize need for some kind of jurisdictional review ASAP.

Dave Montali: Maybe there's a spot between Feb 7th and May 31st for a deadline for making initial illogical output observations.

Ruth Cassilly: Great suggestion. Does anyone have a reason why that can't be done? Is there any input on how long jurisdictions should have to review before they lose the chance to say something doesn't look right.

Dave Montali: At least two months based on what I would do. There might be some other tools when those things come out that might facilitate a quick look by the jurisdictions that might speed up that timeframe.

Cassie Davis: Olivia has been able to produce products that improve our ability to review CAST models in the past. Olivia, I don't know the timeframe would be on those?

Olivia Devereux: Yes, that's how I review the data and I can certainly do that.

Ruth Cassilly: Does the end of March work to do back and forth and work out if something needs to be changed or doesn't look right? That way we have April and May to try to deal with it.

Gregorio Sandi (in chat): Depends on data and how its presented

Ruth Cassilly: Do you mean presented from IET?

Gregorio Sandi: Looking at previous releases there's a high level summary that lets you look into the data further and there's the next level of something's not looking right, how do we dig into it next and then there's additional issues. Sometimes it takes longer, sometimes it doesn't take much time at all.

Dave Montali: You can't predict or make rules that address everything. Coordination is important. All I'm saying is if none of that stuff goes on, WQGIT approving everything and getting it out by June 30th would not be possible if something was raised on May 31st. The first step will be a jurisdictional rep contacting CBPO and saying I'm seeing something odd and wherever that leads. I like that Mar 31 date as a prompt for initial concerns relative to illogical results. What comes after that is two months of coordination.

Gregorio Sandi (in chat): Agreed

Olivia Devereux: Let's be real for CAST 21 it was a year and a half to two years that came after that. The input review is really critical.

Ruth Cassilly: We can make March 31st an aspirational goal assuming everything's happening the way it should be happening.

Ruth Cassilly: The next issue to discuss is how we handle perceived anomalies or illogical results. For example, WV with urban fertilizer data. They did that not because of protocol but because it was the logical thing to do. In April we discussed this and had support for scientific validation of anomalies and the burden of explanation being on the contender. One suggestion was that the

partnership should confirm or agree that results are illogical and another was for there to be a series of steps in place that lead to an effective and timely resolution. There was the suggestion that if an error couldn't be fixed in a reasonable timeframe it would revert to the previous model or method. We shouldn't sacrifice or ignore the resolution of issues or problems to meet timelines or due dates. This is exactly what you were pointing to Dave, that if at the end of March we had a jurisdiction say this doesn't look right that this process would kick in, hopefully informally before this but at the very least this process would have to occur before May 31st. I'm open to suggestions about whether we should keep this vague or develop more detailed steps.

Dave Montali: I think what's on the slide is really good. I could see a kick out box on the overall schedule that starts this process on April 1st. When coming to decision on whether something is illogical, we need to figure out which part of the partnership says yay or nay (ie GIT, SSWG). Conceptually it seems ok but ambitious. Like Olivia said we can come up with ideas for years but at some point we need to take a stab at it and two months seems reasonable to me.

Ruth Cassilly: If this is something that's happening hopefully we've noticed it a lot earlier but just giving it a deadline of April 1st would be a good idea for getting the process started if it hasn't already. Does anyone have feedback on Dave's suggestion of whether if we're going to require jurisdictional approval of the contention that it happens at the WG level or GIT level or both?

Norm Goulet: I'm fine with the WG level but there's nothing wrong with going to both.

Dave Montali: This decision is really about whether the result is illogical. How to fix it doesn't need to go above. The partnership will look at it and decide whether or not its illogical and from there what to do with it involves a lot more. Maybe it's a SSWG a couple weeks later with the expectation for a presentation by April 15th and the convening of a special group or the WG itself to hear it. I'm just thinking about how many monthly WG meetings does it take to make a decision and it's often four or five.

Ruth Cassilly: Going back to Olivia's comment from earlier, if we build input safeguards in early in the process hopefully, we can minimize the chance we end up here in the first place. I don't know that it's possible to have a perfect process, I keep coming back to what defines unreasonable, which I think would be situational, but that's just my opinion and jurisdictions would probably be the best judge of that. I think that the suggestion that other jurisdictions weigh in is good but as far as how they gauge that there's a lot open to interpretation.

Jeff Sweeney: You need a good statistician who can look at large amounts of data and detect anomalies. You want to use statistics in order to identify an anomaly. We have a couple people in our office who I rely on to do that and hopefully we can bring in a statistician within our office to assist with that.

Ruth Cassilly: I will put that suggestion in. If you have feedback please send it me, Cassie or Sushanth and we can incorporate it into the final proposal for review in June. The materials are available on the Calendar page if you need them. The next steps on this are that Track 1 we resolved to not pursue it but incorporate additional safeguard review into the Track 2 process. For June the goal is final agreement and recommendations to present to the WQGIT. We will

come back with suggestions incorporated and hopefully we can come to consensus in June.

Action: The group will provide any additional feedback via email on the comprehensive CAST review process, building on last month’s discussion. Please reach out to Ruth Cassilly (rcassilly@chesapeakebay.net), Cassie Davis (rcassilly@chesapeakebay.net) or Sushanth Gupta (Gupta.sushanth@epa.gov) with feedback. The materials are available for review on the May WTWG Meeting [calendar page](#).

11:25 **Vote on Revised Oyster BMP Expert Panel Technical Appendix** – Olivia Caretti, Oyster Recovery Partnership (20 min).

Last month, the WTWG was given an overview of the draft technical appendix associated with the Oyster BMP expert panel report and the expectations of how the BMPs will work in CAST/NEIEN. The comment period for the expert panel report and technical appendix ended in March 2023. Olivia returns to the WTWG to address the comments made and present the revised technical appendix to be voted on for approval. Materials and informational webinars associated with this BMP can be found on the Oyster BMP [calendar page](#).

Decision requested: The WTWG will be asked to vote on whether to approve the technical appendix associated with the Oyster BMP expert panel report.

Olivia explained the changes to the Oyster BMP Expert Panel TA based on the last couple months of feedback and discussion. The biggest changes were specifying the units for each item that must be reported and having multiple name options for BMP area, site area or restoration area. Olivia explained that they added a Q and A on when restoration activities are eligible to receive credit based on feedback received at last month’s meeting.

Decision: The WTWG approved the Oyster BMP Expert Panel Technical Appendix. The breakdown of votes is below.

DC	Endorse
DE	Stand aside
MD	Endorse
NY	Endorse
PA	Endorse
VA	Stand aside
WV	Endorse

Norm (At- Large)	Stand aside
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11:45 **Recap of Actions and Decisions** (5 min).

12:00 **Adjourn**

Next Meeting: Thursday, June 1st, 2023, from 10:00 AM – 12:00 PM.

Participants

Alana Hartman, WV DEP	Kevin McLean, VA DEQ
Alicia Ritzenthaler, DC DOEE	Kimberly Dagen, SRBC
Arianna Johns, VA DEQ	Leon Tillman, USDA
Auston Smith, EPA	Mark Dubin, UMD
Bill Keeling, VA DEQ	Megan Thyng, EPA
Cassie Davis, NYSDEC	Normand Goulet, NVRC
Clint Gill, DDA	Olivia Caretti, Oyster Recovery Partnership
Dave Montali, Tetra Tech WV	Olivia Devereux, Devereux Consulting
Elizabeth Hoffman, MDA	Ruth Cassilly, UMD
Emily Dekar, USC	Samuel Canfield, WVDEP
Gregorio Sandi, MDE	Sarah Lane, MD DNR
Helen Golimowski, Devereux Consulting	Scott Heidel, PA DEP
Jeff Sweeney, EPA	Sushanth Gupta, CRC
Jeremy Hanson, CRC	Tom Butler, EPA
Jessica Rigelman, J7 Consulting	

Acronym List

BMP: Best Management Practice	EPA: [U.S.] Environmental Protection Agency
CAST: Chesapeake Assessment Scenario Tool (user interface for the CBP Watershed Model)	MDA: Maryland Department of Agriculture
CBP: Chesapeake Bay Program	MDE: Maryland Department of the Environment
CRC: Chesapeake Research Consortium	NEIEN: National Environmental Information Exchange Network
DC DOEE: [DC] Department of Energy and Environment	NVRC: Northern Virginia Regional Commission
DDA: Delaware Department of Agriculture	NYSDEC: New York State Department of Environmental Conservation

PA DEP: Pennsylvania Department of Environmental Protection

PSC: Principals' Staff Committee

QA/QC: Quality Assurance / Quality Control

SRBC: Susquehanna River Basin Commission

SSWG: Source Sector Work Group

TA: Technical Appendix

UMCES: University of Maryland Center for Environmental Science

UMD: University of Maryland

USC: Upper Susquehanna Coalition

USDA: United States Department of Agriculture

VA DEQ: Virginia Department of Environmental Quality

WQGIT: Water Quality Goal Implementation Team

WTWG: Watershed Technical Workgroup

WV DEP: West Virginia Department of Environmental Protection