

**Urban Stormwater Workgroup Meeting**  
**Meeting Minutes**  
**Tuesday, May 16, 2023**  
**10:00 AM - 11:15 AM**  
[Meeting Materials](#)

**Summary of Actions and Decisions**

**Action:** Norm and David will set up a meeting between Jeff and other CBPO people and VA to try to work something out regarding the UNM Task Force recommendations. If a solution is reached, it will be provided to the WQGIT as an update at their May meeting.

**Decision:** The USWG decided that coagulant enhanced stormwater ponds should proceed in the following way: Pursue as an interpretation of an existing BMP

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

**10:05 Announcements and Updates**

- BUBBAs Grand Prize Winner
  - Alliance for the Chesapeake Bay
- Welcome to CSN's New Stormwater Coordinator: Michele Berry
- STAC Biochar Workshop

**10:15 Urban Nutrient Management Task Force Recommendations.** Jeff Sweeney, EPA and Norm Goulet, NVRC

At their May 3<sup>rd</sup> meeting, members of the UNM Task Force reached consensus agreement on recommendations to the USWG for how to proceed with processing non-farm fertilizer data to develop better urban fertilizer application rates in the Phase 6 Model. Jeff and Norm reviewed the recommendations and provided an example of how the results compare to the existing method.

**Decision Requested:** The USWG will be asked to approve the following recommendation for use in Phase 6: The UNM Task Force recommends to the Urban Stormwater Workgroup that they replace NAWQA data with the entire record of AAPFCO data (1987 through 2016). They also recommend a data smoothing method that removes outliers at the county-scale, then takes a 3-year rolling average. If a state has data after 2016, those data will be used instead of holding the 2016 rate constant. If a state does not have more recent data, the 2016 rate will be locked in and carried forward through time.

**Discussion:**

**Allan Brockenbrough:** Does just the 1995 data have to match or anything else?

**Jeff Sweeney:** Yes, 1995 and the trend afterwards. In this method it changes every year past 1995.

**Allan Brockenbrough:** In this graph the value is held steady past 2016. Is that for lack of data?

**Jeff Sweeney:** Yes, I didn't put the new data in the graph because I don't have it for all states yet, but we do have the data past 2016 for some of the states. I can get it to you if you want.

**Allan Brockenbrough:** Looking at the previous presentation, the P drops down to 2 lb/acre and our calculations are slightly over 1 lb/acre. I'm curious about that discrepancy.

**Jeff Sweeney:** I can show you the original point from 1995 and how it was changed to make it align with the post 1995 trend.

**Allan Brockenbrough:** I would like to see confirmation of the VA numbers.

**Jeff Sweeney:** Here is the summary for VA, with lines for the old and new methods. I will provide the post 2016 numbers to VA. What's important for states to understand is that what we do is take the original trend and we have to make the 1995 point equal which involves shifting the line up. We end up at about 2 lb/acre and the original data, without having to keep the 1995 point constant is lower than that.

**Allan Brockenbrough:** If the whole curve is shifted up to match that point, it has us applying twice the P we actually do in VA. I understand the calibration issue and why you have to match with 1995. I don't understand the continuity you're maintaining after that especially when there's a ban that comes into effect. This will impact MD, PA and anyone else that hasn't adopted a ban. The way that continuity is being maintained post 1995 will affect how we receive benefits of our ban and it will impact PA as well since they have a relatively new ban.

**Jeff Sweeney:** If we didn't shift the line up, we would have to recalibrate the entire Phase 6 watershed model and then redo the planning targets and WIPS, taking years. Instead, we'll deal with it in Phase 7.

**Allan Brockenbrough:** What if you were to break the continuity when the ban was adopted (2008/9) where there's a big drop in the graph.

**Norm Goulet:** There would still be the same problem, we would have to recalibrate etc. This is an artifact of the TMDL. As much as it pains me to say this, we don't have any other options. This will only last for another year or two. The table is completely open and when we do a Phase 7 recalibration everything will be reset to the red line. Between now and Phase 7 we have to live with that adjustment.

**Dave Montali:** I wanted to further the arguments about maintaining the calibration and point out that if we don't resolve this then we're going back to the current method which is really bad for WV and VA. In Phase 5 the approach was not to violate the calibration based on the last year of calibration. Now there's an improvement but the 1993-1995 period has to be maintained the same. Any argument about not keeping 1993-1995 the same will therefore fail. This is a band aid for the really bad stuff that the change we introduced into CAST 21 caused, but it's not an ultimate solution and the absolute values will come back into play in Phase 7.

**KC Filippino:** You do have the application rate in lbs for some states beyond 2016, but I'm not seeing the smooth curve for those. Is that right?

**Jeff Sweeney:** Yes, I got the data at the end of last week but it isn't in the graph yet. I'll get it to you.

**KC Filippino:** Say we agree to everything today and the fertilizer inputs to the model are reduced, what happens to those lbs? Do they have to go somewhere, how do they get reallocated or reorganized in the model?

**Jeff Sweeney:** We can change all pounds essentially to that 1995 point, but we do have to maintain the trend. If you change the inputs that would change the loads, but turf grass is considered a crop in the model so most of the mass would be taken up by the turf grass and the excess is what you would see as a load. It is not a zero sum game after 1995.

**Olivia Devereux (in chat):** KC, it is not a mass balance so the lbs don't go elsewhere.

**Olivia Devereux:** My understanding is the same as Jeff's that 1995 needs to stay the same. But we can also use a back cast from 1995 to shift those values using AAPFCO vs NAWQA.

**Jeff Sweeney:** This is what Olivia's describing, the shift in trends at 1995 but you're able to maintain them with the new AAPFCO data pre and post 1995. The key is that 1995 has to remain as it was in the calibrated model.

**Norm Goulet:** Is there anyone who doesn't agree with the decision?

**Allan Brockenbrough:** I'm in a tight spot. Sorry that I didn't have a change to give input before. I have been advised that VA probably doesn't want to vote for this if our loads are twice what they really are.

**Norm Goulet:** Are you a Stand Aside or a Hold?

**Allan Brockenbrough:** Hold. Maybe we can have a follow up discussion with the other people in VA like Evan and Clayton Hodges.

**Norm Goulet:** I understand you're in a tough position. We've tried to communicate with Evan but haven't heard anything. The only way to resolve the 1995 issue is a complete recalibration of the model with new loads and targets.

**Allan Brockenbrough:** I understand that I would like to have that conversation with Evan and Clayton.

**Norm Goulet:** Would you have any objections with this moving forward to WQGIT and letting your state member decide at that meeting or do you have objections to it proceeding there.

**Allan Brockenbrough:** When is that meeting?

**Norm Goulet:** Two weeks from now, this is not on the agenda though. I see Jeremy has his hand up.

**Jeremy Hanson:** We don't have time on the May agenda but can add it to June agenda. Our Members like at least two weeks for a decision.

**Allan Brockenbrough:** I'm good with June.

**Norm Goulet:** Any other states a hold or stop? Hearing none, VA is at a hold. We will set up a meeting between Jeff and the other Bay folks and VA and try to work something out. If we work out something we will provide that as part of the WQGIT update in two weeks.

**Action:** Norm and David will set up a meeting between Jeff and other CBPO people and VA to try to work something out regarding the UNM Task Force recommendations. If a solution is reached, it will be provided to the WQGIT as an update at their May meeting.

**11:00 Coagulant Enhanced Stormwater Pond Performance.** David Wood, CSN. Attach E, F.

At the April USWG meeting, the workgroup heard a presentation on coagulant treatment - adding a common flocculent to stormwater/surface water which forms precipitates which trap total phosphorus (TP), total nitrogen (TN), bacteria, total suspended solids (TSS), and other pollutants. David will ask USWG members how they would like to proceed with the request for a new BMP.

**Decision Requested:** USWG will be asked to decide whether coagulant enhanced stormwater ponds should proceed in one of the following ways: 1. Do not pursue; 2. Pursue as an interpretation of an existing BMP; 3. Pursue as a full BMP expert panel when capacity is available.

**Discussion:**

**KC Filipino:** Do you have an idea of what existing BMP this would fit into?

**David Wood:** This would be an interpretation of the retrofit BMP. The approach being discussed in the white paper is similar to the one the floating treatment wetland expert panel took which is to use the ST curves and data from existing studies to propose a series of small bumps based on impervious acreage treated by pond with the addition of the coagulant.

**Jeremy Hanson:** I just wanted to clarify that for option #3 (convening a full expert panel to review the practice when resources become available) are the resources those of CSN or would we need other CBP resources?

**David Wood:** If that is the decision we would probably have a conversation about the best way to tackle it. CSN probably have the resources to tackle one expert panel. We will discuss it if we take this route. We can tackle one in the fall and it's a matter of which because there are other ones too like Biochar.

**Jamie Eberl:** This is going to be an issue for PA. We have an alternative BMP evaluation process in our Chapter 102 New Construction NPDES permitting. We have already decided this is not allowed in PA for 102 NPDES permitting, and we try to keep New Construction BMPs, MS4 BMPs and Bay Program BMPs relatively consistent. If this goes forward as a Bay BMP there will be a disconnect with what's in our other NPDES programs.

**David Wood:** I know from a messaging standpoint that's a challenge. There is a clause in our interpretation policy saying that states are welcome to opt out and so PA can opt out at that point, there are options without turning down the whole proposal but I would be interested to hear and understand why PA has chosen not to allow it for permitting purposes.

**Allan Brockenbrough:** VA has a similar, separate process with the same potential for disconnect so would need to coordinate with our construction GP folks.

**Samuel Canfield:** Where does this BMP stand in the queue of other potential BMPs? Is it at the front? You said there were other BMPs being discussed as well for a full expert panel. My second question is have all BMPs undergone an expert panel to be accepted into the model? That relates to option #2 and whether it would be a deviation from previous BMPs.

**David Wood:** We have not done a formal queue since this was proposal was brought forward. If we decided to go with expert panel, I would revisit the queue with you all and get a recommendation. This is the only potential BMP that has been officially brought forward rather than just floated. The goal would be to wrap this up by the fall. In terms of second question we have approved other BMPs using this policy such as the CMAC (continuous monitoring and adaptive control practices) smart retrofits that were an adjustment on the retrofit curves that were approved as an interpretation. We also have used this process for conservation landscape practices and interpretation of our existing homeowner BMP process.

**Jeremy Hanson (in chat):** I was assuming the proposed BMP wouldn't be eligible to the construction load source, since we already have the ESC practices that sometimes includes coagulants. the proposed BMP sounded like something that would be applicable to other developed load sources. would that help clarify the disconnect noted from PA and VA?

**KC Filippino (in chat):** You're right Jeremy, this is for post-construction.

**Allan Brockenbrough (in chat):** I don't think so. We have BMPs/site design requirements to meet a post construction runoff rate of 0.41 lbs/A TP. Those BMPs are included in a BMP clearinghouse, and we have the same potential for a disconnect between that program and the CBP.

**Jeremy Hanson (in chat):** Okay thanks I think I misheard some of the comments and only heard "construction" 😊

**Christina Lyerly:** Will this be limited to aluminum, or will other flocculants be considered?

**David Wood:** My understanding is it is just aluminum. That's something I want to get straightened out with the proposal team. Is there anyone from the team that can address that in more detail?

**Jeff Herr:** We have tested many other metals but find aluminum consistently provides optimal removal efficiencies and the right pH. Iron for example has minimum solubility at a lower pH meaning you get more dissolved iron available if you use iron coagulants. We would propose aluminum unless there's a strong reason the workgroup would like it expanded.

**Heather Gewandter:** For option #2 does a mini panel still get to explore the different options and the concerns I brought up regarding disposal?

**David Wood:** I have your notes and will make sure they're addressed.

**Norm Goulet:** Is anyone for decision #1, do not pursue? Ok no one, so #1 is off the table and need to decide between 2 and 3.

Norm Goulet: Consensus on 2. David will get to work on interpretation.

**Decision:** The USWG decided that coagulant enhanced stormwater ponds should proceed in the following way: Pursue as an interpretation of an existing BMP. The breakdown of votes is below.

DC	2
DE	2
Ginny (At-large)	2
Heather (Local Gov't MD)	2
Jeff (Local Gov't PA)	2
KC (Local Gov't VA)	2
Marty (Local Gov't VA)	2
MD	2
NY	2
PA	2
Ted (At-large)	2
VA	2
WV	2

**11:15 Adjourn**

### Participants

Aileen Craig, TNC MDDC  
Allan Brockenbrough, VA DEQ  
Allie Wagner, NVRC  
Beth Uhler, Center for Watershed Protection  
Camille Liebnitzky, City of Alexandria  
Cassie Davis, NYS DEC  
Cecilia Lane, DOEE  
Christina Lyerly, MDE  
Dave Montali, Tetra Tech WV  
David Wood, CSN  
Elaine Webb, DNREC  
Eugenia Hart, Tetra Tech DE  
Ginny Snead, AMT  
Heather Gewandter, City of Rockville  
Helen Golimowski, Devereux Consulting  
Ho-Ching Fong, Montgomery County DEP  
Holly Sepety, VDOT  
Jamie Eberl, PA DEP  
Jeff Colella, WVSA PA  
Jeff Herr, Brown and Caldwell

Jeff Sweeney, EPA CBPO  
Jeremy Hanson, CRC  
KC Filippino, HRPDC  
Mark Symborski, M-NCPPC  
Marty Hurd, Fairfax County  
Michelle Berry, CSN  
Nathan Forand, Baltimore County DEPS  
Olivia Devereux, Devereux Consulting  
Priyanka Mohandoss, Brown and Caldwell  
Samuel Canfield, WVDEP  
Scott Crafton, VDOT  
Sushanth Gupta, CRC  
Ted Brown, Biohabitats  
Tom Butler, EPA CBPO