

**Urban Stormwater Workgroup Meeting**  
**Meeting Minutes**  
**Tuesday, March 19<sup>th</sup>, 2024**  
**10:00 AM - 11:45 AM**  
[Meeting Materials](#)

**Summary of Actions and Decisions**

**Action:** USWG Jurisdictional Members should email Peter Claggett, USGS ([pclagget@chesapeakebay.net](mailto:pclagget@chesapeakebay.net)) with information on when their MS4 permits are being updated and if those are including new spatial data for the MS4 footprints. They should also include points of contact (POCs) for each of the states that Peter can reach out to.

**Action:** USWG Members should email David Wood, CSN ([wood.csn@outlook.com](mailto:wood.csn@outlook.com)) with suggestions for potential Panel Members or Volunteers.

**Decision:** The USWG confirmed Camille Liebnitzky, City of Alexandria, as a VA local government representative.

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**10:00 Welcome and Review of January Meeting Minutes.**

Norm Goulet, Chair. Attach A.

The review of the January Minutes was postponed until the next meeting.

**10:05 Announcements and Updates**

- GIT Funding Proposals
  - Link to the [USWG Proposal](#)
- Beyond 2025 Listening Group Sessions and Recommendations
  - Beyond 2025 [Presentation to the PSC](#)

**Discussion:**

*Dave Montali:* I was at the PSC meeting. Basically, the PSC says we've got to go back and talk amongst ourselves and give the steering committee further direction, and that ended it. After a discussion on the focus on water quality. I don't know that I heard it has to be about water quality but there was that concern. The other concern, I think, was the PSC having enough time to understand all the recommendations and come to consensus there in time to give them to the EC. I think the public notice stuff is kind of a crawl [sic] in some folks. The underlying concern is that there needs to be enough time for the PSC to be comfortable with everything and endorse it before they move it on [to the EC].

*Norm Goulet:* I also tuned in to it, and I agree with what you and KC said. I think there was quite a bit of emphasis on bringing it back towards the TMDL. It was connecting everything to water quality, was the way I interpreted it. The PSC was very much concerned about the timeline and not having the time to fully digest what appears to be a very complicated product. The membership here needs to be aware of the fact that these conversations are going on, and that there is a lot of push and pull going on within the program and workgroups to get their thoughts across. My recommendation to the

membership here is don't be afraid to talk to your reps either at the WQGIT or other watersheds [sic] to let your feelings be known.

*KC Filippino:* The only thing I'll add is that at the end of the day these recommendations are supposed to lead to one and the conversation is centered around what do we do with the existing Bay Agreement. Do we amend, extend, or rewrite? That's where a lot of this is going to be culminating.

*Dave Montali:* One more thing. It's really difficult for me and I'm sure for KC too. When you meld all this stuff together you get a product in the end and then everybody who reads it scratches their head and says what do you mean by this. There's this idea that we gotta boil all these things down and put them all together and come up with something short and sweet because that's all the higher ups can understand. At the same time there's going to be all this supporting material in the background that would take a month for someone to read and try to understand. It's going to be a very difficult process no matter how it comes up. I can explain the goals of the clean water group pretty well, and they're pretty succinct and may hint to how more than some of the other groups but I was on that team so that's what I can do. Not so much for the other teams.

- Land Use Data Call

## Discussion:

*Marty Hurd:* There are a lot of industrial stormwater permits, other types of regulated areas that aren't considered part of the Fairfax County discharge permit. We do coordinate with them through our IHRR program but I'm curious, if we provide an MS4 service area it's going to have cutouts for all of those regulated areas. It might be best to get that information from the State if they're tracking those for all the permits.

*Norm Goulet:* That's actually the subject of a conversation that KC and I have been having for the past couple days. Unfortunately, there's no requirement for the industrial permittees to submit that information to the state so it's actually a complete void. Matter of fact, as far as I know it's not being collected by any of the states. We would love to have all permitted land shapefiles in CAST or in the Land Use mapping. I agree with you 100% but unfortunately, I think it's going to be a bridge too far. It's something we can start pressuring the states to start thinking about, how to collect that information, because you're right that it's all regulated land. Right now, it all gets dumped on the MS4s as being the sole regulated land within the Bay Watershed when that's clearly not the case.

*Marty Hurd:* What about Federal Facilities or Federal Land and Phase 1 MS4 permits? Does DEQ have geographic information on the Phase 1's and the Federal Land? I guess the Bay Model has the Federal Facilities in it, right?

*Norm Goulet:* Yes, as far as I know the Federal Facilities are mapped out [in the Bay Model]. In terms of VDOT, I believe they also have shapefiles. MD has its own Land Use for MD SHA. I don't know about the other states but that's a good question we can ask for the meeting.

*Marty Hurd:* Yeah, again because we would take Vienna, Herndon, and other Phase 1's out of our regulated area.

*Norm Goulet:* Yes, at least in VA the Phase 2's have their own requirements to submit.

**Action:** USWG Jurisdictional Members should email Peter Claggett, USGS ([pclagget@chesapeakebay.net](mailto:pclagget@chesapeakebay.net)) with information on when their MS4 permits are being updated and if those are including new spatial data for the MS4 footprints. They should also include points of contact (POCs) for each of the states that Peter can reach out to.

### **10:15 Confirming VA Local Government Representative**

Norm Goulet, Chair

In January, the USWG confirmed a new slate of at-large and local government representatives.

At that time, no nominations were received for VA local government representatives. Since the meeting, Camille Liebnitzky (City of Alexandria) has volunteered to serve in that role.

**Decision Requested:** The USWG will be asked to confirm Camille Liebnitzky, City of Alexandria, as a VA local government representative.

**Decision:** The USWG confirmed Camille Liebnitzky, City of Alexandria, as a VA local government representative,

### **10:45 Urban BMP Queue**

David Wood, Coordinator. Attach B.

The USWG maintains a running list of BMPs that the workgroup is most interested in exploring for either future credit or for revisiting an existing Expert Panel report. The last time we updated the Queue was back in 2021. The USWG will be asked to review the existing queue and provide recommended updates and revisions to their priorities.

### **Discussion:**

*Cassie Davis:* There's a lot of interest in NY in roadside ditch management BMPs. There's been some work done at Cornell and its of interest to a lot of our soil water conservation districts. I don't know what steps are next in getting that BMP on the move, but its supported in NY.

*KC Filippino:* Isn't there one for roadside ditch management? I know they've been done here with a lot of difficulty.

*David Wood:* There is a dirt and gravel roads BMP that exists that was done back pre expert panel process. It was in the Simpson and Waymert (sp.) report from 2008 so it still exists from then. Part of the work that was done by the center with some participation from Cornell and some others was to look at what existing BMPs could be mapped to these better definitions of what these practices could be. They looked at ditch elimination as a practice, there was ditch retrofits where you were amending the bottoms of those ditches. I'd have to go back and look, there's a stabilization one as well. Some of those were easier fits than others, so some would probably be easy to adopt, and others would need a little bit of additional work.

*KC Filippino:* I would second this one too though. There were some that were tried here in Hampton Roads by the Elizabeth River Project, and they had a really tough time. I think a lot of it had to do with the urban nature of doing this, so this is something we would be interested in too.

*Cecilia Lane (in chat):* How are coastal buffer zones different from living shorelines?

*Alan Hartman (in chat):* On the ditch BMPs effort, I seem to remember that there was no modeled load to reduce from.

*David Wood:* Yeah, I know there were some things to sort out as well. Alana, I was just going to get to that – it was kind of figuring out the modeling of it. Because there is sort of a load that's coming, there was an effort by the Chesapeake Conservancy to map the ditches. That was pretty unsuccessful because the elevation changes were difficult to track, and in forested areas they're difficult to detect because of the canopy cover. There were some challenges there, a lot of the ditches drain from ag lands and so it's a question of what is the load source, is it ag, is it the road? Those were the kinds of things that needed to be sorted out and why it got left unfinished.

*Christina Lyerly:* MD would be particularly interested in the soil amendments and soil health. We have an urban soil restoration BMP in our accounting guidance for MS4s. We would like to see this come out of the Bay Program so that there's confidence in this BMP and to see what the research is, so we're particularly interested in that. The roadside ditch management practices, we'd be supportive of that, I know there's a 2017 roadside ditch management manual from Talbot County and the Center for Watershed Protection. So there's probably a start to that already, as you were talking about, with that report. We're not particularly supportive of the MS4 Minimum Management Measures. This is a regulatory requirement for MS4 permittees, they have to do this regardless. I'm not sure how much of a value add that would provide other than accounting for something that's not already accounted for. I'm a bit, I don't know if skeptical is the right word, but I

wonder if the science is out there for something like public education you know, and some of the other things like pollution prevention. I'm less favorable towards that one.

*Carol Wong (in chat)*: Final [Report](#) from the previous ditch work and Rural Roadside Ditch Management [Manual](#) from Talbot County/CWP.

*Olivia Devereux (in chat)*: Here is the definition of the urban dirt/gravel road. It involves ditches. Reduce the amount of sediment runoff from dirt and gravel roads through the use of additional Drainage Outlets (creating new outlets in ditchline to reduce channelized flow). Where specific design is unknown, use this BMP with outlets only. Enter units of feet. However, all BMPs directly related to ditches are for agricultural ditches.

*David Wood*: That's a good point, and yeah, the education and outreach is the one that we get asked about pretty often. Tetra Tech did a threshold review for the USWG a while ago before I was at CSN. At the time there was not enough information to support it, I've heard it come up again every couple years, but to date we have not found enough science to support a direct tie to nutrient and sediment reduction from public education and outreach. So if it were favored by folks it would be a threshold review type of discussion.

*Samuel Canfield*: I think the soil amendments, biochar soil health, that realm, because of its applicability to so many BMPs would likely have a great effect if we focus on that in particular. This is revisiting the stormwater retrofits, as you stated, to update them would probably be the next one. I saw self converted dry detention ponds into wetlands on the queue and I just found that interesting, but I don't know if that needs to be moved up further. That's an interesting potential BMP.

*David Wood*: That one has been around for a while. There was a presentation back in 2016/2017 on some research that was done on letting those ponds convert. We didn't end up voting to pursue it over time because it was all based on the one study. To address the questions about coastal buffer zones that were in the chat. I'm trying to remember the specific impetus behind it, but my understanding was the feeling that it was a specific gap that wasn't addressed by the shoreline management panels. Because of the definitions of the riparian forest buffers that were along freshwater stream systems, it was trying to fill that gap. I want to say it also wanted to try to address forest management or riparian management of invasive removals and the general health of those buffer systems as well. I'd have to go back and dig through the minutes or notes, but it sounds like there's interest in a few others that would go a bit higher than coastal buffers at this time.

*Olivia Devereux*: That's not the one where shoreline erosion control is out in the tidal waters, this was something different?

*David Wood*: Yeah, it would be different than that.

*Olivia Devereux:* Just want to make sure because we're addressing the tidal waters for shoreline erosion control separately.

*Jamie Eberl:* On the self converted detention ponds item, I wanted to bring up that that's something PA will have an issue with. Maintenance of BMPs is a requirement by municipal ordinance. If you're crediting something, you're incentivizing non maintenance. That's going to conflict with our ordinance requirements. It's something we would have a lot of heartburn over. I understand the thought behind it, but it's a maintenance concern for us, and an ordinance issue.

*Christina Lyerly (in chat):* MD concurs with concern over lack of maintenance.

*Norm Goulet:* We've heard that frequently when it comes to self converting.

*Jamie Eberl:* I don't like that term at all, self converting. Nothing ever gets better without maintenance so if there's some other way that we can account for that, but self converting doesn't work very well.

*David Wood:* I think maybe an actual retrofit would make sense there, so understood.

*Camille Liebnitzky (in chat):* I thought I saw about conservation landscaping and no fertilizer in the email.

*Norm Goulet:* Most of what we've talked about is on the list. Is there anything that we want to add to the list that you guys have out there?

*KC Filippino:* I might have a few, we're doing a report here about BMPs in the coastal plain as tied to resilience efforts, so when we get our list, I'll share it. I don't know any of the details but something like blue roofs and submerged gravel wetlands. These are not things I know anything about, but they're coming out of a report we're doing here. When that gets final, I might add them to the list.

*Norm Goulet:* The other thing I've heard frequently, especially for the more urban areas, is looking to get credit for some of the larger facilities going in for resiliency flooding. There have been quite a few conversations about trying to get credit for that. We probably want to add that to the list, David.

*David Wood:* How similar do those types of projects look to the way we're addressing other retrofits and things like that? Obviously, they're volume focused. Trying to think about how to tackle them, are the practices unique enough where they'd be their own panel? Or would it be trying to carve out an amendment, if we were to go back to look at the performance curves it would be another set of curves or something like that for resilience focused projects.

*Norm Goulet*: I don't know where that one would land. Conventional thought is that they're just gigantic detention basins. I just know that there's been quite a bit of conversation about trying to get Bay credit for if there's any kind of water quality improvement as a result of them.

*KC Filippino (in chat)*: I'm interested in coastal buffer zones though if they can complement shoreline management.

*David Wood*: To just summarize where we are, the top of the list is probably soil amendments and soil health as well as roadside ditch practices. Revisiting retrofits can hang around and then we kind of bump down or remove buffer zones. With the minimum management measures either remove it or restrict it and be a little more specific about it being a public education type effort or threshold review. We're removing self converted dry ponds from the list as well. [Referring to KC's above comment] I think it's probably a matter of tightening it up a bit, but I think it's probably far enough down the list that it depends. If there's a specific proposal, we can evaluate it but probably not in the top two or three. If anyone has any other feedback after the meeting and suggestions shoot me an email but its very helpful for CSN to prioritize what we need to be digging into a little bit more.

#### **10:45 Urban Nutrient Management**

David Wood, Coordinator. Attach C.

In 2023, the USWG convened a task force to address a short-term fix to urban fertilizer application rates for CAST. While the task force reached a resolution, there was agreement that the issue should be re-visited for Phase 7. The USWG also identified a series of other needs that necessitate updates to the 2013 Urban Nutrient Management Expert Panel Report. David will discuss a proposed scope and timeline for this effort and ask for workgroup feedback and nominations to serve on the re-constituted panel.

#### **Discussion:**

*Cassie Davis (in chat)*: NY is just getting started with our Urban Nutrient Management program.

*Olivia Devereux*: That is fantastic, and I appreciate your laying out the remaining concerns. Panels typically have a modeling representative just to answer questions and I'm happy to serve in that role for this one, make sure it jives with other BMPs and what we can do in the model. I think that would be helpful. The other part of it is you mentioned that we are using AAPFCO data which we may not be doing in the future. We're using the state provided data and the person who worked for AAPFCO for many years on this data is now deceased so we're not sure that that's going to be an option in the future. I just wanted to keep in mind that we may be using only state provided data



for fertilizer in the future. There's a lot of ways of going about this so I'm really excited that you're looking at re-forming a panel to address these issues.

*David Wood:* Thanks Olivia, we'll definitely be coordinating really closely with the Bay Program folks. I didn't mention it here, but we also have planned for May a presentation from Joseph Delesantro who is working with the Bay Program as well as the Wastewater Treatment Workgroup and other partners. He's looking at some of the sensitivity topics like phosphorus sensitivity and he's going to share a little bit about what he's working on and what opportunities the workgroup and this panel will have to help inform the priorities for that work. Things like identifying key research and things that should be considered, so a lot of coordination will be involved.

*Olivia Devereux:* One of the issues that comes up is that there's a BMP on nutrient management and then there's also nutrient applications and loading rates to the land and those two are related and they get conflated. I think being clear is the panel looking at just people who have nutrient management plans written, or is it looking at nutrient applications for agriculture? There's an Ag Modeling Team that's addressing that but there isn't a parallel group for urban. This group could certainly do both, but the two issues get conflated and I just wanted to point that out.

*Dave Montali:* Everything that Olivia said is all good and I agree. My point was that the last bullet about working with Phase 7 or the Modeling Team relative to P sensitivities has to be decided up front. My understanding, and David and Norm may know better than me, is that in the existing way we model P from turf is that the export is solely a function of the annual application. On the ag side, we learned in Phase 6 that that wasn't the best way to represent it, and I think we need to consider whether we're going to try to change or not. On the ag side we have P as a function of soil P plus sediment runoff, and I know that's a real challenge for getting data. We need to talk about it one more time. Maybe we just stick with what we've got, but we've got a system that's dependent on using data for annual application and predicting export, and we've got to look into that and say is that giving us the right answer. There are so many issues, you know is the P that you get in a banned state the same as you get in a non-banned state when you use urban fertilizer? Does the application of urban fertilizer per directions create an excess soil P over time, things like that. Because that's the way we model it on the ag side, and land is land so it shouldn't act any differently. My big point is that the last bullet may need to be talked about first, do we need to change the way we're doing it before we talk about the BMPs that go on it.

*Norm Goulet:* You're probably right, Dave. I think you and I need to talk with the modeling workgroup, and we probably need to bump the timeline up on that discussion to around the now timeframe. Some of it also hinges on some of the work that would come out of this workgroup, so it's a chicken and egg type situation. The idea of moving to the



state data as apposed to the AAPFCO data was something that we moved in that direction with the last update.

*Dave Montali:* That's the same data; we did that so we could get it quicker, that's all.

*Norm Goulet:* Yeah, I know it is, and that's still the contention, is that that information is out there and available and we know its measured. There's always a reason why we want to stick to what we know the best. I agree with you, we probably need to start talking about some of this stuff now. The P sensitivity issue, if you remember the conversation when Phase 6 was first developed, there were virtually no options available for P sensitivity in the non ag sector. I don't know if that's changed since then but my suspicion is that the data still probably don't exist. We need to talk to some more knowledgeable people on this subject.

*Dave Montali:* I think that Joseph, he's been devoting his time to a number of other things, but he may have solutions when he comes to talk here at the Urban Stormwater Workgroup.

*Norm Goulet:* That's our hope and as David said he'll be presenting to us in a month or two.

*Samuel Canfield:* I don't know if this is the time to ask this, but I was wondering, with the thought of applying fertilizer to unfertilized land and where that needs to go. Has there been consideration of incorporating population density as a factor in that application, making it a function of urban density as well. Looking at the data a little bit, looking at different manuscripts that use AAPFCO data, I found one manuscript that took into consideration the population of the area in relation to the AAPFCO data. I wonder if that had been considered or could be utilized in that way.

*David Wood:* I don't know that it has, Samuel. We'd have to think about what that would look like; at this stage anything is on the table for taking a look at and seeing what's available to support different options and things like that. It's a good suggestion especially if there are some papers out there on the topic.

*Samuel Canfield (in chat):* Page 15 of the [PDF](#) and page 5 of the [manuscript](#) is the methodology I am talking about. Another potentially useful [manuscript](#).

*Dave Montali:* Yeah, we could look at the research on it. It makes sense, if you look at the AAPFCO data the counties where the urban fertilizer sales were greatest are the highest population centers. That's probably a mixed function of where the stores are in rural areas, but it seems intuitive that where you have higher density development that's where your urban fertilizer gets used more.

*Norm Goulet:* I think we see that in the data, Dave. That was one of the first reason why we decided to split it up amongst the states. In Phase 4 it was a lump sum and in Phase 5 we broke it up by state because there is such a large difference amongst the totals, which is population driven, we believe.

**Action:** USWG Members should email David Wood, CSN ([wood.csn@outlook.com](mailto:wood.csn@outlook.com)) with suggestions for potential Panel Members or Volunteers.

### **Participants**

Aaron Fisher  
Aileen Craig  
Alana Hartman, WVDEP  
Alison Santoro, MD DNR  
Allie Wagner, NVRC  
Andrea Krug, DC DOEE  
Bonnie Arvay, DE DNREC  
Brenda Morgan  
Brock Reggi, VA DEQ  
Caitlin Bolton, MWCOG  
Camille Liebnitzky, City of Alexandria  
Carol Wong, CWP  
Cassandra Davis, NYS DEC  
Cecilia Lane, DOEE  
Christina Lyerly, MDE  
Dave Montali, Tetra Tech  
David Wood, CSN  
Derick Winn, VA DEQ  
Dylan Burgevin, MDE  
Elaine Vidal  
Elaine Webb, DNREC  
George Doumit, DNREC

Ginger Ellis  
Greg Hoffman, CWP  
Heather Gewandter, City of Rockville  
Ho-Ching Fong, MCDEP  
Jamie Eberl, PADEP  
Jeff Sweeney, EPA  
John Seitz, York County (PA) Planning  
Commission  
KC Filippino, HRPDC  
Laura Hermann, VA DEQ  
Mark Hoffman, CBC  
Martin Hurd, Fairfax County  
Michele Berry, CSN  
Monique Dykman, Londonderry Township  
Nathan Forand, Baltimore County DEPS  
Normand Goulet, NVRC  
Olivia Devereux, Devereux Consulting  
Rebecca Winer-Skonovd, Biohabitats  
Samuel Canfield, WVDEP  
Sophia Grossweiler, MDE  
Sushanth Gupta, CRC  
Tyler Monteith, VA DEQ