Urban Stormwater Workgroup Conference Call June 21, 2016 Meeting Minutes

Summary of Action and Decision Items

DECISION: The USWG approved the May meeting minutes as-written.

ACTION: USWG members should submit any major comments on the FWG proposal to include an Urban Forest Planting BMP in the Urban Tree Canopy expert panel report to Jeremy Hanson (jchanson@vt.edu) by Thursday, June 23rd.

ACTION: USWG members should send any comments or questions on the proposed E3 scenario to Norm (ngoulet@novaregion.org).

DECISION: The USWG approved the proposed method to vary nutrient application on urban lands in the Chesapeake Bay Watershed Model by jurisdiction.

DECISION: The USWG approved the proposed method to vary nutrient application on urban lands in the Chesapeake Bay Watershed Model through time.

Introductions and Announcements

DECISION: The USWG approved the May meeting minutes as-written.

Announcements:

- Street Sweeping and Storm Drain Cleaning: The expert panel report was officially approved by
 the CBP Partnership. Virginia has the ability to pursue their proposed addition to the report if
 they resolve the issues raised by the Partnership, and the amended proposal is approved by the
 Urban Stormwater Workgroup (USWG), Watershed Technical Workgroup (WTWG) and Water
 Quality Goal Implementation Team (WQGIT).
- Impervious Cover Disconnections: The 30 day comment period for the panel report closes today, June 21. The debut webinar was held on June 3rd and a recording is available online. The plan is to request USWG approval of the report in July, but if more time is needed to respond to comments, we would have to delay approval until August.
- Manufactured Treatment Devices: Norm has begun to establish an advisory panel to write the
 protocols for crediting MTDs. The process will likely be similar to that of an expert panel. Norm
 has secured services of a professor from the University of Delaware to help with this effort and
 will be submitting a GIT funding request.
- Floating Treatment Wetlands: Expert panel report is currently out for review and comments are due by July 8th. The debut webinar was held last week and a recording is available on the CSN website. The plan is to provide responses to comments in July and request USWG approval on July 26th.
- BMP Panel Process Challenges: Nick DiPasquale distributed a memo to remind everyone of the BMP Panel approval process and to emphasize the importance of submitting questions and comments within the 30 day comment window.

<u>Improving Roadside Ditch Management to Meet TMDL Water Quality Goals</u> -- Kathleen Boomer, The Nature Conservancy (Attach C)

Kathleen presented the findings from a recent STAC research workshop on the impacts from roadside ditches and associated opportunities to meet Chesapeake Bay Program goals.

Discussion:

- Norm Goulet (Chair, NVRC): Differentiating the form and function of ditches across the watershed will be a major challenge. The other challenge will be how to map roadside ditches.
 - O Boomer: I agree. There is a need to pay attention to the role of the ditches, which will have implications on which BMPs are most effective. From the work we looked at, you can see a transition from upland ditches with steeper relief where ditches are functioning to remove stormwater from roadways, to ditches on the eastern shore where the function is more to lower the regional water table. Regarding mapping, I agree that is a challenge, but one that we need to keep trying to address. It is the local data that the county and highway managers really need.
- Randy Greer (DE DNREC): There seems to be some connection between this effort and the Impervious Cover Disconnection BMP. There are a lot of open channel roads we may look at for credit under that protocol.
- Ginny Snead (Louis Berger): When it comes to implementation, a consideration is who owns and operates the ditches. Are there easements? There is not a well maintained record with that kind of information.
- Bill Keeling (VA DEQ): We can't represent real stream networks in the model, let alone the ditches. Hydrologic flow is only really differentiated where you have gauge stations.
- Goulet: We might be well served by developing a best practices manual on ditch management. I'm sure there are dozens of recommendations out there that could probably be pulled together. Maybe we can add a product like that to next year's work plan to break this effort into manageable pieces.
- Keeling: These ditches would likely be impacting the perceived benefits of tree canopy over impervious cover.

<u>BMP Panel update: Urban Tree Planting and Urban Forest Planting for Phase 6</u> -- Jeremy Hanson, VTech (Attach D)

The Expert Panel for Urban Tree Canopy released its report for partnership review and comment on May 4th. Following some questions that were raised during the panel's May 20th webinar, the Forestry Workgroup is asking the panel to consider adding an "urban forest planting" BMP to credit larger scale planting projects that meet certain qualifying conditions with the intent of creating forest-like conditions. Jeremy updated the USWG on the FWG's proposal and next steps for the panel's recommendations.

Discussion:

 Hanson: The panel has not reached consensus either in favor of, or opposed to the FWG proposal.

- Jaime Bauer (VA DEQ): If we have concerns with the proposal, should we be submitting comments, or waiting until the panel has made a decision?
 - Hanson: This was developed through the FWG. If you have comments on the version currently posted, feel free to email me and I will get those comments to the FWG.
- Bauer: Our main concern is that there appears to be lines blurred between the definitions of forestry conditions and tree canopy. I don't think this proposal clarifies those differences.
- Keeling: When we start to talk about reporting a quarter acre of tree planting compared to one acre, and getting different land use conversions, then remote sensing it later, we are setting up an accounting nightmare between what we report and what we remote sense.
- Karl Berger (LUWG Chair, MWCOG): The definition for forest extent at this point is an acre in some geographic shape that isn't linear. Decisions that impact these land use definitions would need to be coordinated with LUWG in some degree.
- Hanson: The FWG meets on Thursday, so please try to get at least the highlights of your comments to me by Thursday.

ACTION: USWG members should submit any major comments on the FWG proposal to include an Urban Forest Planting BMP in the Urban Tree Canopy expert panel report to Jeremy Hanson (<u>jchanson@vt.edu</u>) by Thursday, June 23rd.

Everyone, Everywhere, Doing Everything (E3) Scenario Discussion -- Norm Goulet, NVRC Attach E

The E3 Scenario is an estimate of applying management actions to the fullest possible extent. Norm presented the workgroup with the draft E3 scenario for urban stormwater for their consideration.

Discussion:

- Goulet: All Phase 6 Model inputs are due in September, so we would be able to talk about this one more time before requesting approval.
- Bevin Buchheister (CBC): How has under stream restoration, changed from the old E3 scenario to this proposal?
 - Goulet: Urban stream restoration wasn't in the last E3 scenario before because we didn't have an approved stream restoration BMP at that time. This scenario includes the more elaborate restoration efforts for credit rather than just the default credit.
- Berger: Everyone would get the Urban Nutrient Management panel recommended 70% credits for N and P fertilizer laws?
 - o Goulet: This scenario says that all states would have to pass that law.
- Keeling: Is gray infrastructure credit on all urban lands or just regulated?
 - Jeff Sweeney (EPA): E3 doesn't recognize regulated or unregulated. It is entirely theoretical, based on the maximum implementation you could achieve theoretically.
 The 1.5 and 2 in. treatment standards, how did you get at that?
 - Goulet: They are in the panel reports and are on the curves. We are saying we increase the level of effort to account for pushing the boundaries of what is physically possible. It is the uppermost treatment where we have some information. If we pushed it higher we wouldn't have any information to get a curve.
- Greg Busch (MDE): What is the process for providing comments?

- Goulet: Given the timetable, I'd suggest you email me any comments or questions you
 have. I'd like to try to finalize the E3 scenario in July if possible, so please try to send
 them to me in the next few weeks and we will bring it up again in July for approval.
- Keeling: This looks like a WQGIT decision, and one that would be run once the model is finalized.
 - Sweeney: The E3 scenario is supposed to be presented at the September modeling quarterly meeting. It doesn't have to be finalized by then, but it should be at least reasonably close to what you end up with. Please copy me on these emails, I want to make sure there is equity across sectors.
- Ken Murin (PA DEP): What is the goal of E3?
 - Sweeney: You take the difference between the E3 scenario, which represent the
 theoretical maximum implementation, and the No Action scenario in order to determine
 the theoretically controllable load. Identifying this theoretically controllable load helps
 put everyone on more even footing. There are other elements of equity built into
 designing the allocations, but this is one of them.

ACTION: USWG members should send any comments or questions on the proposed E3 scenario to Norm (ngoulet@novaregion.org).

Fertilizer Update -- Jeff Sweeney, U.S. EPA, CBPO Attach F

Jeff presented the status of efforts to obtain additional fertilizer sales data and reviewed methods for determining turf grass nutrient application rates for the Phase 6 models.

Discussion:

- Keeling: If we apply urban nutrients based on fertilizer sales data, I am concerned that we would lose our urban nutrient management BMP credit because application rate would be tied up in the sales data.
- Goulet: How does the AGWG method differ from the USGS method?
 - Sweeney: USGS comes up with methods to fill in holes in the data, such as when a county didn't report, or the sales data wasn't split between farm and non-farm. The AGWG is using the same data just without the gap-filling methods.
- Berger: Are the graphs based on the USGS method or the AGWG method?
 - Sweeney: Most are using sales data from the AGWG method. USGS was not ready to give use data anytime soon, but their method is really just filling in the gaps from the dataset I am showing here.
- Berger: I think there is a lot of unexplained variation in these data and the regression lines are an oversimplification of what is occurring. I recommend taking this data and putting it in front of extension specialists to get their opinion of whether this approach makes sense.
 - Keeling: Is this method more accurate than the current method of assuming a single application rate everywhere, through time?
 - Berger: Yes, this is probably an improvement.
 - Sweeney: I have seen some of the state data that has been compiled and it is even more variable than what is presented here. I know states are digging into why these wild swings are occurring, and I will tap into their thoughts. That is a good recommendation, Karl, but the extension specialists would need to be able to propose a better method.

- Berger: I will send a list of contacts. I do think it is an improvement.
- Keeling: If the modeling team isn't applying the agriculture nutrient management BMP credit because it is tied to sales data, it seems we likewise wouldn't be able to apply urban nutrient management credit to this dataset.
 - Sweeney: The AGWG has not decided how they will approach nutrient spread or nutrient management BMP credit. Both approaches they are looking at, would allow for additional benefit for acres under nutrient management plans. In the urban sector, there would also be ways to get at those additional reductions.
 - Berger: The urban nutrient management panel report recommended something like a 10% reduction that wasn't really based on the application rate. The reductions were tied to other best practices.
 - Goulet: If this method impinges upon any BMP, I will commit Jeff to fully vetting this
 issue before any decision is made that would impact jurisdictions' ability to claim urban
 nutrient management credit.
 - Sweeney: You may be meeting two more times before the Beta 4 Model calibration, so I
 can come back and show you this analysis by state and also touch on any urban nutrient
 management concerns.
- Busch: I think the approach makes sense, but when I see linear regression, it seems you don't
 capture the short term variations. Instead of doing linear regression, can we use a moving
 average or weighted moving average to capture short term fluctuations?
 - Sweeney: We have done that before, but it is easy to get burned by that method. In this
 case, I wouldn't recommend that approach because the data are so erratic in the recent
 history. There are other ways to do forecasts besides linear regression, I would just
 worry about the strength of that trend signal. I will look into it.
- Goulet: Does anyone object to varying urban nutrient application rates used in the Chesapeake Bay Watershed Model by jurisdiction?
 - No objections were raised.

DECISION: The USWG approved the proposed method to vary nutrient application on urban lands in the Chesapeake Bay Watershed Model by jurisdiction.

- Goulet: Does anyone object to varying urban nutrient application rates used in the Chesapeake Bay Watershed Model through time?
 - No objections were raised.

DECISION: The USWG approved the proposed method to vary nutrient application on urban lands in the Chesapeake Bay Watershed Model through time.

EPA Milestone Evaluations -- Lucinda Power, U.S. EPA, CBPO Attach G

Lucinda presented an overview of the findings from the 2016 two-year milestone review, whether the jurisdictions achieved their 2015 milestones and are making sufficient progress actions to build capacity to achieve necessary implementation levels achieve 60% of their planned urban nutrient reductions by 2017.

Discussion:

No questions or comments were raised.

Wrap-up and Next Steps

• The next USWG will be July 26th. The August meeting will be canceled.

Adjourned

List of Call Participants

Member Affiliation
Norm Goulet (Chair) NVRC
David Wood (Staff) CRC
Cecilia Lane CSN

Nathan Forand Baltimore Co. Ted Brown Biohabitats

Bevin Buchheister CBC
Ann Jennings CBC

Heather Gewandter City of Rockville

Randy Greer DE DNREC
Elaine Webb DE DNREC
Marty Hurd DOEE
Alisha Goldstein DOEE
Lucinda Power EPA, CBPO
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Christina Lyerly MDE Greg Busch MDE

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PA DEP Ken Murin Ryan Doran SHA Gary Shenk USGS Jaime Bauer VA DEQ Bill Keeling VA DEQ **Kelsey Brooks** VA DEQ **VDOT** Chris Swanson Jeremy Hanson VT, CBPO Alana Hartman **WV DEP WV DEP** Sebastian Donner Kate Bennett Fairfax Co. TNC Kathleen Boomer **Neely Law CWP** Karl Berger **MWCOG**