Urban Stormwater Workgroup Meeting
<mark>Meeting Minutes</mark>
Tuesday, March 16, 2021
10:00 AM to 11:00 AM
Meeting Materials: Link

Summary of Actions and Decisions

Decision: USWG approved the January meeting minutes.

Action: USWG should review the climate change and stormwater management memo and provide final comments to David Wood (wood.csn@outlook.com) by Tuesday, March 23, 2021.

Meeting Minutes

10:00 Welcome and Review of January Meeting Minutes.
   Norm Goulet, Chair. Attach A

- **Decision:** USWG approved the January meeting minutes.

10:05   Announcements and Updates
- BUBBAs Finalists and Grand Prize Voting
    - Finalists have been announced. BUBBAs *Voting Link*: https://chesapeakestormwater.net/2021-bubbas-cast-your-vote/ (includes descriptions of each project etc.)
- Runoff Rendezvous
    - *Runoff Rendezvous Registration:* https://chesapeakestormwater.net/bay-stormwater/stormwater-retreat/2021-runoff-rendezvous/ (if registering, check spam folder for link!).
- Others?

10:15   Land Use Data Update. Peter Claggett, USGS Bay Program

Peter will review the land use rules and data for the 2017 high-resolution land use update, focusing on the more urban uses: impervious surfaces, turf grass, trees over turf grass, bare construction, and solar fields.

Summary and Discussion:

Peter reviewed the Land Use rules and data for 2017 high- res land use update. There will be a roll up of the 54 classes to the 13 classes from Phase 6 but there are many more classifications for 2017 to help with accuracy. The 2013/14 high-res land use forms the baseline for forecasting the past and future of land use. Some important considerations related to the Phase 6 land use "roll up" includes: 1. 2013 Phase 6 land use acres are fixed and will not be updated; 2. For CAST 21, post 2013 land uses will be updated to 2017 by adding only the changes from 2013-2017. 14 counties were selected to prototype development of the 2017 high- res land use data. For the first time we are enabling the workgroups to weigh in for what this product will look like. Once the counties are done, you will be able to see these counties in a viewer hosted by the Chesapeake Conservancy. The goal is to assess whether 2017 is doing a better job mapping than 2013.

Olivia Devereux: Can you explain what the difference is between the viewer and CAST?

Peter Claggett: We are applying the changes in acres etc. to 2013 and applying it to CAST in 2013. This is a little different because it includes 2013 land use but also Ag Census and different acres, which are used to mass balance the acres in the county (true- up). In addition, federal facilities can't have ag land, so if there is some, then that gets shifted out of the federal and those acres get put into non-federal land. Now when people report timber harvest, they will report it in mix open and not in forest. We map feeding space as impervious/ impervious structure, and they get lumped into the urban realm because we don't have a class for these yet.

Norm Goulet: what's your deadline for getting MS4 boundaries etc. from the states?

Peter Claggett: from what I understand the official deadline is April 30th, 2021. The deadline for NGO's and federal is June 30th, 2021. We are directly mapping cropland, pasture and orchards across the whole watershed. We are also using image segmentation to look at irregularities which is super useful because when a farmer has cleared part of a forest next to a pasture it just looks like pasture. Now we can figure out this difference and mark it as timber harvest. In dense urban areas, a forest has to be at least an acre in size and the internal radius also needs to make up an acre. We are now able to distinguish that large, forested sections may just be treetops over turf grass.

Norm Goulet: one of the new classes you talked about is solar. This is a point of interest in VA because of the consumption of land and the loads. Can you comment on that?

Peter Claggett: The CC are using the data bases available through DEQ, they also have developed an AI model to distinguish solar fields. For MD, there were over 100 solar fields in their data base, the AI modeled 200, 50 were incorrect. Mark Dubin for MD is field checking a subsample of these areas to get an idea of how the pervious land around the panels is managed. I do not believe for CAST 2021 we are going to be able to come up with different classes for the solar panels. Right now, the default is the panels themselves go into impervious, and the land around the panels goes into mixed open.

Norm Goulet: I think we will need to have discussion on how this will be classified because mix open doesn't seem to fit what I know so far.

Peter Claggett: That's a great idea, Norm. If you or others in the WG could provide evidence to support a point, that's what I am looking for. We are open to anything, but we just need evidence.

Norm Goulet: In VA it's treated from turf grass to impervious. I am more worried about the loading rates associated with this class. What is the plan if the deadline slips some more? Will the groups still have time to review?

Peter Claggett: There are two options: I think it's feasible to push this forward one month where the final decision to the WQGIT is June 30th. I would only advocate that if all counties could be mapped and incorporated and QA/QC'd. Option 1: WQGIT approves it in June, and we are provided enough information that CC can complete 206 counties. Option 2: we do not use 2017 data in CAST 2021 and wait till CAST 2023.

Olivia Devereux: The CAST 2021 release is not just based on land use there are other items that we are including.

Peter Claggett: Some may find reason to postpone the release of CAST 2021 and I think that is a huge mistake, aside from LU missing the deadline. I would never advocate for postponing CAST 2021.

Norm Goulet: I think this brings up a separate discussion of whether it's better to meet deadlines or have accurate information.

10:45   Climate Change and Stormwater Management Memo. David Wood, CSN. Attach B.

David will review the feedback received on the climate resilience memo and present the final changes to the workgroup. This will then kick off the first technical panel of the Runoff Rendezvous on climate change and extreme rainfall.

Summary:
Most comments were points of clarification and emphasis and those are the main changes. There were no changes to the recommendations. Things that were cleaned up:

- Emphasizing that resilient design should be considered for new BMPs and for existing and retrofitting old BMPs
- Adding more information on how the recommendations came about
- More context for the rates that reflect the range of BMP failures to capture the correct context.

Action: USWG should review the climate change and stormwater management memo and provide final comments to David Wood (email) by Tuesday, March 23, 2021.

11:00   (Optional) Climate Change and Extreme Rainfall: Translating Future Projections into More Resilient Urban Communities.

USWG will be invited to switch platforms to join the first panel in the Runoff Rendezvous. The agenda description is included here for reference:

The panel will present the latest work on future climate projections and their implications for Bay stormwater managers. Experts will also review the potential vulnerabilities of stormwater BMPs and restoration practices to future extreme precipitation conditions and discuss how community engagement and environmental equity play a role in future climate resilience. The resulting conversation with panelists and audience members will inform what we need in a Bay-focused "response plan" to increase climate resiliency in our urban communities.

Speakers: Dr. Franco Montalto (Drexel University); Dr. Fushcia Hoover (SESYNC); Michelle Miro (RAND); Kimberly Grove (City of Baltimore); David Wood (CSN)

12:30 Adjourn

 Call Participants
Randy Greer, DNREC
Elaine Webb, DNREC
Cecilia Lane, DOEE
Christina Lyerly, MDE
Jeff White, MDE
Mark Symborski, MDE
Jamie Eberl, PA DEP
Scott Crafton, VDOT
Alana Hartman, WVDEP
Adrienne Kotula, CBC
Peter Claggett, USGS
Olivia Devereux, Devereux Consulting
Jeff Sweeney, EPA
KC Filippino, HRPDC
Heather Ambrose, Fairfax County
Kate Bennett, Montgomery County DEP
Ginny Snead, AMT
Robert Goo, EPA
Dave Montali, Tetra Tech (WV)
Karl Berger, MWCOG
Allie Wagner, NRVA

David Wood, CSN
Norm Goulet, NRVA
Thomas Butler, CRC
Lew Linker, EPA
Sadie Drescher, CBT
Brenda Morgan, Ann Arundel County
Fernando Pasquel, Arcadis
Jamie Alberti, Alliance for the Chesapeake
Chris Swanson, VD
Deb Cappuccitti, MDE
Ginger Ellis, MDNR
James Dunbar, EIT
Janis Markusic, Ann Arundel County