

## **Urban Stormwater Workgroup Conference Call**

**April 19, 2016**

**10:00AM-12:00PM**

### **Meeting Minutes**

#### **Summary of Actions and Decisions**

ACTION: Revisions will be made to the CMAC crediting proposal document and it will be re-distributed to USWG polling members for their review and consideration.

ACTION: Norm will continue discussions with Baltimore County on self-converted dry detention ponds to determine additional data needs and next steps.

ACTION: Norm, CSN and Mary Gattis to talk offline about what information from the MS4 annual survey could be useful for the Local Government Advisory Committee.

#### **Announcements**

- Street Sweeping Expert Panel: Virginia submitted an additional sediment control practice to the WQGIT for consideration. The WQGIT decided to go back to the panel for a vote on the validity of incorporating the proposed addition. Final decision will be made on April 25<sup>th</sup>.
- Floating Treatment Wetlands Panel: Panel has been working well, and will have what is hopefully the final panel meeting on April 27<sup>th</sup>. Looks like it will be a retrofit-type BMP to enhance wet stormwater ponds. It would not be applied to tidal waters at this point in time. Our hope is to have final report to bring before USWG in either May or June.
- Impervious Disconnection Panel: Recently had their final conference call and are finalizing the report. Should be out for review in mid-May. BMP is largely boiling down to an expansion of retrofit protocols, so nothing too new for reporting purposes.
- Urban Tree Canopy Panel: Report will likely be released in first week of May for review. It will come to the USWG following the a presentation to the Forestry Workgroup.
- Norm Goulet (Chair): Whenever we hold the webinar to release the Floating Treatment Wetlands panel report, whether it is a standalone webinar or our standard meeting, that will start the 30 day comment period.
- Jaime Bauer (VA DEQ): It sounds a lot of these reports will be ready around the same time. Can their release be staggered to ensure folks can review these in a timely manner?
  - Jeremy Hanson (VT): We are trying to stagger some of the Virginia Tech coordinated panels by a couple of weeks, primarily for our own purposes.
  - Tom Schueler (Coordinator): There is also a schedule from the WQGIT to release the panels by a certain date in order to meet Phase 6 deadlines that we have to be cognizant of.
  - Bauer: There are also concerns about not being able to thoroughly vet the reports.
    - Goulet: I understand the concerns, but there has been a great deal of pressure, up to the Management Board, to get these done. We will do our best to try to stagger them out a little to help with the review process but there isn't a ton we can do.

- Jill Whitcomb (PA DEP): The Urban Tree Canopy panel is under the Forestry Workgroup (FWG), but will we be able to see the report the same time as the FWG so we have the same amount of time to review?
  - Hanson: When we release the report, it is open to anyone for comment, and we encourage everyone to provide comments in the first 30 day period so that we can try to address as many comments as possible on the front end.

#### **CMAC Update** -- Norm Goulet, NVRC

Norm gave a brief update on where the USWG deciding members stand on the CMAC proposal which was discussed at several of the last few workgroup meetings. He also explained the next steps for feeding the proposal through the CBP channels

#### **Discussion:**

- Goulet: Back in January we had a proposal to incorporate CMAC into the BMP crediting system. There was a recommendation to poll the USWG polling members for endorsement, and they ranged from endorsement to endorsement with reservations. The most common comment was the need for any CMAC technology be in accordance with any state and local requirements. That is true of any BMPs, so it shouldn't be an issue, but we will add language to stress that. Another question was about the type of wetlands we are referring to in Table 1. This is for constructed stormwater wetlands exclusively and we will add that clarifying language. There was a comment with regards to need for rigorous verification. Verification is a state prerogative and it will be up to each state in terms of how it is handled. We will work with Watershed Technical Workgroup on how to handle reporting requirements. Another request was to emphasize that CMAC can be used in conjunction with other retrofit activities, and we will add language to that effect. There was also a four question email exchange between MDE and Opti, and we will incorporate that Q&A into the document.
- Goulet: There were several commenters who would like to see more data on the pollution reduction findings leading to the credits. Some suggested a need for a test period. While most stormwater BMPs need more monitoring or additional research, we have had one instance of a test drive period. That did lead to a lot of confusion on that BMP. At this point, I would like to see if there is a need for a test drive period, or is the iterative process of BMP review is sufficient for this?
- Bauer: We were one of the ones looking for a test period for assurance of reduction efficiencies. We were thinking this is different than standard BMPs because of the adjustability of the BMP itself, but we wanted to ensure it is getting the efficiencies the technologies expected to get.
- Goulet: Is there heartburn with having a test drive for this practice?
  - No comments were raised
- Goulet: Hearing no concerns, we will approach the WTWG to see their thoughts on this. Seeing that the WG has determined that the request is sufficiently similar to a previously approved practice, we will have to document the rationale for the recommendation and send it forward to the WTWG and WQGIT for approval.
  - Ray Bahr (MDE): We put on a stop on this report. We think it is only appropriate that because there a half dozen updates to the document, that we should have the chance to see the revised version before moving this forward.

- Goulet (Chair): Apologized for missing that part in the emails. The document will be revised and distributed.

ACTION: Revisions will be made to the CMAC crediting proposal document and it will be re-distributed to USWG polling members for their review and consideration.

**Proposed Nutrient Removal Credits for Self-Converted Dry Detention Ponds.** -- Michael Pieper & Colin Hill, KCI Technologies, Inc. Attach B-C.

Results of Baltimore County's self-converted dry detention pond study were discussed with a comparison of the pollution removal efficiencies of the self-converted ponds to the control ponds and the removal credits currently provided in the NPDES/TMDL framework.

#### **Discussion:**

- Goulet: The main criticism I predict with this proposal is that you are looking for credit for not doing maintenance. How would you recommend that be addressed?
  - Steve Stewart (Baltimore Co.): These wetlands develop over time. When first installed, they were functioning at the lower level. All ponds are over 3 years of age. I would need to look at the extent of the acreage served by these types of facilities in relation to calibration points. Even if there is no additional credit, from a management perspective, we will not convert them if they are already getting the reductions. Maybe this ends up being a margin of safety.
  - Bauer: I think a similar thought process is that if these have self-converted and are providing reductions, aren't they inherently captured in our current data? Wouldn't you be getting more reductions by just existing as they are?
- Stewart: Over time, these facilities had higher removal. In Baltimore County, we maintain the vegetation around the pond but left the bottoms naturalized, so the bottoms are functioning like an herbaceous or forested wetlands. We couldn't find a relationship between the size of the wetland and the actual removal.
- Schueler: Do you have an estimate of what fraction of the dry detention pond in the Baltimore County inventory have self-converted?
  - Stewart: I don't, and even the self -converted ponds wouldn't necessarily meet all qualifying conditions. But probably 25% or so have some amount of wetland at the bottom.
- Jennifer Orr (PA DEP): Would it be something along the lines of, since these are generally old BMPs that have self-converted, you could only take credit for ponds that were older than a certain age. I understand that concerns, but we should be able to take credit for what they are now.
  - Stewart: I agree with that. They weren't providing the benefits back then that they are now.
    - Ken Murin (PA DEP): I think that sums it up from my point of view. We are looking at much older practices when there wasn't a lot of regulatory requirements or established design criteria, so there wasn't any obligation for long term maintenance, and that has resulted in a better functioning, naturalized system. I think it is very promising.

- Goulet: Looking at this from a CBP standpoint, one hiccup I see is that in order to be able to claim this for BMP credit, the existing facility would have to have been reported through the Bay Program and been included in the historic data cleanup. Otherwise they will say it is in the calibration. If one of the older facilities is reported but is not included in the cleanup in September, it would be lost.
  - Stewart: All these facilities are in our database. Given the history of stormwater management, a lot of these detention ponds became extended detention ponds, but one thing we did in our cleanup was look at these detention ponds in the database and saw that a number were extended detention ponds. That moved a lot of those dry ponds into the extended pond category.
- Goulet: This would apply to all of the states.
- Orr: If they weren't in your database, how would you suggest we handle these BMPs if they are on the ground and we would like to credit for how they are functioning now?
  - Stewart: My recommendation is you actually have to go out and do field inspections to meet the qualifying conditions.
- Goulet: The biggest thing now is getting them in the historic data cleanup because of the Phase 6 calibration. You would need to work through your WTWG representative to make sure you know when this needs to be in there.
- Marty Hurd (DOEE): You alluded to this earlier, but looking at the memo, we are talking about dry detention ponds that are now functioning like wetlands or wet ponds. So efficiencies would greatly increase. That would fly in the face of what the WTWG was hearing about these not being maintained and no longer being efficient.
  - Stewart: It isn't necessarily that they aren't maintained, because the embankments are maintained.
- Hurd: If these structures are being inspected and considered for this conversion category, why wouldn't they just be reported under the stormwater retrofit BMP protocol? You could use that new protocol to determine the actual reduction efficiencies.
  - Stewart: The retrofit curves hasn't been designed for a water quality volume. That isn't in the design in order to determine where you are on that curve.
- Heather Gewandter (City of Rockville): If, in fact, the new science is telling us these ponds are better, it would be good to know sooner rather than later in order to stop the cost of maintenance on our facilities. Also, instead of doing the conversion from a dry pond to a wet pond, can we simply encourage natural conversion and get the same kind of credit?
  - Stewart: I can't speak for other jurisdictions, but in Baltimore County we felt that if you did the maintenance to make sure the embankment was solid and the structures were working, that was appropriate. To make a conscience decision to change your maintenance, as long as the vegetation isn't hindering the function, logically, the greater mass of vegetation will provide greater nutrient removal.
- Goulet: Did the control structure elevation or ponding depth have an effect on the removal?
  - Colin Hill (KCI): That isn't a factor we evaluated. We had 3 of each type of pond to work with. There were numerous characteristics of each but we didn't evaluate that independently.
- Stewart: We submitted the report to MDE with our annual report, but we haven't formally worked with MDE on this.

- Goulet: It sounds like folks are saying this is interesting and that there is potential. The number of ponds in the study is well below what we could use to bring it farther through the process. We would need additional data. I would like to get a few heads together and see how we can keep the ball rolling to gather some more information.

ACTION: Norm will continue discussions with Baltimore County on self-converted dry detention ponds to determine additional data needs and next steps.

- Bahr: We have always allowed jurisdictions to do monitoring to show us what a BMP is actually doing. We would need to take a look at this. If they have data where they can show efficiencies, what else can we do but give them the credit for those efficiencies. Here we are talking about extrapolating a very small sample size, so we would need to evaluate further.
- MDE: One thing that jumps out at me, is the issue of a marsh being developed and getting higher removals, and that is interesting but I think that is separate from structural integrity issues. I appreciate that the embankments are maintained, etc. What jumps out to me with old ponds is that I think of metal pipes, and whether there is a wetland or not, the structural integrity of metal pipes have a shelf life. I would be interesting in more beefed up qualifying criteria for the still way pipe inspections. Also, more criteria in terms of how we know this qualifies for this credit.

**Urban Agriculture in the Chesapeake Bay** -- Brian Hazelwood & Liz Deardorff, American Rivers. Attach D.

Liz and Brian provided an overview of American Rivers' new report "Urban Farms: A Green Infrastructure Tool for the Chesapeake Bay". As part of the discussion, they identified research gaps and examined how urban communities can increase urban agriculture activity while managing stormwater through best practices and supporting policies, and provide opportunity to meet Chesapeake Bay objectives.

#### **Discussion:**

- Goulet: This is something that has been up and coming. There have been several in Baltimore and D.C., and it runs the gamut as far as how big or small they are. I agree it is something that we are probably going to have to look at. I think we are talking about standard BMPs. The question is, are the inputs to these facilities comparable to what is going to urban stormwater, or are there higher inputs to these facilities. From the state perspective, are you getting questions from folks wanting to go down this road?
- Julianne Bautista (DOEE): People want to know if they can do a green roof with urban agriculture. Most concerns in our office are about the fertilization of urban agriculture. Whenever we see an urban agriculture project, they are usually paired with a stormwater BMP. So you are you thinking of urban agriculture as a BMP?
  - Goulet: I don't know if we are at that point yet. I think the biggest outstanding question is the inputs to the facility. Is it in the realm of urban stormwater runoff, or does fertilization increase the inflow, and does that impact the outflow? If we see similar results, I don't see why it can't go through the regular BMP efficiency process.
    - Hazelwood: We shied away from rooftop gardening for that reason. It is more difficult to say it is an agricultural use and a BMP as well. We see it at all

different scales and different locations. Sometimes it is done with a BMP in mind, other times it is in food deserts and stormwater isn't thought of.

- Bautista: In D.C. it is interesting because we have the green area ratio developed by our office of planning that is a design code for building that has a benefit for having native vegetation on rooftops.
- Felicia Dell (YCPC): Did you talk to the City of York in your study? They have been promoting CSAs on some of the vacant lots. I think your point about having planning codes and regulations address it is a good point. I think they are looking at it as an interim use on the lots they are holding.
  - Deardorff: I did talk to the City of York, and it seemed like the CSA idea was a natural direction to start the urban agriculture discussion in the city. They actually have some old planning codes in place that were put in place when farming communities were being swallowed by development in order to preserve farms within the city and some of those remnants are in there. I need to circle back with them.

#### **MS4 Needs Survey Results.** -- Cecilia Lane, Chesapeake Stormwater Network, Attach E.

Cecilia debuted select results from the Chesapeake Stormwater Network's 2016 MS4 Needs Survey.

#### **Discussion:**

- Bauer: Was there any indication of what they anticipated future budgets to be?
- Lane: We didn't ask them to project future expenditures, it was more of a current assessment.
- Dell: Are they identifying things that are readily identifiable in their budgets, or did they include hidden costs that might be embedded in other activities?
- Lane: We provided a little guidance, but we really just asked them to identify annual budget, so it sort of fell on them to define it.
- Dell: In York County, we surveyed and then we delved deeper into budgets with a key group of counties and we found that they were frequently underestimating their costs and budgets. Just keep in mind that it might be even more underestimated than what is revealed on the slides.
- Lane: Another comment from other presentations is it would be great to estimate budget per minimum control measure.
- Murin: Do you have a way to identify which jurisdictions the information came from? Could you provide a customized report for each jurisdiction?
- Lane: Would be happy to talk offline about what we information we could share with you
- Mary Gattis (LGAC): How does this get translated into recommendations from the USWG? Are there plans to do that beyond CSN's use in targeting? Is there a way for USWG to translate this into recommendations that go to the Management Board or PSC? The PSC is going to be looking at local engagement closely at the May meeting and if there could be recommendations about the needs of local governments, that would be great. I would also love to share this, or any recommendations from the USWG with LGAC.
  - Lane: I will defer to Norm in terms of whether or not this will be translated into formal recommendations. We did this for informational purposes, but also to guide CSN's annual workplan to make sure we are providing the information that they need. You are welcome to have a copy of what I presented and take it to LGAC or whomever, but beyond that I am not sure.

- Goulet: I will need to think more about it. There are probably aspects of this that LGAC may want to carry through, but I am not sure it is information that the USWG would take a formal motion on. Looking from a process standpoint, any recommendations we make would have to technically come from the WQGIT after we passed it up. We can talk more offline to see what we can do for LGAC.

ACTION: Norm, CSN and Mary Gattis to talk offline about what information from the MS4 annual survey could be useful for the Local Government Advisory Committee.

- Gattis: Great, as we continue to think about ways to accomplish what needs to be done more efficiently, I think there is potential to learn from all of this.
- Dell: It could also be helpful as states prepare for Phase III WIP development to know where to concentrate their resources.

### **Adjourned**

#### **List of Call Participants**

<b>Member</b>	<b>Affiliation</b>
Norm Goulet (Chair)	NVRC
Tom Schueler (Coordinator)	CSN
David Wood (Staff)	CRC
Cecilia Lane	CSN
Brian Hazelwood	American Rivers
Liz Deardorff	American Rivers
Nathan Forand	Baltimore Co.
Steve Stewart	Baltimore Co.
Ted Brown	Biohabitats
Bevin Buchheister	CBC
Heather Gewandter	City of Rockville
Marty Hurd	DOEE
Julienne Bautista	DOEE
Alisha Goldstein	DOEE
Jenny Tribo	HRPDC
Colin Hill	KCI
Michael Pieper	KCI
Mary Gattis	LGAC
Ginny Snead	Louis Berger
Ray Bahr	MDE
Christina Lyerly	MDE
Greg Busch	MDE
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Ken Murin	PA DEP
Jen Orr	PA DEP
Jill Whitcomb	PA DEP
Mike Hickman	PA DEP
Karen Coffman	SHA
Kelsey Brooks	VA DEQ
Jaime Bauer	VA DEQ
Chris Swanson	VDOT
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Alana Hartman	WV DEP