Urban Stormwater Workgroup Meeting Meeting Minutes Tuesday, August 15th, 2023 10:00 AM - 11:00 AM Meeting Materials

Summary of Actions and Decisions

Decision: The USWG approved the May Meeting Minutes.

10:00 Welcome and Review of May Meeting Minutes.

Norm Goulet, Chair. Attach A.

Decision: The USWG approved the May Meeting Minutes.

10:05 Announcements and Updates

- Chesapeake Urban Stormwater Professionals (CUSP) Training Program
 - o Registration is Open: https://chesapeakestormwater.net/chesapeake-urban-stormwater-professionals-cusp/
- EPA RFAs on Machine Learning and Climate
- GIT Funding Proposal Ideas

10:15 Stream Restoration Protocol 3 Revisions

In 2020, the Water Quality Goal Implementation Team approved a series of updated recommendations for how to track and credit Stream Restoration practices. Since the new Protocol 3 was approved, practitioners who helped develop the protocol have discovered a series of issues related to its inability to properly "scale" the credit to account for more or less extensive floodplain restoration projects (whether by length or acres of reconnected floodplain). Over the past year, the group has reconvened several times to review the issues and propose a solution.

David introduced the draft memo and proposed solution. The USWG had the opportunity to review the memo and will be asked to make a decision on whether to accept the amendments at the September meeting.

Supporting materials:

- Attach B. Protocol 3 Fix to Address Credit Scaling Issue
- Attach C. Presentation slides for the USWG (August 15, 2023)

Discussion:

Alison Santoro: Can you post the document in the meeting chat or send it out? Does it also include comments from Denise as to why she abstained?

David Wood: I have some comments from Denise in the process, I don't know if Denise or anyone from MDE is on the line and wants to speak to it. Alison I'm happy to talk to you about that. There was some interest from Denise in trying to segment the floodplain accretion rates based on hydrogeomorphic regions and some other factors like that which is something we looked into. We did some statistical analyses of how those rates differed across these different segmentation values and there wasn't enough statistical difference, and that was the decision the group reached, to not do that. I know that was one remaining concern, and I don't know if anyone from MDE wants to chime in.

Christina Lyerly: I don't think Denise is on the call.

Scott Heidel: Are you incorporating any of the microbiological processes at play that denitrify some of the groundwater that reports to these sites by reconnecting the groundwater surface water interface?

David Wood: That's part of our Protocol 2 process. We have a second crediting protocol that specifically deals with hyporheic exchange and denitrification based on connectivity to the root zone of the plant species. That was dealt with back in this 2020 process and so far, no issues or concerns have been raised at this point with that process. So, we do account for that, it's just in a different crediting protocol.

Jamie Eberl (in chat): Is the bulk density – 55lb/cf an example or a default?

David Wood: This is one of those discussions that we had in multiple processes. That 55 pounds per cubic foot comes from the density of the floodplain sediments, so it's the average bulk density of floodplain sediments from the Chesapeake Delaware floodplain network sites. That represents 68 different floodplain sites across the region over about 50 years of data. That's where that comes from, it is able to be used as a default for the calculations although we do encourage sampling. The challenge here is that you can't sample the bulk density of your floodplain accumulated sediments until post restoration. So, you need several years to revise it which is why they went ahead and put the value in place.

Jamie Eberl: Thanks, yeah that's one of the things that from reviewing these types of projects, will certainly get brought up by practitioners who want to argue because that seems a little low. So you're saying that the three years of post construction monitoring would then be sampling those accumulated sediments and if that number is different than the assumed 55 they could then revise their calculations?

David Wood: That's correct. That's the process we use for all of these. That goes for the vertical accretion rate as well as the bulk, density and soil nutrient concentrations.

Jeff Sweeney: I have a question about the caps and hitting the caps with large projects. Are the caps based on edge of tide loads?

David Wood: I think they're edge of stream.

Jeff Sweeney: They're therefore all sources combined right. We don't have caps for individual sources like urban stormwater?

David Wood: No, I think the cap is the total load delivered which would be coming from the stream bed and bank in this instance. That's where those values came from since it's based on the length of stream reach upstream. So those loads are coming from the bed and bank load value.

Jeff Sweeney: But the cap is for all sources, right? Or is the cap just for the stream bank load?

David Wood: What we did in this example here is that we looked at the upstream contributing stream length for the site. They selected an example site location, found that there were four miles of upstream stream length and then determined the delivered loads for NPS which comes from that stream bed and bank load. Then, when we were going through the calculation process, with those large sites the calculated reductions are larger than those delivered NPS loads. That's where rather than exceeding the 350lbs/mi/yr of N for instance, it was capped at that level of reduction. Does that make sense?

Jeff Sweeney: Yes, so we're not saying that these larger projects are addressing all the loads from agriculture and all the loads.

Norm Goulet: The last thing we want is to run into a situation where a BMP is removing more than what its saying the source is.

10:45 Coagulant Enhanced Stormwater Pond Performance Update. David Wood, CSN

At the May USWG meeting, the workgroup agreed to move forward with a proposal to pursue a BMP Interpretation for coagulant enhanced stormwater ponds. Since the USWG decision, a draft white paper was developed, and a review team was convened to provide feedback on the proposal. David provided an update on progress, and next steps for the proposal. There were no questions.

11:00 Adjourn

Participants

Alison Santoro, MD DNR
Allan Brockenbrough, VA DEQ
Allie Wagner, NVRC
Andrea Krug, DOEE
Ashley Hullinge, PA DEP
Bonnie Arvay, DE DNREC
Brendan Diener, DNREC
Cassandra Davis, NYS DEC

Cecilia Lane, DOEE
Charles Hegberg
Christina Lyerly, MDE
Brenda Morgan
David Wood, CSN
Derick Winn
Doug Austin
Elaine Webb, DE DNREC

Eugenia Hart, Tetra Tech DE

Ginger Ellis

Heather Gewandter, City of Rockville

Helen Golimowski, Devereux Consulting

Ho-Ching Fong, MC DEP

James Dunbar

Jamie Eberl, PA DEP

Jeff Sweeney, EPA CBPO

Jeremy Hanson, CRC

Liz Feinberg, Calvan Enviro – NFWF Field

Liaison

Mark Hoffman, CBC

Martin Hurd,

Nathan Forand, Baltimore County DEPS

Norm Goulet, NVRC

Samuel Canfield, WVDEP

Sara Weglein, MD DNR

Scott Crafton

Scott Heidel, PA DEP

Shannon McKenrick

Sophia Grossweiler, MDE

Sushanth Gupta, CRC

Ted Brown, Biohabitats