Chesapeake Bay Program
Watershed Technical Workgroup (WTWG)
Meeting Minutes
Thursday, October 1, 2020
10:00 AM to 12:00 PM
Calendar Page: Link

Summary of Actions and Decisions

Decision: WTWG approved the September meeting minutes

Action: WTWG members should send any information regarding N, P, SS default load reduction and/or rates associated with permitting for stream restoration projects to AgWG Coordinator, Loretta Collins (lcollins@chesapeakebay.net) before the November 5th WTWG meeting.

Action: Jeff Sweeney will meet with jurisdictions to discuss back-out procedures and cutoff.

Action: Hilary Swartwood will post Cassandra Davis's PowerPoint from today's meeting to the WTWG calendar page.

Agenda

10:00 AM – **Introductions and Announcements** – Cassandra Davis, NYSDEC (15 min.)

- Approval of the September Minutes
  - **Decision:** WTWG approved the September meeting minutes
- CAST 2021 Workplan – Jeff Sweeney, EPA
  - *Everything going into Cast 2021 needs to be finalized and submitted by September 1, 2021*
- BMP Verification Ad- Hoc Action Team Update – Vanessa Van Note, EPA
- The AgWG Non-Urban Stream Restoration EPEG requests any information from WTWG members regarding N, P, SS default load reduction and/or rates associated with permitting for stream restoration projects. Please reach out to AgWG Coordinator, Loretta Collins (lcollins@chesapeakebay.net) with any information
  - *EPEG is special group for AgWG to discuss non-urban stream restoration. Established in response to USWG updating their stream restoration protocols. Get information to Loretta Collins before next WTWG meeting (November 5th).*
  - **Action:** WTWG members should send any information regarding N, P, SS default load reduction and/or rates associated with permitting for stream restoration projects to AgWG Coordinator, Loretta Collins (lcollins@chesapeakebay.net) before the November 5th WTWG meeting.
- Member and participant announcements
  - *None at this time*

10:20 AM – **Tracking and Reporting of Stream Restoration Protocols** – David Wood, CSN

David reviewed the tracking and reporting needs of the USWG's recently approved changes to stream restoration protocols. See his presentation at https://www.chesapeakebay.net/channel_files/40359/group_4_stream_memo_slides_wtwg.pdf

Discussion:

Ted Tesler: This doesn't change the data reporting?
David Wood: For tracking and reporting to CBP, it doesn't change. In section 8 of the report, it includes a few other recommended sets of data for future verification efforts, and some of that might be where the different reduction factors are with protocol 2. You might want to have information on soil conditions and ground water to ensure that you have that connection to promote denitrification but it doesn't change what you are reporting to CBP. All of that information is in here with completed examples as well.
Bill Keeling: Are these stackable BMPs?
David Wood: Yes, these are stackable ("multiplicative") with other BMPs. The only one you can't stack is the prevented sediment protocol. They can be reported as separate BMPs as well.
Dave Montali: Did you say anything about changing watershed loads at a point in time. Was there any consideration for how the credit to the floodplain changes with changes upstream?
David Wood: The idea is that those changes would be relatively minor. The changes would have to affect the stream bed and bank load since that's what these protocols are dealing with. Our thinking is that it would be pretty minimal.
Dave Montali: Currently these are just for urban areas?
David Wood: Until we are told otherwise, we are following the decisions from the WQGIT. We put this in as a component of urban stream restoration because that was the decision of the GIT.
Loretta Collins: That's one of the conversations we plan on having in the EPEG. The main driver for this group was the prevented sediment memo and the default rates. From the mechanics of this BMP, if it follows the protocols as defined in the memo agreed to by the USWG, then it should be fine for agriculture. However, the default rate for non-urban stream restoration and how NRCS defines that was the drive of the EPEG, not this protocol.
James Martin: Question regarding stream miles – We know CBP will be getting high resolution stream data in the coming years, as we get that it will be a significant improvement from what we have now. I would expect that the number of stream miles upstream would increase significantly. Does this memo account for that?
David Wood: I would need to defer to modeling folks who are more familiar with what the changes are. My hope is that once we have a tool integrated to do these calculations and then any changes can be incorporated into that tool to make it a seamless transition for folks. I don't know what it would look like in terms of impact on loads for stream miles. Presumably if the loads are somewhat known, the actual loading weight would decline and be distributed through those additional miles.
Olivia Devereux: There is no limit of stream miles in CAST. This was a decision of the WQGIT.
James Martin: Which makes it more incumbent on the user to make sure they've calculated that.
Olivia Devereux: Which is why we plan on getting a calculator on the CAST website (it's not integrated into the 2021 Workplan, just a tool that can be accessed from CAST). No due date on that yet.
Bill Keeling: Which source is this load reduction occurring on?

Olivia Devereux: Stream bed and bank and it can go negative.

10:45 AM – **Continued Discussion of Back-Out Procedures** – Alana Hartman, WV DEP, Cassandra Davis, NY DEC, Jeff Sweeney, EPA

The WTWG continued the discussion of back-out and cut-off procedures from the September meeting including examples from WV and NY. See Cassie's presentation at https://www.chesapeakebay.net/channel_files/40359/backoutcutoffwtwg_davis_10.20.pdf

Cut- off and Back-out Discussions:

Dave Montali: A big issue in WV is related to not enough turkey's in certain counties.

Jeff Sweeney: Did you dig into it like Cassie did? Possibly, there are outlier counties that straddle the border of the CB watershed.

Dave Montali: I didn't do this recently, but I think it was just not enough turkeys in counties that drained entirely in the Bay.

Jeff Sweeney: There are two reasons for cut-off, one could be overreporting and the other is the number of animals that are reported by the 5-year Ag Census; distribution of animals from the 1-year Ag Census; or state/local animal data that identifies what portion of county animals are in each land-river segment.

James Martin: Question for Ted or Lisa: For the E&S cut-off for PA where the construction acres can be reported annually as part of progress in addition to the BMP – Is that cut-off that's seen where there's more reporting of E&S than construction acres to report the BMP to?

Ted Tesler: I think there is some old reporting/ the domain hasn't been updated and that may be why we are seeing that. Ideally it should be 1:1 which is why it looks like old data.

James Martin: Cassie, would you be willing to share your CAST scenarios?

Cassie Davis: Yes, I can share them and this presentation with the group.

Kevin Du Bois: For street sweeping, if a data reporter makes an error in the reporting area vs. street miles, could that have an effect on how many miles get backed out? How do you incentivize the correct reporting of data to make sure eligible, valid units don't get backed out?

Jess Rigelman: Street sweeping does not have back- out.

Jason Keppler: Some of the data you showed in MD, specifically some of the poultry numbers, we historically have reported our practices at the county level. Can you explain how that data could be distributed to counties that are only partially in the watershed?

Jess Rigelman: We have the data for the entire county even for ones that straddle the watershed, so it will be proportioned to all segments in an entire county unless you specify that it's watershed only.

Jeff Sweeney: If there are changes (losing operations etc.), it should be reported because it's changes in the data. This would be reported annually or during the milestones period.

Jeff Sweeney: I am fascinated by this exercise. Did you take the excess and put it into a no-action scenario?

Cassie Davis: I put it as a BMP scenario and then used 2019 as a baseline and ran it like the 2025 scenario.

Action: Hilary Swartwood will post Cassandra Davis's PowerPoint from today's meeting to the WTWG calendar page.

Bill Keeling: The recommendation is that first bullet (date of imagery – 5 or 10 years). That's the recommended change that would be put forward.
Jeff Sweeney: I am perplexed by this. So are you trying to adjust for the growth period of trees?
Bill Keeling: We are not going to get into lag-time of the model predicting what's going on. There's lag for when the trees actually start doing things. There's ground water lag. We have discussed at the Modeling WG the various things that cause lag. That is a separate discussion than the acreage being credited for a reporting year.
Jeff Sweeney: We give immediate credit in the model to saplings like they're acting like 20 year-old trees. So, it seems like you want to put some realism into this, and I am confused as to why. The purpose of back-out is to avoid double accounting.
James Martin: The imagery can't differentiate anything other than herbaceous. So, the idea of a grass buffer being identified and credited is incorrect. At least with trees, the imagery and model can differentiate those so allowing for what the imagery can detect is appropriate.
Jeremy Hanson: The Urban Tree Canopy expert panel considered tree growth and imagery, here's a quote from the report: "analysis of the i-Tree Forecast results found that, on average, it would take approximately 10 years of growth after planting for the canopy areas to be captured by high resolution imagery (i.e. 97ft^2 minimum area for higher resolution imagery used by the Partnership to map urban tree canopy land uses)."
Jeff Sweeney: I think a call with Bill Keeling and James Martin about this would be really helpful.
Ted Tesler: I think all states would like to be included in the discussion James is suggesting.
James Martin: Thanks Alana, I think that helped. Describing it as back-out causes you to lose the land use change of the credit. The land use was detected in the imagery or in other data. If, in fact, the imagery cannot detect that land use change, then a time offset can't be done. We should make the change allowing for the detection of forest in the imagery.
Bill Keeling: The bigger part of the credit is the land use change, not the efficiency reduction.
Alana Hartman: I haven't analyzed that, but I think that's debatable.
Bill Keeling: The way I understand it, if you're going from cropland to forest, the upland benefit is diluted because it applies to ag overall.
Dave Montali: I would think you are right on cropland but it's maybe not as stark as pasture. Anything to ag is substantive, I would think.
James Martin: If the back-out is held static, then we start reducing the submitted amounts because of verification and we could end up with a double discount.

Action: Jeff Sweeney will meet with jurisdictions to discuss back-out procedures and cutoff.

General Discussion:
Jeff Sweeney: I did a similar analysis, looking at both annual and cumulative BMPs. There is more cut-off in the annual BMPs than in the cumulative ones.

Dave Montali: Septic systems are not BMPs, so this is a little divergent from our needs. If septic systems are declining, that's not the same issue as cutting off the BMP.
Jeff Sweeney: What I am saying is the BMP is the conversion of septic's going to sewer.
James Martin: I think there are likely other possibilities that are leading to cut-off other than the acres are wrong or bad reporting.

Dave Montali: if a jurisdiction took a hit in 2018 but didn't lose much between 2018 and 2019, I think you need to capture the whole thing to get the big picture.
Jeff Sweeney: Yes, you are correct. I ran an analysis for more years (2017 through 2019) but made the decision to show only the period from 2018 to 2019 for this meeting, to keep it simple. Next time we discuss this issue, I will bullet out my methods and calculations so that everyone can see it.
Loretta Collins: Where does new BMP implementation figure into this?
Jeff Sweeney: The beauty of the model is that you can isolate the change you want to see.

11:40 AM – **Schedule for TMDL-Related Scenarios** – Jeff Sweeney, EPA

Jeff provided an update on the 2020 Progress scenario schedule and other model-related tasks. See the presentation at https://www.chesapeakebay.net/channel_files/40359/sweeney_wtwg_cutoff-backout-schedule_100120.pdf

12:00 PM – ***Meeting Adjourn***

Next Meeting: November 5, 2020 from 10:00- 12:00 PM

Call Participants
Hilary Swartwood, CRC
Jeff Sweeney, EPA
Cassie Davis, NYSDEC
Alana Hartman, WV DEP
David Wood, CSN
Vanessa Van Note, EPA
Loretta Collins, UMD
Elizabeth Hoffman, MDA
Ted Tesler, PA DEP
Emily Dekar, USC
Matt English, DOEE
Jason Keppler, MDA
Lisa Beatty, PA DEP
Dave Montali, Tetra Tech (WV)
Norm Goulet, NOVA
Arianna John VA DEQ
Bill Keeling, VA DEQ

Clare Sevcik, DNREC
Jeremy Hanson, VT
Jessica Rodriguez, DoD
Kevin DuBois, DoD
Olivia Devereux, Devereux Consulting
Ruth Cassilly, UMD
Whitney Ashead, CRC
James Martin, VA DEQ
Jessica Rigelman, J7 LLC.
Sucharith Ravi, UMCES
Lee McDonnell, EPA
Mark Dubin, UMD
Rebecca Hanmer, FWG