



## Urban Stormwater Workgroup Meeting Minutes

Tuesday, February 20, 2018

10:00 AM to 2:00 PM

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### **Actions & Decisions:**

ACTION: USWG leadership will coordinate with the Stream Health Workgroup to schedule a joint-meeting to discuss stream restoration.

ACTION: Workgroup leadership will coordinate with state agency leads and other appropriate colleagues to discuss the issue of tracking and reporting fertilizer data.

ACTION: Jeff Sweeney will present back to the workgroup in March on percent load reductions per reductions in fertilizer nutrient applications.

ACTION: USWG members should contact Tom Scheuler if they would like to engage with the ad hoc group tackling issues related to climate change in the urban stormwater sector.

ACTION: USWG members should submit any additional comments on the memo "[Stormwater at the Edge of Town](#)", which is available on the January meeting page.

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### **Welcome and Review of January Meeting Minutes.** (Norm Goulet, Chair. Attach A.)

- The USWG approved the January meeting minutes.

### **Announcements**

- *Update on RDM GIT Funding Proposal (Schueler):* The proposal was accepted by the Center for Watershed Protection, and there will be a kickoff meeting within the next month. The workgroup will then consider whether this should be an additional BMP or modification to the existing performance enhancing devices panel. Contact Tom Scheuler for more information.
- *Update on MTD report (Goulet):* Comments were requested on a first draft of the report. Group leadership met to address comments, and the revised report will be distributed to the MTD panel for final deliberation.
- *Washington Metro Area Stormwater Forum (Goulet):* There were roughly 65 attendants, and discussion topics included BMP expert panels, maintenance issues, etc. The forum also resulted in a draft list of topics for USWG consideration.
- *Upcoming CSN Webcasts (Wood):* 3 upcoming webcasts in the next month include: Road Salts Part 2 (2/22), Permeable Pavement Part 1 (focusing on maintenance) (3/8), CAST training geared towards local governments (3/22). Register for webcasts on the Chesapeake Stormwater Network website.

### **Stream Restoration and Sediment Delivery Update** (Gary Shenk, USGS)

Gary discussed how sediment delivery and stream restoration is simulated in the Phase 6 Model.

*Discussion:*

- Cecilia Lane: So there's a cap on the amount of credit that can be issued as a result of stream restoration. In DC, we're running into a problem where we're exceeding that, and were told previously that this would require a Partnership decision to allow us to move beyond that cap, and would like to know what that entails.
  - Gary Shenk: It would start here – the Partnership decides how BMPs are implemented, and the Bay Program staff can weigh in. It would then move on to the WTWG and the WQGIT.
  - Jeff Sweeney: Can we talk about how this could be feasible? How you could reach the cap of stream restoration in such a hardened area?
  - Jeremy Hanson: So this issue is when you do the protocols from the panel to calculate reductions, it's greater than the model allows for?
  - Cecilia Lane: My understanding was that it's an issue of scale?
  - Gary Shenk: The sediment we get per NHD stream line meter is the average of all reported bank flux. That is quite a bit lower than what you get for stream restoration, and stream restoration is usually done in areas with higher erosion rates. So you would expect that if you're doing it in those areas, you have a higher than average rate, but are you going to restore a significant portion?
  - Tom Scheuler: I understand that it's a cap, but because there's so many miles of streams in a segment and so few of them are being restored, it's a cap that usually wouldn't kick in unless there's a strange geography.
  - Cecilia Lane: This was raised by Julianne Bautista, where it looked like the model limited stream restoration crediting for projects greater than 1 sq mile. And we do a lot of projects smaller than the 1 sq mile.
  - Gary Shenk: 1 sq mile refers to the size of the NHD catchment – you can get credit for something smaller than 1 sq mile. But when we could up total miles of streams, we're only counting those NHD catchments. If you made the calculation and found that you were running out of credit, and could make the argument that erosion rates are too low due to a special case of streams in DC, then that could be made.
  - Tom Scheuler: I think it might be useful to use CAST to see what the numbers are in those LRSEGs and check whether it's going to be an issue. I know the documentation for this is dated back to August, but may not be reflective of how it would work today.
  - Gary Shenk: The last documentation that was released was prior to the fatal flaw review, which resulted in what I've presented. So these changes are not captured in that documentation.
- Tom Scheuler: One of the reasons why this is a better simulation is that there are a lot more reservoirs hardwired into the model.
- Karl Berger: Does the new sediment simulation resolve the earlier issue with the E3 scenario producing negative sediment loads?
  - Gary Shenk: We used to have a very basic conceptual model, and now that we have a pass-through factor, it must always be a positive number coming out of the river loads. Using the old conceptual model helped create negative numbers, and also through tidal shoreline. But due to the changes, there are no negatives.
- Norm Goulet: What enhancements do you see coming down the line?

- Gary Shenk: We just had a model visioning workshop, and the group focusing on sediment recommended that for the longer term, we need to start over with an entirely new sediment model, but that the conceptual models don't even exist for that yet. We now understand conceptually what's going on better than we ever have, but there's a lot of work to get there. There's a possibility that a subgroup from the Modeling Workgroup will be formed specifically to deal with sediment.

### **Stream Restoration FAQ Document** (David Wood, CSN) Attach A.

David presented the final draft of an FAQ document, developed by CSN and the Center for Watershed Protection, that summarizes qualifying conditions, nutrient reductions, and Model simulation in Phase 6 for the stream restoration BMPs.

#### *Discussion:*

- Norm Goulet: Looking at 401 certification and cost-share is probably going to get us where we need to go. Most of the MS4 folks are struggling since there's nothing in the framework for them to utilize.
  - Tom Scheuler: Normally, to get a permit for stream restoration, you have to do a lot of monitoring for 3-5 years. But once you get to the end of that time period, how do you renew the practice, and is there a simple way to do it? The other confusion is that a lot of people feel that monitoring has to prove the functional uplift, which is not a requirement in my view.
- Norm Goulet: I'd say we have some kind of deadline to get this finished. We're going to need something by the end of the 5-year window; so this would be about 4 years from now to get it done.
  - Tom Scheuler: My hope is that we can get a subgroup of this workgroup and some outside folks to work on a simple template that each state could then modify based on their own regulatory and inspection needs.
- Norm Goulet: Where's all the monitoring information going, and how do we tap it to look at what we've assumed in the 3 protocols?
  - David Wood: That comes up every time we talk about stream restoration, but I don't think there's been a coordinated effort yet on how to pull it all together. There's also a Stream Health Workgroup that may have a better idea of that data.
  - Alana Hartman: The stream health workgroup just had an update from the CBT, and there have been funding pools for monitoring used, and that's available on their website.
  - Tom Scheuler: There's other groups like the Mid-Atlantic Stream Restoration group that has an annual conference to go through bulk density and P data. So maybe it's a subject for a future STAC workshop – getting practitioners and scientists together to share data.
- Norm Goulet: It might be worthwhile to see what kind of information is available in CAST.
  - Tom Scheuler: I think we should coordinate with the Stream Health Workgroup.

**ACTION:** USWG leadership will coordinate with the Stream Health Workgroup to schedule a joint-meeting to discuss stream restoration.

## **Urban Nutrient Management Update** (Jeff Sweeney, EPA)

Jeff discussed how the new urban nutrient application method in Phase 6 impacts the Urban Nutrient Management BMP. The USWG then discussed a proposed approach to help states plan for nutrient reductions from new fertilizer legislation.

### *Discussion:*

- Norm Goulet: It seems to me that the new data continues the irregular pattern, but just with a higher amplitude.
  - Karl Berger: The MD data is just completely off, I think. Nitrogen data is a bit better, because I think it's reflecting the fact that the application rates per acre have leveled off. But even there, the databases are just not that good. This is a problem with the database, not with the homeowner.
- Tom Scheuler: The endpoint of Jeff's new data is 2012; the state laws in MD went into effect in 2013, in NY late 2012, in VA in 2014...
- Jeff Sweeney: It might be worth getting in touch with Alisha Mulkey from MD to get an explanation on that.
- Norm Goulet: VA sent me the information they got and I couldn't make sense of it. Until states step up to the plate and give us the information we need, we'll just have to take this and use it. I thought it was going to be the incentive that was needed, but it doesn't appear so.
- Jeff Sweeney: We will not be taking this new data in for another year and a half, due to the cutoff date for the model data. So we have time to dig into this, up until the next milestone period.
- Tom Scheuler: I think what we're reacting to is that 4 states enacted P bans, and the data you're showing does not reflect any changes related to that. From the standpoint of the model, it appears that the state laws aren't having an effect, then maybe this is an issue we should bring up to the WQGIT. Could an explanation be an increased number of acres?
  - Jeff Sweeney: I haven't had time to consider this yet.
- Dave Montali: Is there a value in a state passing legislation at this point, or is the formula the same whether they pass legislation or not?
  - Norm Goulet: Fertilizer companies work off of regional blends, but I don't remember if the entire Bay region was part of the same regional mix (though I don't believe it was). So maybe we need to dig that information up again.
- Tom Scheuler: I think there's a lot of people who have invested heavily in state-wide bans, and they would be surprised by this conclusion.
  - Norm Goulet: I think we need to put this on the WQGIT agenda – at least a 5-minute discourse on states needing to get this information to us. We can remind them that we're now using trend information, and that their automatic discounts are gone. We may also want to talk with each state agency to see where everyone is with this.
  - Karl Berger: Gary Felton was on our panel, and had brought us the Scott's data. We should reach out to him again, and maybe do a call with him and some others.

**ACTION:** Workgroup leadership will coordinate with state agency leads and other appropriate colleagues to discuss the issue of tracking and reporting fertilizer data.

- Jeff Sweeney: The one state that submitted data was DE, but we're not using it because we're using the same data source for all states.
- Tom Scheuler: These are significantly lower sensitivities for P that were in the Phase 5.3.2 and that were recommended by the original panel – perhaps by an order of magnitude?
  - Jeff Sweeney: They are different and they are lower.
  - Tom Scheuler: So even if take 90% of the P out of my fertilizer, I'd only get a 0.1% reduction. Could you explain the scientific basis for that?
  - Jeff Sweeney: The Phase 6 model documentation has a section on sensitivities.
- Tom Scheuler: I would think that based on these P numbers, there's very little incentive for communities to implement urban nutrient management.
- David Wood suggested double checking the P percent load reduction numbers, noting that he had received data to suggest they are an order of magnitude greater.

**ACTION:** Jeff Sweeney will present back to the workgroup in March on percent load reductions per reductions in fertilizer nutrient applications.

### **2017 Progress Results** (Jeff Sweeney, EPA and Norm Goulet, NVRC)

Jeff gave a brief update on the status of 2017 Progress results.

- Jeff Sweeney: The progress run for 2017 is not ready for prime time yet, and some states felt uncomfortable putting this information out publicly at this time. The data is only available to contacts and state agencies to BayTAS

### **Washington Metro Area Stormwater Forum** (Tom Scheuler, CSN)

- Tom Scheuler: The forum recommended dealing with the lack of guidance for verification of stream restoration practices. As discussed, there may be a special meeting with the Stream Health Workgroup.
- There was interest on getting more data for BMP efficiencies beyond N, P, and sediment.
- Other issues include undocumented ponds, which are 2007 or earlier. These are mostly for stormwater, but some are for agricultural ponds. What sort of information would localities need for them? There was some guidance that's currently under review by MDE. When that is ready for prime time in April/May, they may present to the USWG.
- Tom Scheuler: Considering street sweeping is one of the top 5 BMPs and yet no one is reporting it, tells me that there's a problem with verification, tracking and reporting. It takes a long time from the point at which a BMP panel report is approved to when states start submitting practices.

### **Interior Flooding in the District of Columbia** (Nick Bonard and Phetmano Phannavong, DOEE)

Nick and Phetmano discussed in more detail the results of a recent study on interior flooding issues in the District of Columbia and its stormwater management implications.

#### *Discussion:*

- Norm Goulet: Looking at the Copenhagen map, the data and informational needs to produce that are enormous.

- Tom Scheuler: For all the hotspots for interior flooding, are they really just a reflection of an undersized storm drain system that was built historically? Or is it a question of diminished capacity?
  - Nick Bonard: One thing we see is areas prone to interior flooding are oftentimes areas that used to be streams or creeks. This is true of Federal Triangle and Bloomingdale. Topography also likely plays a role in this, as well as undersized stormwater drains.

#### **USWG Climate Change Strategy** (Tom Schueler, CSN) Attach B.

Tom discussed a proposed plan for an ad hoc team that would take the lead in tackling issues related to climate change in the urban stormwater sector. Any USWG members interested in being involved on the team may volunteer.

#### *Discussion:*

- Norm Goulet: I think one of the biggest questions is what the effect of climate change is going to be on design standards than can be 50+ years old.
- Tom Scheuler: We're looking to see if anyone on the USWG has an interest in joining this ad hoc group, or if there are specific resources that we should consider.

**ACTION:** USWG members should contact Tom Scheuler if they would like to engage with the ad hoc group tackling issues related to climate change in the urban stormwater sector.

- We're also still accepting comments on the "Stormwater at the Edge of Town" memo that was discussed during the January meeting.

**ACTION:** USWG members should submit any additional comments on the memo "[Stormwater at the Edge of Town](#)", which is available on the January meeting page.

- KC Filippino: Hampton Roads is doing a lot of parts and pieces from what you've mentioned, specifically looking at this from a resiliency standpoint. I think we have a lot of people to bring to the table for this, and can share resources via email.

#### Participants:

Norm Goulet	NVRC
Tom Scheuler	CSN
David Wood	CSN
Lindsey Gordon	CRC
Alana Hartman	WV DEP
Chad Thompson	WV DEP
Dave Montali	WV DEP
Christina Lyerly	MDE
Jeff White	MDE
Heather Gewandter	City of Rockville MD
Lisa Fraley-McNeal	CWP
Randy Greer	DE DNREC

Elaine Webb	DE DNREC
Gary Shenk	USGS
Jeff Sweeney	EPA
Jeremy Hanson	VT
Melissa Harlinski	Anne Arundel County MD
Raghu Badami	Anne Arundel County MD
Mary Symborski	Montgomery County MD
Ginny Sneed	Alliance for the Chesapeake Bay
Karl Berger	MWCOG
Ted Brown	Biohabitats
MDOT SHA	
Cecilia Lane	DC DOEE
Nick Bonard	DC DOEE
Phetmano Phannavong	DC DOEE
Ruth Minich-Hobson	VA DEQ
KC Filippino	HRPDC