



Chesapeake Bay Program
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Watershed Technical Workgroup Meeting Minutes

March 5, 2026
10:00 AM-11:30 AM

[Visit the meeting webpage for meeting materials and additional information.](#)

Purpose: To provide the Watershed Technical Workgroup with important updates and to discuss and approve pasture/hay high efficiency values for supplemental nutrient management rate, placement, and timing; updates to the Phase 6 NEIEN Appendix; and the NEIEN Appendix for Phase 7.

Summary of Actions & Decisions

Decision: The WTWG approved the [February 2026 meeting minutes](#).

Decision: In between the February and March WTWG meetings, the WTWG approved via email the process for proportioning nutrient management acres to pasture/hay land uses for Phase 7.

Action: Please submit all 2025 Progress data and Phase 7 calibration BMP history by April 1st, 2026. Please reach out to Auston Smith (Smith.Auston@epa.gov) and Jess Rigelman (jrigelman@j7llc.com) with any questions or concerns related to this deadline.

Action: A new version of the NEIEN code will be deployed 3/5 and a Progress run will take place 3/6, both incorporating items recently discussed by the WTWG. Please reach out to Jess Rigelman (jrigelman@j7llc.com) with any questions or concerns.

Decision: The WTWG approved Sushanth Gupta (MWCOCG) as Chair and Christina Lyerly (MDE) as Vice Chair of the WTWG for the 2026- December 2027 term.

Decision: The WTWG approved the following AMT-recommended efficiency values for supplemental nutrient management rate, placement, and timing.

Load Source	Placement		Rate		Timing	
	N	P	N	P	N	P
Hay High	5.00	10.00	15.00	5.00	5.00	1.00
Pasture High	3.00	10.00	5.00	5.00	5.00	1.0

Decision: The WTWG approved the additions to the Phase 6 NEIEN Appendix to allow for the advance submission of BMPs that will affect Phase 7.

Decision: The WTWG approved the draft Phase 7 NEIEN Appendix, with the request that urban BMPs from prior Phases (previously crossed out) still remain in the Appendix for Phase 7.

Post Meeting Update: The final approved Phase 7 Appendix is posted [here](#).

Minutes

I. Introductions & Announcements

Lead: Auston Smith, EPA

Auston Smith, EPA, walked the group through the following announcements:

- Approval of the February WTWG meeting minutes
 - The WTWG approved the [February 2026 meeting minutes](#).
- 2025 Progress Release Timeline
 - CBPO is still working to ensure that the 2025 Annual Progress scenario can be released by July of 2026. Outside of Progress data, the hope is to finalize QAPPs between April and early May. Reminder emails will go out to receive signatures on the QAPP documents, prior to their upload and finalization by the end of May. CBPO will be working with all partners on 2025 Progress communications and next steps as Phase 7 is released, planning targets and WIPs are finalized, and the Phase 7 model is in use.
- Update On the Results of the Pasture/Hay Nutrient Management Decision Via Email
 - Following the February WTWG meeting, feedback was received via email from all voting members on the proposed process for proportioning nutrient management acres to pasture/hay land uses in Phase 7. All votes received were between 3-5, so this item was approved.
- Reminder of April 1 Deadline for Phase 7 Calibration BMP History and 2025 Progress Data Submissions
 - BMP submissions for 2025 Progress and the Phase 7 calibration for BMP history are due April 1st. The WTWG was asked to contact Jess Rigelman and Auston Smith in advance of the 1st with any concerns.
- AWMS Update
 - As CBPO and Pennsylvania worked through a possible NEIEN Appendix Update to include a conversion rate from volume of storage facilities to animal units, it was communicated by the requesting party that there was no longer interest in pursuing this update for the Phase 7 NEIEN Appendix at this time. As such, additional input will not be sought from the WTWG on this update.
- NEIEN Code Deployment
 - Jess Rigelman noted that a new version of the NEIEN code will be deployed today (3/5). This will include the potential duplicate worksheet on the validation report, as well as new error codes. The 3/6 Progress run will include oyster BMPs correctly attributed to Virginia, as opposed to being erred out since they were in Maryland. WTWG members are asked to look at these updates and communicate any concerns.

Actions:

1. Please submit all 2025 Progress data and Phase 7 calibration BMP history by April 1st, 2026. Please reach out to Auston Smith (Smith.Auston@epa.gov) and Jess Rigelman (jrigelman@j7llc.com) with any questions or concerns related to this deadline.

2. A new version of the NEIEN code will be deployed 3/5 and a Progress run will take place 3/6, both incorporating items recently discussed by the WTWG. Please reach out to Jess Rigelman (jrigelman@j7llc.com) with any questions or concerns.

Decisions:

1. The WTWG approved the [February 2026 meeting minutes](#).
2. In between the February and March WTWG meetings, the WTWG approved via email the process for proportioning nutrient management acres to pasture/hay land uses for Phase 7.

II. Confirmation of WTWG Leadership

Lead: Auston Smith, EPA; Sushanth Gupta, MWCOG; Christina Lyerly, MDE

The WTWG has been given direction from the Clean Water Goal Team Chairs to move forward with the confirmation of nominees for the vacant Chair and Vice Chair positions. Auston Smith introduced our nominees for Chair (Sushanth Gupta, MWCOG) and Vice Chair (Christina Lyerly, MDE) and asked for workgroup approval of these nominees.

Decisions:

1. The WTWG approved Sushanth Gupta (MWCOG) as Chair and Christina Lyerly (MDE) as Vice Chair of the WTWG for the 2026- December 2027 term.

Discussion Notes:

[Caroline Kleis \(in chat\)](#): View Christina and Sushanth's bios here!

<https://www.chesapeakebay.net/what/event/watershed-technical-workgroup-meeting-march-2026>

[Auston Smith](#): Caroline, I think that we could move to vote on this formally rather than saying if there are no dissenting opinions, it's approved. So, if folks could please register your vote in the chat or raise your hand, and we can take you off mute. If you have any opinions one way or another on this, I would love to hear.

[Kevin Du Bois \(in chat\)](#): 5

[Scott Heidel \(in chat\)](#): PA 4

[Matt Kofroth \(in chat\)](#): 5

[Kaylyn Gootman \(in chat\)](#): 5

[Alicia Ritzenthaler \(in chat\)](#): DOEE- 5

[Joshua Glace \(in chat\)](#): 4

[Christina Lyerly \(in chat\)](#): MD-3

[Norm Goulet \(in chat\)](#): 4

[Bill Keeling \(in chat\)](#): VA 4

[Matt Kofroth \(in chat\)](#): I vote 4.

[Auston Smith](#): We don't have Samuel on. We can reach out to Samuel and register his vote later with the minutes.

[Dave Montali](#): I did not hear that Samuel wasn't going to be on. Maybe something has come up. I can't imagine him not going for it, but I don't think I am in a position to vote. So, if you could deal with it through a quick email, that would be better.

[Auston Smith](#): That's how we will move forward. With that one vote outstanding, it looks like this has been approved. I am tentatively looking forward to working with you all in the future, Christina and Sushanth.

A vote of 4 from Samuel Canfield was registered later in the call.

III. Supplemental Nutrient Management Efficiencies

Lead: Tom Butler, EPA

During the creation of Hay High and Pasture High Land Uses, the AMT did not address the efficiencies of Supplemental Nutrient Management, Rate, Placement, and Timing. At their February 13th meeting, the AMT reviewed potential efficiency values for Phase 7 and prepared a recommendation for the Watershed Technical Workgroup. The Watershed Technical Workgroup reviewed these proposed efficiency values and voted on their adoption for Phase 7.

Decisions:

1. The WTWG approved the following AMT-recommended efficiency values for supplemental nutrient management rate, placement, and timing.

	Placement		Rate		Timing	
Load Source	N	P	N	P	N	P
Hay High	5.00	10.00	15.00	5.00	5.00	1.00
Pasture High	3.00	10.00	5.00	5.00	5.00	1.0

Discussion Notes:

Caroline Kleis (in chat): Tom's presentation:

https://www.chesapeakebay.net/files/documents/NM_efficiencies_2.13.26.pdf

Scott Heidel: Thank you very much for presenting this. This is definitely something that needs to get sorted out. I just wanted to bring to folks on this call's attention that we did have a discussion during the AMT considering the new land uses, their loading rates, and things like that being then recalculated to adjust the nutrients applied to the croplands, and we found that half the jurisdictions are getting nutrients applied at below crop need. I heavily hypothesize that it's in direct relation to this new land use type. So, I just want to make sure that during beta testing this does get investigated because applying less than crop need, to me, does not seem like a logical calculation to be making.

Tom Butler: Thanks, Scott. I appreciate that context for the group here. I certainly want to highlight that the AMT will be continuing to look at this in relation to those applications and the test that you were shown specifically. We are still getting information. I think we got the last of it in from jurisdictions on how they want to split out these land uses because they are actually able to report those. So, we are going to be getting that, and that will be reflected once we run those tests with everything calibrated. So, we will see what those results are, and it will certainly be a point that we discuss.

Auston Smith: Thanks for helping lead those conversations, Tom. Scott, thanks for bringing this up. As the AMT requires model specific input, the WTWG will be happy to support. I recognize this is pretty squarely in y'all's realm. Any other questions for Tom on these supplemental nutrient management practices? Seeing none, if folks could type their vote or

come off mute to provide further details, you are welcome to do so. Thanks for your consideration. Caorline, we will also send an email to Samuel with these decisional items.

[Dave Montali](#): He will be a three or above, but I will talk to him about all of these issues.

[Auston Smith](#): Thanks a lot, Dave. Understood. We will be sure to copy you on that outreach.

[Scott Heidel](#) (in chat): PA 3

[Kevin Du Bois](#) (in chat): 3

[Kaylyn Gootman](#) (in chat): 3

[Norm Goulet](#) (in chat): 3

[Matt Kofroth](#) (in chat): I vote 3

[Bill Keeling](#) (in chat): VA 5

[Christina Lyerly](#) (in chat): MD-4

[Josh Glace](#) (in chat): 3

[Alicia Ritzenthaler](#) (in chat): DOEE-3

[Auston Smith](#): Thanks, everyone, that is tentatively approved. We can send an update to the group with the minutes confirming as that is available. I think we can now turn it over to Jess to go over the final additions to the Phase 6 NEIEN Appendix. This is our third decisional item. Please let us know if you have any remaining questions on this topic before we move there.

[Mark Dubin](#) (in chat): In response to Scott's comment, pasture land uses would of course receive nutrient inputs from the deposition of manure nutrients. Thanks!

A vote of 4 from Samuel Canfield was registered later in the call.

IV. 2025 Progress Phase 6 NEIEN Appendix Proposed Additions

Lead: Jess Rigelman, J7 Consulting LLC

In February, Jess Rigelman provided an overview of proposed adjustments to the approved 2025 Progress Phase 6 NEIEN Appendix to include the addition of Phase 7 Urban Nutrient Management BMPs and solar pervious land uses. No progress data will be altered as these additions are only to allow for advance submissions of BMPs that will affect Phase 7. The WTWG was asked to approve these additions to the Phase 6 NEIEN Appendix.

Decisions:

1. The WTWG approved the additions to the Phase 6 NEIEN Appendix to allow for the advance submission of BMPs that will affect Phase 7.

Discussion Notes:

[Auston Smith](#): Any questions or comments? This will be the same as before. If you can, please register your vote in the chat or come off mute to give some further detail as it's useful. Thanks so much, Jess. I know you have been presenting on this for a long time.

[Kaylyn Gootman](#) (in chat): 3

[Christina Lyerly](#) (in chat): MD-3

[Bill Keeling](#) (in chat): VA 3

[Alicia Ritzenthaler](#) (in chat): DOEE- 3

[Norm Goulet](#) (in chat): 3

[Matt Kofroth](#) (in chat): I vote 3

[Samuel Canfield](#) (in chat): WV-4

[Scott Heidel](#) (in chat): PA 3

[Josh Glace](#) (in chat): 3

Kevin Du Bois (in chat): 5

Auston Smith: This is formally approved. I see that we've got all of our votes, so thanks everyone. Thank you, Jess, for walking this through for the partnership for many months.

Kevin Du Bois (in chat): I see Samuel voted; do you want to ask for his votes on the first two items?

V. Phase 7 NEIEN Appendix Update

Lead: Jess Rigelman, J7 Consulting LLC

Jess Rigelman walked the group through the updated Phase 7 NEIEN Appendix for workgroup approval. The group was asked to provide their votes on the approval of the Appendix.

Decisions:

1. The WTWG approved the draft Phase 7 NEIEN Appendix, with the request that urban BMPs from prior Phases (previously crossed out) still remain in the Appendix for Phase 7.

Post Meeting Update: The final approved Phase 7 Appendix is posted [here](#).

Discussion Notes:

Jess Rigelman: If there are any questions, let me know. The only changes are to the land use tab and if there are issues with that in any way, we can add [the urban land uses from Phase 5] back at a later date, or we can choose to not remove them now. Like I said, no one is using them.

Bill Keeling (in chat): They may well be used in WIP development.

Bill Keeling: I would recommend that you leave them in there just because we will be using those when it comes to a WIP scenario. We may not be using them in reporting, but when we are planning future events, we may want to segregate regulated from unregulated urban in our planning. So, I would recommend just leaving them alone.

Jess Rigelman: Ok, I can do that.

Auston Smith: Thanks, Bill. Any other questions or comments for Jess? I think we can move to our voting screen. Fourth vote of the day, so I think you know the drill. Thanks a lot for your vote.

Scott Heidel (in chat): PA 3

Kaylyn Gootman (in chat): 3

Kevin Du Bois (in chat): Great work Jessica! I vote 5.

Christina Lyerly (in chat): MD-3

Alicia Ritzenthaler (in chat): DOEE-4

Josh Glace (in chat): 3

Bill Keeling (in chat): VA-4

Norm Goulet (in chat): 4

Samuel Canfield (in chat): WV-4

Matt Kofroth (in chat): I vote 3

Auston Smith: It seems like the color is not showing up.

Caroline Kleis: My wifi is not keeping up with these changes. I will make sure they are all inputted into the vote tracker correctly.

Auston Smith: Sounds good, Caroline. I think we have all votes between 3 and 5. Thanks so much everyone for confirming this Phase 7 NEIEN Appendix as well. Before we go on, Samuel, we had a vote to approve the incoming WTWG leadership of Christina Lyerly and

Sushanth Gupta, and we had a vote on the supplemental nutrient management practices. While we are all on the call together, I was hoping to put you on the spot for West Virginia's votes there. Let us know if you want a refresher on any of that.

Samuel Canfield (in chat): Sorry about missing those! WV - 4 on both.

Auston Smith: No worries at all. I understand everyone is busy at this time of year. Thank you so much for those votes.

VI. Wrap-Up

Lead: Caroline Kleis, CRC

VII. Adjourn

Next Meeting: April 2nd, 2026, from 10:00AM-12:00PM

Attendees:

Auston Smith, EPA

Caroline Kleis, CRC

Sushanth Gupta, MWCOG

Tom Butler, EPA

Bill Keeling, VA DEQ

Dave Montali, Tetra Tech

Tyler Trostle, PA DEP

Christina Lyerly, MDE

Dylan Burgevin, MDE

Mark Dubin, VT Cooperative Extension

Scott Heidel, PA DEP

Kevin Du Bois, DoW

Eugenia Hart, Tetra Tech

Jess Rigelman, J7 Consulting/CBPO

Matt Kofroth, LCCD

Alicia Ritzenthaler, DOEE

Ashley Hullinger, PA DEP

Josh Glace, Larson Design Group

Megan Thyng, EPA

Kaylyn Gootman, EPA

Bailey Robertory, MD DNR

Arianna Johns, VA DEQ

Norm Goulet, NVRC

Samuel Canfield, WVDEP