

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

Thursday, March 7<sup>th</sup>, 2024  
10:00 AM to 10:40 AM

[Meeting Materials](#)

**Summary of Actions and Decisions**

**Decision:** The WTWG approved the February 2024 meeting [minutes](#).

**Action:** WTWG Leadership will follow up with Bill Keeling, VA DEQ regarding his concerns about the VA EU report in CAST.

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**Meeting Minutes**

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

- *Please put your name and affiliation in the chat box for attendance purposes. Thank you!*
- **Decision requested:** Approval of February Meeting [minutes](#).

**Decision:** The WTWG approved the February 2024 meeting [minutes](#).

- VA EU Issues
  - **Bill Keeling:** I just wanted to point out that the EU calculators in CAST are not working properly. At least for VA, its not calculating the correct number, and just displays the climate change target for VA and compares it to that, which isn't very useful. I would suggest that we have a separate report in a standard format that would allow the actual calculations to be done. Then you could create GIS layers, etc. Just wanted you all to know that it's not functioning properly.

**Action:** WTWG Leadership will follow up with Bill Keeling, VA DEQ regarding his concerns about the VA EU report in CAST.

- [Link](#) to TMDL Indicator webinar mentioned at the February WTWG [meeting](#)

10:10 **Progress and Verification Overview and Timeline** – Auston Smith, EPA and Chesapeake Bay Partnership (5 min)

Auston provided an update on the 2023 Progress Schedule. Partners had an opportunity to discuss their questions or concerns.

10:15 **Abandoned Mine Reclamation BMP Discussion** – Ruth Cassilly, UMD and Jessica Rigelman, J7 Consulting (25 min)

Ruth and Jess provided updates on the Abandoned Mine Reclamation BMP. These included Phase 6 and CAST-23 related issues in preparation for decision regarding this BMP in Phase 7.

**Discussion:**

**Bill Keeling:** Are coal mines the only mines that will be eligible? Because we have sand and gravel mines in our Bay drainage, and they are also reclaimed. That's part of the concern I have for Phase 7 – how do we characterize a sand and gravel mine versus a coal mine? They're both surface extraction and it's going to be hard to tell them apart from remote sensing; however, sand and gravel doesn't have the drainage issues that coal does.

**Ruth Cassilly:** And that's currently under mixed open as well Bill? Are you all currently reporting that as reclamation at all?

**Bill Keeling:** No, we reported some of it up until Phase 6 and some of that carried forward. Since extractive is not in Phase 6, we haven't messed with it.

**Ruth Cassilly:** [Referencing presentation slide 'In C23 – The BMP will begin to receive a land-use change credit from mixed open to forest'] It'll still be mixed open for CAST-23. This BMP applies to the mixed open land use, and it says mined for coal or affected by mining. That would be a discussion we need to have; I couldn't answer that question, I don't know if anyone else has a better answer at this point.

**Jess Rigelman:** I don't have an answer for that. I know that you've raised that before, the different kinds of mines, and we can bring that to the Land Use Workgroup. More importantly, the land data team that's doing the mapping for the Bay Program and see what they can differentiate. Going into Phase 7, if they can and or can't differentiate then we ought to have a discussion on a different types of Abandoned Mine Reclamation and whether they are coal or gravel.

**Dave Montali:** Historically, we had an extractive land use loaded high and we got rid of it and changed it to mixed open, under the idea that these Abandoned Mine Lands are not nutrient rich, they don't give high loadings. We had problems with the available BMP. That said, this idea of converting mixed open to forest for reclamation practices is fine for Phase 6. When we get into Phase 7, we have to start talking about some of the issues Bill brought up. It's not just coal, it's not just abandoned mines. You have permitted surface mines, quarries, sand and gravel activities. Similar things, not nutrient rich land, probably doesn't process atmospheric N as good as forest. We just need to talk through all these things. The remote sensing, there's confusion about extractive lands. Many things are classified as extractive that aren't extractive. Looking at the approach mixed open to forest, OK, particularly with Abandoned Mine Lands, but it doesn't matter as much as how much your reclamation is now. Eventually, they will revert to forest. There's another question, what do you do with active stuff, that has within it a responsibility to reclaim, stabilize, re-vegetate? Most of the time, that land is going through a succession process that's slower than natural, but eventually trees will still grow. The idea of a modest credit for mixed open to forest is fine. I would say that we probably ought to give that credit for an activity to forest, whether you initially re-vegetate with grass or not. I'm sure there are some projects that have an active forest planting component and others that don't, but the ones that don't, the long term expectation is still that they're likely to go to forest. So, lots of things to talk about when we get to Phase 7.

**Ruth Cassilly:** Completely agree. Just to comment on 'it will go to forest' that does also depend a lot on what fill you're putting over it, how thick it is. I get that we'll have some kind of trees

coming but certainly there'll be a big difference between that and returning to what we'd consider a natural forest on healthy soil. It does bear out more discussion on the methods being used and the final result; what's enabled in terms of what you're starting with.

**Dave Montali:** I agree; we need to talk about this in terms of nutrient processing first. I also, in my travels across West Virginia see reclaimed mine lands that have cows on them. The idea of that land being reclaimed and going to forest is not always true. It's the predominant thing that happens over a long time, but not always.

**Tyler Trostle:** Two quick questions. First, did you state that this would not have an effect on historic record, or would it?

**Jess Rigelman:** Nothing changes for anything you've reported thus far. Those are fine, just for 2024 Progress forward you need to use the new BMP names for returning to grass or reporting to forest. All the old records that any state has reported, and I believe it's only PA and VA, those records stay in place and there's no change that needs to be done. Unless you wanted to retroactively go back and change those but that's up to you.

**Bill Keeling (in chat):** Some of the sand and gravel mining in VA is in our coastal plain and occurs on cropland and the reclaimed land could be returned to cropland.

**Tyler Trostle:** My second question is on the July meeting for approving a lot of these updates to the NEIEN appendix that we've proposed. Is that a set meeting or is it possible to be moved to June or a sooner timeframe for getting those approved with the WTWG and the WQGIT. Had some concern from higher ups about approval timing and having that done in reporting season versus prior.

**Jess Rigelman:** In general, it is not the WQGIT, this is WTWG discussions. I know that you, PA had proposed these changes. There were no complaints heard in the meeting, and I followed up with the appropriate staff at the Bay Program Office to make sure there would be no arguments there in terms of verification efforts. I think those are on track, but we don't actually approve the NEIEN appendix and all the changes until the August meeting because people can propose changes up until then. I don't think PA has anything to worry about, if they do, someone should speak up now, but for the most part those are technically approved. The final appendix won't be approved until August.

**Joshua Glace:** I want to build on Dave's comments. With this BMP stating its Abandoned Mine Lands, is this BMP just for land that would be classified as Abandoned Mine Lands, which in PA is anything that's pre SMCRA (Surface Mining Control and Reclamation Act). I think that's 1977, so is this BMP only allowed to be used on that or can this be used on any reclamation that could have occurred even past those dates.

**Ruth Cassilly:** I think that's something we need to talk about because in the definition it mainly points to coal, but that would be a discussion we'd want to have about what else it can apply to. Like Jess said it would also depend on what we could see with the land use imagery, to get a domain for which to be able to apply these BMPs to. That's a discussion we would need to have with the Land Use Workgroup.

**Samuel Canfield (in chat):** So, instead of a BMP credit from Mixed Open to Forest, would there need to be a modular credit: Mixed Open to Forest or Tree Canopy or Cropland or etc?

**Ruth Cassilly (in chat):** Good question Samuel – part of the Phase 7 conversation.

**Joshua Glace:** This would still be coal based, but you know, abandoned coal mine lands versus active. Our definition is anything abandoned would be anything that happened prior to 1977 versus any open coal mine that might have happened or even work that has been done in the 80s and 90s that's been left idle for the last 20 to 30 years. That's where I'm getting its still coal based but is this an overarching BMP or just for lands that would be classified as abandoned?

**Dave Montali:** I think this is historically what's been the name and I agree with you 100% that it should not be called abandoned. If we're going to deal with extractive land use, then we need to recognize that the SMCRA date has no bearing on anything. If you think about it too, the stuff that's active now, within their permits they're taking what bare land they create and they have a responsibility to re-vegetate it. It all needs to be talked about for Phase 7, the name needs to be changed because there's no distinction between unreclaimed lands from 1977 and earlier. Those are mostly re-vegetated already anyway, at least those in our state. The other point I wanted to make that needs to be talked about is the credit duration as well. 10 years is ridiculous if these activities are going to last much longer, and I don't think we need to put up a verification block at 10 years.

**Joshua Glace:** I agree, I think that clarifying the name, just to make it user friendly for the people applying this, because there's going to be people interpreting this differently. That goes to my follow up question, as you're separating out forests from grass open space, we're seeing, especially in PA with the IJIA funds dedicated to Abandoned Mine Reclamation, we're seeing larger Abandoned Mine Lands projects occurring that have a lot of mixed use, mostly for wildlife habitat. Having that forest component, grassland component, a combination, are we inputting the same project with multiple BMPs for that credit, or how is that going to be handled, especially on these larger projects going forward?

**Ruth Cassilly:** That's a great question and that's why we want to start collecting as much information in the NEIEN dataset as possible so that we can have a more informed discussion for Phase 7. As I understand it now, Abandoned Mine Reclamation is just an acreage you apply the practice. It doesn't differentiate all of the sub-practices that are going on unless a state's reporting those separately.

**Joshua Glace:** Traditionally you are correct Ruth, it used to be a lot different. With the influx of funds that are coming, we're seeing larger projects, especially on publicly held land. Here in PA, the PA Game Commission, state game lands, they have very specific wildlife habitat criteria they want to achieve. If it isn't a forested area they want grass, or they want mixed use for certain bird or mammal species depending on what their overarching goal is for that region. Pennsylvania Elk reclaimed a lot of those habitat over the years. Just making sure that as these new practices are hitting the ground, when this BMP hits, making sure we're capturing and categorizing them correctly.

**Dave Montali:** The first thing we've got to recognize is that our model now has these lands in as mixed open which is the next lowest loading rates compared to forest. As we're modeling it, it's not very bad. We're talking about incremental credit from mixed open to forest that's relatively small. We need to keep that in mind too. I'm real interested to see what STAC says about the nutrient implications of this. Like it or not, when you go to reclaim some of this old stuff, you're actually putting more nutrients own to enable the vegetation. So, a true assessment of nutrients

before and after might not show very much even though we have a beneficial land use resulting from it.

**Cassie Davis:** For this BMP its not an efficiency BMP or load reduction, its just a land use change BMP, so you're only getting that credit?

**Ruth Cassilly:** Yes, its just a load source change.

**Cassie Davis:** At some point, the land use imagery should pick up the land use change to forest, is that where the 10 year credit duration is coming from?

**Ruth Cassilly:** Great point. I have no idea what went into the decision for the 10 year credit duration, but originally, we had that for our buffers and our other tree canopy BMPs as well so it might have been the same rationale re getting picked up in the land use.

**Cassie Davis:** That's going to increase to 15 years, I think for forest BMPs.

**Scott Heidel (in chat):** Will historic AMR BMPs automatically be switched from Mixed Open to Forest and create a load reduction and when would that be calculated and shared with jurisdictions? I apologize if I missed that.

**Ruth Cassilly:** That's a great question, I don't think we did answer that, but my understanding is yes that it would. Jess, correct me if I'm wrong, but I believe historical BMPs would receive the same credit as what's being entered from 2024 onward.

**Jess Rigelman:** Yes, that's correct, and that's already in CAST-23 so when that is released you will see that credit. Many of you on this call have access to the draft version of CAST-23 that's out for review and can see that.

**Dave Montali:** There is an aspect of Abandoned Mine Lands/Reclamation dealing with the continuous discharge of acid that needs to be put in the folder to think about, and that is the treatment of acid with anhydrous ammonia. We had some of that going on in WV but at the time we started playing in the Bay and we got that stopped. But that needs to be a component of things. Nutrient wise, if you're doing all this land reclamation and you're using anhydrous ammonia to treat the pH you're making a nitrogen load, and for what its worth to keep that in the discussion points.

**Ruth Cassilly:** Dave, do you think that belongs in the Abandoned Mine Reclamation? There's a separate conversation going on in the STAC for abandoned mine drainage. Do you think that should be part of the STAC discussion, or both?

**Dave Montali:** I haven't been tuned into the STAC process on this issue, but it seems like its relevant to that IF that's still going on. We had limited instances and that's one of the first things we did about the extractive land use that we had back in 2008 or so. We took actions with our mining programs to stop that practice. It may be over and done, we may have been doing that stuff and everyone else isn't doing it anymore, but just throwing it out there that it was a nutrient concern with that land. Maybe it needs to be a part of what STAC's looking at but I'm not up on that.

**Next Meeting:** Thursday, April 4<sup>th</sup>, 2024, from 10:00 AM – 12:00 PM.

## **Participants**

Alana Hartman, WV DEP  
Alicia Ritzenthaler, DC DOEE  
Arianna Johns, VA DEQ  
Ashley Hullinger, PA DEP  
Auston Smith, EPA  
Bill Keeling, VA DEQ  
Caitlin Bolton, MWCOG  
Cassie Davis, NYS DEC  
Clint Gill, DDA  
Dave Montali, Tetra Tech WV  
Dylan Burgevin, MDE  
Elizabeth Hoffman, MDA  
Eric Hughes, EPA  
Eugenia Hart, Tetra Tech  
George Doumit, DE DNREC  
Helen Golimowski, Devereux Consulting  
Holly Walker, DE DNREC  
Jeff Sweeney, EPA  
Jeremy Hanson, CRC

Jessica Rigelman, J7 Consulting  
Jillian Seagraves, MD DNR  
Joe Schell, DE DNREC  
Joshua Glace, Larson Design Group  
Karl Blankenship, Bay Journal  
Kevin McLean, VA DEQ  
Kimberly Dagen, SRBC  
Lori Brown, DE DNREC  
Mark Dubin, UMD  
Matthew Kofroth, LCCD  
Normand Goulet, NVRC  
Olivia Devereux, Devereux Consulting  
Ruth Cassilly, UMD  
Samuel Canfield, WV DEP  
Scott Heidel, PA DEP  
Sushanth Gupta, CRC  
Tom Butler, EPA  
Tyler Trostle, PA DEP

## **Acronym List**

BMP: Best Management Practice  
CRC: Chesapeake Research Consortium  
DDA: Delaware Department of Agriculture  
DEC: [NY State] Department of Environmental Conservation  
DEP: [PA] or [WV] Department of Environmental Protection  
DEQ: [VA] Department of Environmental Quality  
DNR: [MD] Department of Natural Resources  
DNREC: [DE] Department of Natural Resources and Environmental Control  
DOEE: [DC] Department of Energy and Environment  
EPA: [U.S.] Environmental Protection Agency  
IIJA: Infrastructure Investment and Jobs Act  
LCCD: Lancaster County Conservation District  
MDA: Maryland Department of Agriculture  
MDE: Maryland Department of the Environment  
MWCOG: Metropolitan Washington Council of Governments  
NEIEN: National Environmental Information Exchange Network  
NVRC: Northern Virginia Regional Commission  
SRBC: Susquehanna River Basin Commission  
STAC: Scientific and Technical Advisory Committee  
UMD: University of Maryland  
WTWG: Watershed Technical Workgroup