Chesapeake Bay Program

Watershed Technical Workgroup (WTWG)

Meeting Minutes

Thursday, April 3rd, 2025

10:00 AM to 11:00 AM

Meeting Materials

Summary of Actions and Decisions

Decision: The WTWG approved the March Meeting Minutes

Action: If you are interested in filling the open WTWG chair position, please email Caroline Kleis, CRC (kleis.caroline@epa.gov), and Auston Smith, EPA (smith.auston@epa.gov).

Action: Please continue to provide any point or polygon spatial data related to construction in your jurisdiction to Peter Claggett, USGS, (pclaggett@chesapeakebay.net).

Action: Please reach out to Auston Smith, EPA (Smith.Auston@epa.gov) if you have any questions on the finalized QAPPs that were recently sent out.

Action: Auston Smith, EPA, will work with Caroline Kleis, CRC/AgWG Staffer, and Eric Hughes, EPA/AgWG Coordinator to get the discussion of upland buffer credit for Phase 7 on the May Agriculture Workgroup (AgWG) meeting agenda.

Action: Bill Keeling, VA DEQ, will return to a subsequent WTWG meeting for a vote on the proposed methodology for the application of upland buffer credit for Phase 7.

Meeting Minutes

10:00 **Introductions and Announcements** – Auston Smith, EPA (15 min).

- **Decision:** The WTWG approved the March Meeting Minutes
- Call for WTWG Chair – WTWG Leadership
    - **Action:** If you are interested in filling the open WTWG chair position, please email Caroline Kleis, CRC (kleis.caroline@epa.gov), and Auston Smith, EPA (smith.auston@epa.gov).
- Overview of PA DEP/ Resolve Hydro AgWG Remote Sensing Update
    - Auston Smith, EPA, gave an update on the work being done by PA DEP and Tom Howard of Resolve Hydro to present and approve an adjusted methodology for the verification of four categories of tillage utilizing remote sensing. If adopted, this approach could save funding and people hours to more quickly and accurately verify and report these practices for crediting in CAST. These discussions will continue at the AgWG at their April 17th meeting, where the group will vote on the approval of this methodology. Those interested are encouraged to attend the April AgWG meeting.
    - Bill Keeling: If that moves forward, there are ramifications on who does what reporting. Is that going to be something that the Bay Program generates for everybody? In other words, would I cease reporting our survey results and just get credit for whatever is remote-sensed? Has it been discussed how that works?

- Auston Smith: My initial thoughts are that this approach is Pennsylvania specific for this upcoming progress year. Were other jurisdictions curious about pursuing that methodology for their own area, then I think that would need to be an additional discussion. Scott, is that a good summary of the effort?
- Scott Heidel: Yes, that's how we view it as well. We are developing the methodology to be used throughout the Bay Watershed, but we're calibrating it based on our transect survey data that we've been collecting over the last several years. So, it would be Pennsylvania specific at this point, but it should be able to be adjusted for the other jurisdictions as long as you have data to calibrate it.

- Construction Data for Land Use Data Team Reminder
  - **Action:** Please continue to provide any point or polygon spatial data related to construction in your jurisdiction to Peter Claggett, USGS, (pclaggett@chesapeakebay.net).
  - Jess Rigelman: If you've reported your construction data to me for the land use, I have given that data to Peter. So, you wouldn't have to hand that data over. It would just be anything extra that you may or may not have.
- Finalized QAPP Overview
  - Near finalized QAPPs have been sent out to all jurisdictions. Ruth Cassilly, UMD/CBPO and Auston Smith, EPA, will be sending out preparatory emails in advance of the 2025 progress season to help with streamlining efforts.
  - **Action:** Please reach out to Auston Smith, EPA (Smith.Auston@epa.gov) if you have any questions on the finalized QAPPs that were recently sent out.
- 2024 Progress Timeline Overview
  - The anticipated timeline for the progress scenario release is still early May. The group will be informed if that timeline shifts.

10:15 **Application of Upland Buffer Credit for Phase 7**- Bill Keeling, VA DEQ (30 min).

Bill Keeling, VA DEQ, presented a proposed change to the methodology for the application of upland acres for Phase 7.

Discussion:

Dave Montali: I've got some history in looking at excess of riparian deposition, and I've thought that all along the credit we are getting for riparian deposition for reporting a practice that is pasture related, exclusion with buffer practices, was that we were giving too much credit for the feet or acres that we report. I saw some of that excess in Virginia. I saw it pretty much everywhere.

Bill Keeling: Dave, that's a completely different subject, and that's what I am going to be talking with the AMT about. That cutoff of the riparian deposition is part of the animal BMPs.

Jess Rigelman (in chat): This change Bill is proposing will not affect backout at all.

Tyler Trostle (in chat): Loadings meaning reducing nitrogen load being sent, or reducing load reduction thus increasing nitrogen?

Dave Montali: How in the world is this happening? How are we getting upland benefit from a practice that is generally not applied to pasture?

Bill Keeling: I don't know, but that is how it is being done in Phase 6.

Dave Montali: I'm confused. I thought for sure that pasture buffer with exclusion is pasture, and the buffers without exclusion is everything but pasture. So, I don't know how you get the upland benefit. Jess, maybe you can help.

Jess Rigelman: You are correct as far as the land use change that exclusion buffers change pasture to ag open space or forest, and the other ones come from crop or hay. It's just the upland benefits. So, the way CAST is done now, when these exclusion fencing buffers were put in and made exclusive to pasture, and the other ones were called upland buffers, I was told to put the upland benefit on pasture for the exclusion buffers. There was no change to the upland buffers in saying that instead of them going to all ag, that they exclude pastures. So, that is the proposal that Bill is putting in place. That's just simply saying that upland buffers/ upland benefit only goes to the upland land uses, and the pasture buffers only goes to pasture.

Dave Montali: Ok. That's a nuance I didn't know about. That makes perfect sense then.

Bill Keeling: I'm going to toggle back and forth. This is the current, and this is what I am proposing. So, you see zero upland benefit from pasture for non-exclusion. Again, that's non-exclusion, and exclusion would only be on pasture. That's the proposed change from Phase 6 to Phase 7. I would hope that we would understand that it would make more sense, it would be easier to explain to people, and it seems more logical that upland benefit is only provided from a load source that BMP is applied to. So, in the case of non-exclusion, that would be on hay and cropland and would not be, I would argue, on ag open and pasture. I have heartburn about the ag open, because it's already a BMP land use, or it's a land use we convert when we do retirement to ag open or put in a grass buffer. It is an effective BMP, so I'm having problems having a BMP supplying upland benefit. Again, the proposal would be proportional distribution to the load sources the BMP is applied upon.

Dave Montali: It all seems so cut and dry that this is a mistake. Is there a counter reason that we're not understanding to doing this? The idea to put the benefit of a non-pasture BMP on pasture, was that simply a mistake or is there some other rationale for doing that?

Cassie Davis (in chat): The proposed update makes sense to me.

Jess Rigelman: I don't know of any rationale. I just think it was probably just not thought about, and it was just always this way. I do remember that I was told only to put the exclusion fencing on pasture. Nobody told me to change the other one. I didn't think about it to ask the question, so I think it was just something that was either forgotten or that maybe, at the time, people thought it should stay that way. I don't know. I just don't remember a discussion ever happening. So, it seems logical that it was just a mistake or a forgotten step.

Bill Keeling: Correct me if I am wrong, Jess, but prior to your direction on exclusion, the process was to distribute across all ag.

Jess Rigelman: Yes.

Bill Keeling: So, then you pulled out just the pasture part for exclusion and, more or less, maintained the math and how CAST works for the rest. It really wasn't until I started digging into this that it dawned on me that this was happening and that it didn't make sense and, therefore, proposed a change.

Dave Montali: In theory, I agree with you on ag open space. It seems like it's a land use that shouldn't get a buffer BMP, but is there some reason why it should be retained in the land uses?

Bill Keeling: I understand that in the real world we could have a grass buffer that gets converted. That would be a situation in terms of simulating in the model where we would do a land use change from ag open to something else. I just don't know that our tracking, reporting, and the

way CAST works and how it distributes to the land river segments, that we can carry all of that information through on the exact same acres. So, that seems like a very minor thing to be trying to tie to that land use. Otherwise, I would argue that ag open should not be used for upland benefit, nor should pasture for the non-exclusion.

Jess Rigelman: I just wanted to talk a little bit about ag open space. It's not just a BMP defined land use, but it actually is defined by the amount of wild hay in the ag census, and I know that has been argued before and that it shouldn't be done that way. Everybody's within the right to discuss if that should be changed, and that would be a discussion that I think should start in the Ag Modeling Team. I also know that Peter is potentially going to propose a way to map ag open space and, therefore, would change its definition. So, I feel like we can have these discussions, but how ag open space is defined is being discussed by the land data team, and whether or not it should be defined by wild hay or just be a BMP condition should also involve the AMT. So, I'm not arguing one way or the other on any of this, I just think that there may be a shift in general on how ag open space is defined and, therefore, we may have to revisit this conversation about ag open space.

Bill Keeling: In terms of the application to pasture, I believe it is, as Dave said, more cut and dry. It's more logical.

Dave Montali: With the whole universe of ag open space, isn't the wild hay kind of the bigger part versus the area of buffers? I'm on the same page with you. Ag open space sounds a bit shaky for putting a BMP on.

Bill Keeling: I can see that if you're talking a buffer could be downstream or downhill of some ag open area and, theoretically, be part of what's providing upland flow to the buffer. But generally speaking, a buffer goes in on a given field which is like all cropland, or all hay, or all pasture, and, at least from the data I've seen, there's sufficient upland acres particularly for pasture in Virginia to accommodate all of the exclusion buffer. So, that was the other thing that was confusing me. Regardless, I would argue that we should move at least the pasture. It should be just like this: zero application of the buffer and zero upland benefit from pasture.

Auston Smith: I really appreciate the back and forth discussion here to clarify what exactly may be happening, but I think that having a vote on this for next month would be really useful because maybe there can be next steps in the discussion. Any additional analyses or questions that the group has for both Bill and Jess would be really helpful to aid in the understanding of this. I do appreciate Cassie's comment in the chat that this update does seem to make sense on New York's end. You'll likely see this as a voting item at an upcoming meeting.

Sushanth Gupta (in chat): On this table are negative numbers an increase in loads or a decrease?

Auston Smith (in chat): Negative numbers were a decrease and vice versa here, so I believe Phosphorus was the only load that went up due to this proposed update.

Bill Keeling: The question about negative numbers, negative means it's a decrease, or loads went down. By using a proportional distribution, 110,000+ less nitrogen was produced, or we benefitted by 110,000 pounds and 5.8 million pounds of sediment, but 13,000 pounds of phosphorous went up. I wasn't sure which way to go with the negative sign here, so I wanted negative to mean a reduction. Positive is an increase.

Jess Rigelman: It's clear that we will have a decision next month that upland buffers can't have their upland benefit on pasture. Is there also a proposal, and this is for you, Bill, that upland forest buffers should be applied to crop and hay, but not ag open space? Or is that not something that is also up for a decision?

Bill Keeling: Again, I am saying non-exclusion meaning if there is no stream side fence associated with it, it should not be applied to pasture, and pasture should not provide any upland benefit. So, all of the flavors of non-exclusion (grass narrow, forest narrow), but where there's stream side fencing, that would only be on pasture.

Jess Rigelman: I understand that one. My other one is the non-exclusion ones. Exclusion is only pasture. The non exclusion ones, you had also mentioned that maybe they shouldn't go on ag open space. So basically, grass buffers can't go on open space because they create it, but forest buffers, non-exclusion, are you saying that we should remove the ability to put them on ag open space as well, and are you asking for a decision on that?

Bill Keeling: After you brought up how they're going to be kind of revamping ag open, we kind of need to see what ag open is for Phase 7. At least this is a more proportional distribution than what we currently have, even though it is going on ag open. If we can make the progress of at least fixing the pasture part, I'm willing to leave the ag open to further debate once we have a clear definition of what that is in Phase 7.

Dave Montali: Agree.

Jeff Sweeney: Did you run this by the forestry workgroup?

Bill Keeling: No.

Jeff Sweeney: They are the ones who actually defined the BMP. They're the ones who came up with the upland benefit. I'm unsure if they also assign those land uses that the upland benefit applies to, but they're all about making improvements on the model. I think there's enough people in that group that would understand what you're talking about.

Bill Keeling: This isn't just forest. Are you talking about the buffer expert panel?

Jeff Sweeney: No. I'm talking about the forestry workgroup. This isn't relevant to grass buffers. That group typically doesn't want anything to do with grass buffers.

Bill Keeling: Non exclusion includes both forest and grass, and exclusion includes both forested and grass if there's a fence. It's both of those combined. I was trying to put this in the simplest way to present it instead of having all the rotations. Right now, my proposal is that we make this change related to pasture for non-exclusion buffers that no upland credit is pulled from pasture. I would suggest at a later date once we understand better how ag open is defined and how it's derived in Phase 7, that we can revisit that subject.

Jeff Sweeney: I would suggest you at least go to the coordinator and the chair and kind of run this by them, and they can decide whether their group has any interest at all in weighing in.

Bill Keeling: Well, I could understand this going to the AgWG because it's an assortment of ag BMPs.

Auston Smith: Thanks for outlining what decisions may be coming. For next month, it would be a decision on pasture for non-exclusion buffers that no upland credit is pulled from those and then following up on the ongoing AMT discussion about ag open space, maybe Bill or Tom from the AMT may be able to come to the following Watershed Technical to expand on that potential decision.

Bill Keeling: I think if it would be ok with Tom, I think going through this with the AMT might be beneficial so that they could provide insight to the AgWG if they so desire.

Dave Montali: I am just taken aback by this. I always thought that the non-exclusion buffers could not be applied to pasture. I think Jess said that, well, with the land use change we don't include that, but with the upland benefit we do. It just seems like it was an oversight when considering what to do with the upland benefit when we pulled the exclusion practices back out of it. So, to me, there's two ways it could go. One is you let non-exclusion buffers be applied to pasture and

you do the land use change and the upland benefit, both, or you don't, and you do neither. Tell me if I am wrong, but we were philosophically thinking you don't have buffers without fences on pasture, but we're not accepting buffers on pasture without fences. Is that right?

Bill Keeling: Yes, that's how I understand it. That makes sense. What doesn't make sense is giving upland benefit to non-exclusion where the BMP was never applied to that land use.

Olivia Devereux (in chat): When doing this analysis of putting it only on pasture, was there any or more excess?

Auston Smith: Olivia asked when you were doing this analysis to put it only on pasture, was there any excess or more excess? Maybe you touched on that.

Bill Keeling: Again, I would argue that what happens with excess for the load is secondary to doing things logically. In terms of the exclusion buffers, excess went down. The others, it went up in terms of the upland benefit. I don't believe it changes the actual land use change acres.

Auston Smith: Not hearing anything else from the group, we'll appreciate you coming back with this presentation for a quick overview again and maybe including some decisional language for the workgroup to vote on.

Bill Keeling: Even if this takes to June to get through this to make sure the AgWG understands the proposed change and nobody seems to have heartburn, that would be fine, too. I just want to get it on the docket sooner rather than later, preferably before we get deep into the progress year.

Auston Smith: Sounds good. I have an item on my action list to copy you on an email to Eric and Caroline. I know the AgWG has a lot of items on its agenda already, so it might need to go to the May meeting and then it could come back to the WTWG with their understanding in June for a formal vote. So, I'll copy you on that email.

Action: Auston Smith, EPA, will work with Caroline Kleis, CRC/AgWG Staffer, and Eric Hughes, EPA/AgWG Coordinator to get the discussion of upland buffer credit for Phase 7 on the May Agriculture Workgroup (AgWG) meeting agenda.

Action: Bill Keeling, VA DEQ, will return to a subsequent WTWG meeting for a vote on the proposed methodology for the application of upland buffer credit for Phase 7.

10:45 **Phase 7 Timeline Topics for the Partnership**- Auston Smith, EPA (10 min).

Auston Smith, EPA, provided the group with an overview of Phase 7 related discussions taking place at various workgroups as the September 30th deadline approaches for land use and agricultural inputs within the Phase 7 model. These discussions include, but are not limited to:

I. Updates from Peter Claggett, USGS, at a subsequent WTWG meeting on construction data.
II. An informational overview from Sarah McDonald, USGS, on the distinction between land use products and how the Phase 7 rollup is used to inform CAST at upcoming WQGIT and WTWG meetings.
III. A decisional item at the April Wastewater Treatment Workgroup on how non-significant WTP facility data is being incorporated for Phase 6 and how it would be treated in Phase 7.
IV. A discussion of CAST Segmentation at a future WQGIT meeting.
V. Urban Nutrient Management Expert Panel updates at future Urban Stormwater Workgroup meetings.

VI. Continuing conversations and decision-making on agricultural inputs at the Agricultural Modeling Team (AMT) monthly meetings.

Discussion:

Dave Montali: Back to the non-significant wastewater discussion that's in front of the Wastewater Treatment Workgroup, the key thing is the standard deal about whether there's real on the ground change. So, with the non sigs, way way back we started with default concentrations. A lot of states have just reported default concentrations, i.e. no change over the years. Gary's point was if you want to use monitoring, if you are going to change those, whatever number you come up with you ought to revise the history to be that number through all time, unless you have information that there was a plant upgrade or some kind of real change in operation that actually provided increased treatment to get that lower than default concentrations. Especially for Phase 6, but for Phase 7, we ought to have a good history of what's gone on at each facility.

Auston Smith: Thank you, Dave, for providing that additional insight. That is my understanding, yes. If you are moving from default values to annual or more frequent monitored values, then please update the history of that treatment facility, not just the current progress year, unless it corresponds to a systematic change in treatment capabilities.

Jess Rigelman: I don't think the thought was that the states would go back and update their history. They're welcome to. The assumption was that we would use the monitoring data to create an average over either the monitored period or the last five years, and use that number for not only the history, but kind of as their default. But, it would kind of be on a state by state basis. Somebody like West Virginia and Virginia, which I know just report defaults based on different methodology, would continue to do that. But another state that has started to report monitoring data, we would come up with a system so that it uses that more accurate data or monitored data but doesn't show the fluctuation. So, I didn't want people to get the impression that if you started using monitoring data, all of a sudden you have to fill in the history for monitoring for the monitor data, because you probably don't have that.

Auston Smith: Can a trend be created by just updating the current progress year or maybe at least the previous year?

Jess Rigelman: I think the assumption would be if you've been reporting monitoring data for the last five years, that we would somehow create an average value out of that. Then that would be used for not only the last five years, but for all of the history. This would have to be a discussion that would have to happen on a state-by-state basis depending on how they're reporting the data.

Bill Keeling (in chat): Since there is no such thing as a nonsignificant NPDES permit can we use major and minor WWTP instead of significant and nonsignificant?

Auston Smith: Bill, I agree. There are no nonsignificants as far as a wastewater treatment plant. I would probably need to lean on the Wastewater Treatment Workgroup to only use major and minor. I can start to use that nomenclature, but the only guidance I'd received is to stop using the term insignificant wastewater treatment plant, which certainly is misleading.

Dave Montali: Insignificant/nonsignificant, depending on who you are, is what you use and what you see. The point being that the major and minor thresholds aren't the same as the significant or non significant/insignificant. So, I agree that one word, whether it's nonsignificant or insignificant is what we should call it. I think it will open up more cans of worms with major and minor.

Cassie Davis: I would agree with that. In our grant guidance, we have the definitions of significant versus nonsignificant, and we use those in our watershed implementation plans, and that's what's in our facilities permits.

Ashley Kelly: I was talking with Kevin Du Bois this morning, and I just wanted to bring up a couple of points to give an update of where we stand on a few things. So, I know there's been talk at lots of different workgroups about the new allocation of the pollutant loads for federal agencies to ag, septic, forest harvest, and construction. We are still working that effort internally. We've drafted a white paper, and that's going up to the assistant secretary of the Navy. Unfortunately, Kevin and I can't make those decisions at our level, so we are working that still. We're still working on verifying all the parcel boundaries for the Federal Facilities viewer, but it's really cumbersome on our end. Kevin and I are going through each jurisdiction, and there's a lot of polygons, and we're finding a lot of errors. So, we're just trying to make sure we're going through it very carefully. The hope was to have these wrapped up in February, but we're still working through it, so just wanted to give an update on that. Those are the two main highlights I wanted to make sure I brought that to your attention.

Auston Smith: I am remiss in not mentioning those myself, now being the coordinator of that workgroup. So, yes, it's been an ongoing discussion for both the updating of the federal boundary data layers as well as load allocations tied to various sectors or land uses on federal lands as well. So, I really appreciate you helping move forward that white paper for your leadership. We received some feedback from other agencies as well but for those interested, a robust discussion on both of those topics is being held next week, Tuesday the 8th. So, I really appreciate you bringing that to the table, Ashley.

10:55 **Recap of Actions and Decisions** (5 min).

11:00 **Adjourn**

Next Meeting: Thursday, May 1, 2025 from 10:00 AM – 12:00 PM.

Participants

Auston Smith, EPA
Caroline Kleis, CRC
Bill Keeling, VA DEQ
Samuel Canfield, WVDEP
Sushanth Gupta, MWCOG
Olivia Devereux, Devereux Consulting
Cassie Davis, NYSDEC
Scott Heidel, PA DEP
Ashley Kelly, DoD
Tyler Trostle, PA DEP
Jessica Rigelman, CBPO Contractor
Eugenia Hart, TetraTech
Matt Kofroth, LCCD
Arianna Johns, VA DEQ
Megan Thynge, EPA
Alicia Ritzenthaler, DOEE
Christina Lyerly, MDE
Eric Hughes, EPA
Christopher Thompson, LCCD
Norm Goulet, NVRC
Ashley Hullinger, PA DEP
Helen Golimowski, Devereux Consulting
Jeremy Hanson, CRC
Jeff Sweeney, EPA
Joshua Glace, Larson Design Group
Ruth Cassilly, UMD/CBPO
Dave Montali, Tetra Tech
Emily Dekar, USC
Bailey Robertory, MD DNR

Acronym List

BMP: Best Management Practice
CBP: Chesapeake Bay Program
EPA: [US] Environmental Protection Agency
NRCS: [USDA] Natural Resource Conservation Service
TA: Technical Appendix
USDA: United States Department of Agriculture
WTWG: Watershed Technical Workgroup