

Urban Stormwater Workgroup Meeting

July 26, 2016

Meeting Minutes

Summary of Action and Decision Items

DECISION: The USWG approved the June Meeting Minutes as-written.

DECISION: The USWG approved a 3 year credit duration for Floating Treatment Wetland BMPs.

DECISION: The USWG approved the addition of Pennsylvania's proposed disclaimer on the summary page of the Floating Treatment Wetland Expert Panel's report.

DECISION: The USWG approved the Floating Treatment Wetland Expert Panel's report and recommendations.

ACTION: Revisions will be made to the proposed E3 scenario and it will be recirculated in August. Approval will be sought in September.

ACTION: The Panel's response to MDE's comments will be sent to Stew Comstock. MDE will then work to develop an alternative crediting method for the Impervious Disconnection BMP for USWG consideration in September. The alternative recommendation will be submitted by September 9th.

Announcements/Updates

DECISION: The USWG approved the June Meeting Minutes as-written.

Consideration of Floating Treatment Wetland Recommendations

Tom Schueler (CSN) presented the key findings and consensus recommendations from this expert panel that defined the nutrient and sediment removal performance associated with Floating Treatment Wetland design application.

Discussion:

- Tom asked the Workgroup to weigh in on where in the report to include a proposed disclaimer, and whether the workgroup members would prefer a 5 year credit duration or a 3 year credit duration.
 - Norm Goulet (Chair, NVRC): I am a little uncomfortable with a 5 year credit duration but 1 year is a little too oppressive.
 - Schueler: The Panel recommended a 3 year duration for retrofits with an enforceable maintenance plan, and 1 year without. Pennsylvania asked for 5 years for one with a plan.
 - Bevin Buchheister (CBC): I'm comfortable with 3 years
 - Ken Murin (CBC): There is not a lot of credit with these systems, I don't know how strongly we feel. It just seems like 5 years with enforceable condition seems reasonable

and would align well with our permit cycles, but we will leave it up to the workgroup to decide.

- Stewart Comstock (MDE): 3 years coincides with our maintenance cycle in Maryland.
- Julianne Bautista (DOEE): 3 years coincides with our maintenance cycle in DC as well.
- Jaime Bauer (VA DEQ): There may be a need to align verification of this practice with the BMP verification the states are already doing. It makes sense from a consistency standpoint to align it.
- Goulet: Maybe we can tweak to make it a minimum of 3 years and max of 5. Considering the fact that some states have 3 year and some have 5 year maintenance cycles and most facilities are private, I would be happy with 3 years. I will ask Matt Johnston if we can have a variable credit duration. For states with the shorter cycle, they can have a 3 year credit duration, for longer we'll go with 5 years. If we can't have variable credit durations, my recommendation is the 3 year credit duration so it satisfies lowest common denominator. Is everyone alright with that?
 - No objections were raised with the proposed approach.
- It was determined that it was not feasible to include a variable credit duration. Therefore, the 3 year credit duration was approved.

DECISION: The USWG approved a 3 year credit duration for Floating Treatment Wetland BMPs.

- Schueler: Where should Pennsylvania's proposed disclaimer be located?
 - Murin: The summary page would be a good location.
 - All workgroup members agreed.

DECISION: The USWG approved the addition of Pennsylvania's proposed disclaimer on the summary page of the Floating Treatment Wetland Expert Panel's report.

- Goulet: Are there any objections to approving the Floating Treatment Wetland Expert Panel report?
 - No comments or concerns were raised.

DECISION: The USWG approved the Floating Treatment Wetland Expert Panel's report and recommendations.

Next steps for Impervious Cover Disconnect Recommendations

Bill Stack (CWP) and Reid Christianson (CWP) reviewed the key findings and consensus recommendations from this expert panel that defined and developed nutrient and sediment load reductions from disconnecting existing impervious areas. They provided an overview of comments received from the partnership and updated the workgroup on next steps in response to comments from MDE.

Discussion:

- Comstock: MDE is not questioning the expertise of the panel, we are concerned that this is not the best use for curve number hydrology. We ask that the panel seek experts in curve number hydrology and get their advice on this. MDE has gotten several of those experts to agree to look at it. We are not saying the panel of experts put together are not qualified to make this

recommendation, but the panel is setting a precedent for curve number hydrology to be used in an area where it is not intended to be used. This warrants some caution as we move forward, because there is an effort underway to update those numbers and the recommendations might be moot soon anyway.

- Schueler: I am concerned about convening a new expert panel to review an existing expert panel.
- Comstock: The problem is the method was not intended to be used for these purposes. The runoff prediction model was not intended to be used as a soil moisture model.
 - Goulet: I understand where you are coming from. We had a similar concern raised with the street sweeping expert panel. The Management Board decision in that case was to move forward with the panel recommendations, then have the state develop the revised methodology and bring it forward later. I would offer, as a compromise, that if you can develop an alternative recommendation for how to move forward by the September meeting, we will consider it when we ask for approval. I think that is reasonable.
 - Christianson: On the method, the panel went back and forth on this. There are really intensive methods you can use, but we settled on the curve method because this is an accounting exercise. It is the difference between runoff before and after, then you turn that into inches treated. We need rainfall information and we needed a curve number. Otherwise, we would need to know soil moisture, rainfall intensity and a number of other factors. The panel tried to keep it simple so it can be used across the bay by anyone and it is consistent with other BMPs.
 - Stack: I think the issue that you raise about the runoff curve number under-predicting runoff for low precipitation depths is something the panel took on full force from the beginning. In the assessment that Reid did, much of which was at your recommendation, I feel we addressed the issues, which are legitimate, just not applicable in this case. The method is based on how much water infiltrated through soil amendments. Please take some time to read what we put together in response and consider it when you present your alternative.
- Comstock: We will look through the response, look at what our experts have to say and come back with an alternative.
- Schueler: Just to be clear, there is often a lot of scientific disagreement. MDE has a strong opinion about what is going on, so please just be aware of that bias when interacting with these experts you are interacting with, because the CWP has been trying to simply present a different perspective.

ACTION: The Panel's response to MDE's comments will be sent to Stew Comstock. MDE will then work to develop an alternative crediting method for the Impervious Disconnection BMP for USWG consideration in September. The alternative recommendation will be submitted by September 9th.

- Schueler: When this report is ultimately approved, how widespread do you feel the BMP will be in terms of other stormwater BMPs in the watershed? Do you predict it as a moderate impact, or more of a boutique BMP?

- Christianson: I think everyone's opinion will differ. I think it is an interesting practice but don't know how much it will be adopted. I think it will boil down to the cost of implementation compared to other BMPs.

Overview of the Urban Tree Canopy Recommendations

Jeremy Hanson (VT) provided an overview of the recommendations of the Urban Tree Canopy review panel and facilitated a discussion with workgroup members to receive their input on the panel's recommendations and the proposal from the Forestry Workgroup.

Discussion:

- Buchheister: Why does the urban forest planting BMP convert to mixed open?
 - Neely Law (CWP): For newly planted trees, the credit duration is 15 years. Over the course of that time, when they are small, they more closely resemble the mixed open condition than a true forest condition.
 - Goulet: I think it comes down to how it behaves hydrologically.
 - Buchheister: That makes sense. And after 15 years it would be considered a forest land use?
 - Goulet: If it shows up in the high resolution land cover imagery, yes.
- Greg Busch (MDE): MDE feels strongly that it should be a conversion to forest, largely because that is the precedent that has been set in other BMPs, like riparian forest buffers, etc. I think scientifically this makes sense, but I think it should be a recommendation universally. Don't do it just for one BMP, maybe we can go back to the Forestry Workgroup and see if that modification can be made for all of the forestry practices.
 - Schueler: It is good to talk about cross cutting issues, but it is difficult when these expert panels are doing independent work, to have cross cutting consistency. I think the most important feedback I can give, is to have a 1-2 page fact sheet to explain the difference between the two tree planting BMPs to local governments.
- Sally Claggett (USFS): I agree with the suggestions, and the FWG can add to the fact sheets suggested by Tom, and also address other tree BMPs. Also, to address Bevin's question, we settled on mixed open in order for there to be a certain width involved instead of just a string of trees, in addition to what Neely mentioned.
- Bauer: We talked about wanting to retain a forest conversion option because of how previous BMPs have been reported. We are trying to maintain consistency.
 - Jeff Sweeney (EPA): I would argue that the purpose of the panels is not to just maintain consistency, but to provide an update with the best new information.
- Goulet: Next step is to take this report to the Watershed Technical Workgroup for approval. Please take this feedback to the WTWG.

Everyone, Everywhere, Doing Everything (E3) Scenario Discussion

The E3 Scenario is an estimate of applying management actions to the fullest possible extent. Norm facilitated a workgroup discussion on the draft E3 Scenario.

Discussion:

- Busch: Generally, the recommendation makes sense. Street sweeping as its own independent BMP apart from retrofit and stormwater development, at 100%, seems too high since it is usually confined to central business districts. My preference would be to go back to not including every BMP, but rather the most effective ones. Maybe those reductions can be wrapped into the retrofit or new development.
 - Goulet: I think it argues more for lowering the 100% implementation rate for street sweeping.
 - Busch: Lowering the percentage or moving into the more efficient practices.
- Busch: Do we know the stream corridor load yet?
 - Matt Johnston (UMD): We don't know the number, but it has been added to the model.
- Schueler: I feel strongest about are the retrofit size of 1.5in.
 - Johnston: Do you have sense of percent breakdown of retrofit versus new development?
 - Schueler: Retrofit would be everything 2016 and earlier.
- Busch: Is 100% of construction available in the model yet?
 - Schueler: It is technically allowable, but I am not sure if anyone has ever reported it. It is all part of the panel report.
- Bauer: I am still trying to wrap my head around the concept of the scenario. No recommendation on street sweeping, but I think 100% at SCP-1 is probably beyond theoretical for the same reasons Greg mentioned. For urban nutrient management plans, if we say 100% of pervious, does that mean all acres have UNM plans?
 - Schueler: 50% of pervious cover is fertilized, and of the 50% of acres, 80% were low risk. It might be more realistic to say 50% instead of 100%.
- Bauer: For stream restoration, do we have all of the stream networks mapped and known?
 - Goulet: No, only 100cfs are completely mapped.
 - Sweeney: It will be finer than that in Phase 6, but we don't know what it will be yet. It is a tough call. We will come back to you with what the domain is and what is eligible for restoration.
- Bauer: You mention that other sector workgroups were not as far as we are. Should we be moving forward on this now, or should we wait and make sure there is equity among sectors?
 - Goulet: This is due to the WQGIT for the end of October, so we would like to have something approved by our September meeting.
- Roberta Persons: 1.5 in for retrofit seems hard to reach for those in the coastal plain.
 - Goulet: Yes, in the coastal plain, that might not be theoretically possible. We can try to think about how to figure out a solution for that.
 - Schueler: The challenge is that we don't want to be completely unrealistic, but we want to do something that is more than just what we are doing now.
 - Goulet: In the past, we broke out coastal plain lowland. We can consider doing that again.

ACTION: Revisions will be made to the proposed E3 scenario and it will be recirculated in August. Approval will be sought in September.

Quantification of BMP Impacts on CBP Management Strategies and Additional Goals

Tetra Tech is working with the Chesapeake Bay Trust to quantify the effects of BMPs on the management strategies and additional goals to better enable jurisdictions, localities, and others to assess the impact (positive or negative) of their watershed implementation plans on all management strategies.

Discussion:

- Bauer: Has there been discussion of operation and maintenance? That will have an impact on how effective these practices are. Is ease of operation and maintenance or compliance factored in?
 - Mark Sievers (Tetra Tech): It assumes everything is operating like it should be, but we can add that explicitly to our scoring definitions.
- Schueler: Will you factor in cost?
 - Sievers: No, that is addressed elsewhere.
- Buchheister: How does this interact with CAST?
 - Sievers: That shows how well scenarios meet Bay TMDL goals. This helps show what other management strategy goals and ancillary benefits they can get from these practices.
- Goulet: I think it would be a mistake not to include cost. It is a major factor for localities, more so than what the co-benefits are.
 - Schueler: You can maybe use the 5 point scale and rate cost for each of the BMPs. That might be able to pick up the maintenance burden question as well.

Construction Reporting for Phase 6

Matt Johnston briefed the workgroup on new reporting requirements of construction acreage for Phase 6 of the model.

Discussion:

- Schueler: States would have to indicate what year, after 2000, they shifted to level 2 ESC.
- Goulet: I think a lot of this needs to be taken to the WTWG because they are the ones who tell the implementers what to do.
- Schueler: The 3rd bullet should be the largest focus. First bullet is second priority, but will be difficult to collect.
- Murin: We have been reporting historic acres of disturbed areas for ESC for as long as I can remember. To say we haven't reported or documented it is a shock. Does this also include extractive lands?
 - Johnston: No, this is not extractive.
 - Murin: Could there be any error in the way it has been reported?
 - Johnston: There are omissions in the reporting. States were asked to report the acres of historic construction, and we only received two years from Pennsylvania. You might want to work with Ted Tesler to make sure you have a complete history to hand over.
- Bauer: To what level has this information been shared?
 - Johnston: Bill Keeling has a good handle on it, it is just a matter of going back to 1985. You don't have to, some states choose to take the default ratio.

- Sweeney: To be clear, this is all Phase 6 data. We are not taking any of the data from Phase 5.3.2 and putting it in Phase 6. The jurisdictions are responsible for taking their entire history and submitting it for Phase 6.
- Schueler: The ESC panel included failure rate when developing the BMP efficiency, so we don't need to add in an additional compliance rate. We can assume 100% coverage. I don't think you're going to get the acres not under permit.

Wrap up

- The August meeting is cancelled
- In October, states will be asked to give a presentation on the tracking and reporting systems they have in place for BMPs.

Adjourned