



Urban Stormwater Workgroup Meeting

Tuesday, December 17, 2019

10:00 AM to 12:00 PM

Zoom Link: <https://zoom.us/j/679285024>

Conference Line: 929-205-6099

Meeting ID: 679-285-024

10:00 Welcome and Review of October Meeting Minutes.

Tom Schueler, Coordinator. Attach A.

Decision: Meeting minutes from October were approved by the USWG.

10:05 Announcements and Updates

- Webcast Schedule
 - January 21: [Projecting Future Precipitation for Stormwater Management](#) (Joint with next USWG conference call)
 - January 28: [New Insights on Using GI to Reduce Stormwater Runoff](#)
- Stream Restoration Update
 - Floodplain reconnection Group 4 is working on a draft and is hoping to wrap up in the first quarter of the new year.
- USWG Membership Update
 - The membership is now up to date and will be revisited again next year.
- Shoreline Management Update Completed by WTWG
 - The finalized version of the report is now available at [this link](#).
 - **Action:** David will check on the status of missing Appendix N and summary
- GIT Funding project for probabilistic IDF curves
 - There were three bids for the proposal that will be reviewed in the first couple weeks of January.

10:15 New Insights on using Green Stormwater Infrastructure to Reduce Suburban Stormwater Runoff – Kristina Hopkins, USGS

Kristina discussed the results of a study that USGS conducted with Montgomery County, MD to better understand the effectiveness of selected stormwater practices. The study looked at two main questions:

1. How does the amount of runoff change when an agricultural area is developed into a suburban neighborhood with a high density of green stormwater infrastructure?
 2. Can suburban development with a high density of green stormwater infrastructure store and infiltrate enough runoff to replicate forested conditions?
- Tom Schueler: Could you give detail about total stormwater engineering design volume?
 - Krissy Hopkins: It was designed for one inch of rain, like most are.
 - Tom Schueler: Based on specific conductance, is a portion of benthic invertebrate response due to chloride? Or some other ion or cation?
 - Krissy Hopkins: We don't have detailed ion data, but I would guess chlorides. We are seeing a consistent pattern across the county of an increase in specific

conductiveness, a salty streams phenomenon. There has not been a lot of water quality monitoring, we mostly focused on stream flow.

- Cecilia Lane: Which of the two treatments had higher peaks?
 - Krissy Hopkins: Treatment 2 has more stormwater GSI facilities higher in the watershed. Comparing the two, I would guess treatment 2 has less storage but, I don't know that for a fact.
- Krissy Hopkins supplied this link:
<https://onlinelibrary.wiley.com/doi/full/10.1002/hyp.13593>

11:00 Climate Resilience Project Update

David Wood, CSN

David shared the results from the Climate Stakeholder Survey on the greatest concerns related to climate change, current engineering and management approaches, and future needs.

- KC Filippino: Some categories with “other” had high percentages. Do you have an idea of what the “other” category was referring to? Are there unique things to share that you can pull out of the survey?
 - David Wood: Unfortunately, a lot of N/A answers are people new to the program, or unsure of the correct answer. We have some funding available, but we are using it for other things before resiliency such as emergency management but not for stormwater improvement. There was a question if people were aware of new regulations or policies that communities have adopted, and most answers were “no.”
- Tom Schueler: What is the timeline?
 - David Wood: The synthesis portion will be about 6 months. We will bring updates periodically. There will be another update in the Feb-March timeframe. There will be a summary writeup of findings from the survey before the end of Jan.
- Liz Feinberg: Were there correlations between municipalities with dedicated stormwater funding sources and resiliency planning?
 - David Wood: We did not collect that data to a correlation level. Some folks answered the stormwater fee question that it was for the program, not specifically for resiliency planning.

11:30 Urban BMP Crediting Priorities

USWG members were asked to review the Urban BMP Priority Queue and recommend their top priorities for the workgroup to tackle.

- Julianne Bautista: Will there be an urban wetland panel?
 - Jeremy Hanson: The wetland BMP panel is still working its way through approval process and we have had questions on how it applies to the urban sector. The panel felt it wasn't specifically limited to the agricultural sector. We still need to figure out how to credit an occasionally urban practice. We are waiting to hear from Group 4 on how to address that.

- The group asked for time to share this with our agencies and get comments/feedback in by Jan 15. We can revisit it one last time at the January call.
- **Action:** The USWG will get comments/feedback on Urban BMP Crediting Priorities in by January 15, 2020.
- KC Filippino: Could coastal buffer zones and coastal restoration be added on to existing panels or how would that work?
 - Jeremy Hanson: I'm not sure about coastal buffer zones, the first wetland expert panel in 2016 recommendations were focused on nontidal zones. Protocol 2,3,4 of shoreline management panel could be applicable to coastal wetlands. There was not a specific practice created for that. The implication was that people should use those protocols. We can consider a new BMP for those protocols, or a different approach. Rates for those protocols were based on tidal fringe wetland systems.
 - KC Filippino: I get many questions about invasive species removal and I'd like to push for that as well.
 - Jeremy Hanson: Invasive species removal is tricky about the definitions and issues with categories that get lost in context.
- **Action:** In the first quarter of 2020, David, Tom, and Jeremy will meet about these reports and see if it makes sense to fold coastal wetland restoration or invasive species removal into existing panel reports.
- Christina Lyerly: There is interest in MD on trash reduction and soil amendments in addition to coastal buffer zones:
- Heather Gewandter: I'm interested in enhanced urban riparian buffers. Already existing trees that are unhealthy if there's room for enhancing them to get credit.
 - Tom Schueler: I think there's a meeting in Jan on urban forest canopy and we can bring that up with them at that time. Forestry folks may have an interest in that.
- Karl Berger: I Second MDE's promotion of soil amendments. SHA is pursuing work now to quantify that practice. It may be similar to the outfall stabilization memo. Which practice is looking at the data from ponds? Is the thought on that one that it would be ready if there is more data?
 - Tom Schueler: Results were intriguing but not definitive and more research may be needed.
 - Note: The BMP Priorities List will be updated with notes from today and others that we receive over email.

12:00 Adjourn

Attachment A. October Meeting Minutes

Attachment B. USWG Membership as of October 2019

Attachment C. USWG BMP Crediting Queue (April 2017)

Attachment D. Climate Resilience Update Presentation

Meeting Participants

Jeremy Hanson, VT

David Wood, CSN
Allie Wagner, CRC
Tom Schueler, CSN
Julienne Bautista, DOEE
Cecilia Lane, DOEE
Christina Lyerly, MDE
Alana Hartman, WV DEP
Lee Murphy, PA DEP
Elaine Webb, DNREC
Randy Greer, DNREC
Steve Hudson DNREC
Liz Ottinger, EPA
KC Filippino, HRPDC
Ruth Minich-Hobson, VA DEQ
Krissy Hopkins, USGS
Ginny Snead, A&T
Renee Reber, American Rivers
Doug Austin, EPA
Heather Gewandter, City of Rockville
Karl Berger, MWCOG
Nathan Forand, Baltimore County DEP
Liz Feinberg, PEC
Sebastian Donner, WV DEP
Shannon McKenrick, MDE
Natalia Sanchez, UMD