



Chesapeake Bay Program
Watershed Technical Workgroup (WTWG)
Meeting Minutes
Thursday, January 6, 2022
10:00 AM to 12:00 PM
Calendar Page: [Link](#)

Summary of Actions and Decisions

Decision: WTWG approved the December meeting minutes.

Action: WTWG will receive an updated Progress Schedule.

Action: WTWG members should reach out to Cassandra Davis with information on how jurisdictions share CAST data with local governments and planners.

Action: Septic connections will be brought back as an agenda item at a future WTWG meeting.

Action: Low vegetation will be discussed further at a future WTWG meeting.

Action: More follow up on water filtration treatment plants will need to be done before determining if this is something that the WTWG would need to address in a smaller group.

Agenda

10:00 AM – **Introductions and Announcements** – Vanessa Van Note, EPA

- Approval of December Meeting Minutes – Cassandra Davis, NYSDEC
 - **Decision:** WTWG approved the December meeting minutes.
- CAST 2021 Update – Cassandra Davis, NYSDEC
 - *No update currently. Larger partnership discussion will occur in February after individual meetings with jurisdictions.*
 - *Olivia Devereux clarified that all meetings with states were pushed to February to provide time for the Bay Program to brief the managers and administration internally.*
 - *Major release of CAST (rewrote the entire backend making it much faster) happened earlier this week. You won't see any difference in loads or functionality.*
- 2021 Progress Schedule Reminders – Vanessa Van Note, EPA
 - *Jordan Baker:* how are you ensuring that this stay's on track?
 - *Vanessa Van Note:* this schedule is one way we've been trying to keep things moving.
- Update on Appendix V Revisions – Vanessa Van Note, EPA
 - *We will continue to revise the document as needed prior to 2022. There is a lot going on right now with Progress and Evaluation and Milestones. We would like to wait until the progress evaluation and milestone updates are completed first. This would likely come back in April which would still give us plenty of time to approve it by December.*
- EPA's Comments on QAPPs for 2021 Progress – Vanessa Van Note, EPA

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- **Action:** WTWG will receive an updated Progress Schedule.
- We are aiming to provide edits by the end of the next week hopefully.
- Link: https://www.chesapeakebay.net/channel_files/21753/appendix_q--nps_bmp_qapp-guidance_8-11-14.pdf
- **Ted Tesler:** were we supposed to get an update on septic connections?
- **Vanessa Van Note:** yes, we will give an update on that in the next agenda item.
- **Kevin Du Bois:** it would be good get a presentation at the FOD on expectations.
- **Vanessa Van Note:** I will follow up with you Kevin.
- Sharing CAST Data to Local Governments and Planners– Cassandra Davis, NYSDEC
 - Wondering if we wanted an agenda item on tools that they have for partners?
 - Reach out to Cassie if interested
 - **Action:** WTWG members should reach out to Cassandra Davis with information on how jurisdictions share CAST data with local governments and planners.
- Other announcements

10:15 AM – **Low Vegetation as it Relates to Backout** – Vanessa Van Note, EPA

Vanessa Van Note will give a brief overview of backout of grass buffers, wetlands, land retirement, and alternative crops. A discussion on alternatives will follow.

Septic Connection Update:

Norm Goulet: Bill, do you get anything directly from localities?

Bill Keeling: Yes, some of them are entering that information but I have to dedupe it from what the health department provides.

Vanessa Van Note: Previously we discussed how the Bay Program is building these base conditions for the septic system and we went through how there could be estimation if the sewer area expands it is assumed that that those households are now on municipal sewer. We now know that this is not always the case. The sewer service areas in the model are created by the sewer service areas boundaries from counties and localities that is provided. It is also based on the census county level population data is used to estimate growth. At the WWTWG, they told me that even if the sewer service area boundary is expanding that doesn't mean that every single septic connection in that boundary would be eliminated.

Norm Goulet: I would also add that those boundaries are not very accurate.

James Martin: When the sewer service areas are updated in the land use change model, are the new boundaries applied retroactively or are the only applied to new households being established?

Vanessa Van Note: I believe the old households would be included if the boundary has extended to include those older households.

James Martin: That's probably not a great assumption. If a household is established on septic and the service expands to include that household they probably are not connecting right away. Some localities might require connection when it is available but typically that is not the case because there is a fee associated and if your system is relatively new why would you incur that additional cost?

Greg Sandi: In MD, we prevent people from connecting to certain sewer areas when we grant out engineering design costs because we are trying to limit growth to certain areas, we won't encompass the in between houses if we are going out to a development.

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Dave Montali: in WV, the story is completely different, if there is public sewer available, they must connect whether they have a perfectly functioning septic or not.

Cassie Davis: when you say “count all single detached housing units” how are they estimating the housing units?

Vanessa Van Note: that is a question I can purse with peter. Since they are using the census population data, I thought that would be a good way to estimate this.

Cassie Davis: that would make sense if it’s a smaller census block.

Vanessa Van Note: To answer your originally question Ted, we are still in the process of getting this information clear.

Norm Goulet: this is one where I think there should never be an attempt to do automatic backout. The numbers are just too screwy to begin with and trying to come up with an estimation based on census information won’t work. There is too many deviations in how the census bureau comes up with estimates and the privacy aspects.

Cassie Davis: I agree, we have tax parcel data that says whether a household data is on sewer or septic and I don’t think that would really line up with the census data because its just so separate.

Bill Keeling: I am looking at summary BMPs and VA has never reported. The last year, 2020, was a high year of 965 connections. Considering the scale, I wonder why we are so worried about double counting this BMP?

Jeff Sweeney: we need to figure out something to determine the growth on septic since very few states provide information on this topic. We need to continue this process, but we don’t necessarily have to do anything with our model estimates.

Bill Keeling: backout should be a concern when it could potentially impact things. When we are down to just a few hundred, I am with Norm that the numbers are so screwy, I think we could spend our energies better elsewhere.

Jeff Sweeney: it would still be double counting if our new data if our new data from localities and the states are telling us how the sewer area expands so we are automatically cutting out septic systems because of that and the states are also reporting how many are connected so that is what the double counting is.

Bill Keeling: what you hear is that is a bad assumption. What we heard from Norm is that the mapped service areas should not be considered verbatim to what is really there, so how do we really know what is going on?

Jeff Sweeney: That is the issue, we don’t have information from most states on what the growth is.

James Martin: well Peter estimates the growth, and to my knowledge, all states permit new systems. I think we would be better off getting states report new septic systems and then Peter assumes any growth that wasn’t a new septic system is on sewer.

Norm Goulet: I agree with that. These are hard engineering things. We shouldn’t be coming up with these numbers based on assumptions and projections. When someone connects, they have to pay a tap fee. I just find it hard to figure out why we are trying to make guesses on some of these things.

Jeff Sweeney: because no one is reporting the growth is so we have to estimate what the growth is.

Norm Goulet: Then you need to find a different way to get information. I’ve been fighting with Peter for years about septic numbers. We did an inventory in Northern VA and proved that his numbers were way off.

Jeff Sweeney: so we should focus on getting the numbers right. Before the recent calibration of the model, we worked with MD on what are the exact numbers they had and that is what we used, but that was the only state at the time that had a good idea of what the growth is.

Norm Goulet: have your tried working with VA Department of Health, they permit these facilities.

Jeff Sweeney: Ideally, we could get all the data directly from the states but it’s unlikely we are going to be able to do that for each state.

James Martin: does any state not permit new septic systems?

Jeff Sweeney: I didn’t see any septic connections reporting in NY.

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Cassie Davis: we didn't have a data base set up before, but we just got one set up this year.

Jeff Sweeney: so in that case, NY is dependent on the growth estimates that Peter does.

Cassie Davis: I do want to acknowledge Greg Sandi's comment in the chat, we are behind so I feel we should come back to this discussion at a later time.

Vanessa Van Note: I have some follow up to do so we can talk pretty clearly about what each state is doing. So far, we've been working on how the Bay Program calculates growth but there are obviously a lot of gaps. I will be following up with the state contacts to build a fuller picture.

Low Vegetation as it Relates to Backout:

James Martin: I just want to make sure I understand the process to prevent double counting, but I think you are talking about double counting as it would occur when our reporting is capturing the base conditions. If the land use isn't picking up that base condition, would it be double counting?

Vanessa Van Note: that is exactly right, first I want to understand how it is being captured right now before we decide if there is an alternative that would be better.

Vanessa Van Note: Jess can you confirm if grass buffers on pasture would be included?

Jess and Bill: they must have exclusion

Dave Montali: I am very confused too with the new methodology used in CAST 2021 where the imagery drives it. I thought in CAST 2021 we were getting away from using absolute values on the x axis

Jess Rigelman: that is correct and in the pasture that Peter provided us.

Cassi Davis: Peter provides cropland and pasture?

Jess Rigelman: That is correct.

Bill Keeling: what was wild hay?

Jess Rigelman: that would be ag open space, which was a new category in Phase 6.

James Martin: Ag open space is a model land use and an ag census classification. Wild hay should be taken out of pasture. When we talk about a grass buffer, which converts something to ag open space, it wouldn't be a buffer at that point.

Bill Keeling: we have cropland that is busted up by rotation, which we haven't addressed yet. We do not need rotations to do a what if scenario down the road (related to Phase 7).

Bill Keeling: credit duration for grass buffer and cropland is 10 years? So, we will never be able to phase out it. Similar for the retirement. For 2021, in terms of alternative crops we only reported 846 acres and all of it was backed out.

James Martin: is wild hay how people capture their acres in grass buffers? I would think they wouldn't capture it that way. I don't think ag open space is working the way we have it set up right now.

Ted Tesler: it's a good point you are making but there are a lot of proxies. With some of the chatter going on at the GIT level we will get a better conversation going on about back out and cut off.

Cassie Davis: from attending the modeling WG it sounds like the ag modeling subcommittee is going to reconvene for Phase 7 and many of these issues will be discussed there.

Loretta Collins: The AgWG hasn't touched back out and cutoff, but we can address it in the subcommittee reconvenes. With the timelines being relitigated, we are sitting back to figure out the timeline first before reconvening that group.

Action: Septic connections will be brought back as an agenda item at a future WTWG meeting.

Action: Low vegetation will be discussed further at a future WTWG meeting.

11:15 AM – **Water Filtration Treatment Plants in CAST** – Helen Golimowski, Devereux Consulting

Helen Golimowski will brief the WTWG on water filtration treatment plants in CAST.

Discussion:

James Martin: are these things more like a net zero and if that's the case and we are reporting the discharges are we are reporting

Abel Russ: at this point is taking almost all the solids and is a significant net sink. Unfortunately, it might require a site-by-site analysis. The DMR loading tool is very unreliable and those two errors that they made a net sink look like a net rise.

James Martin: do they add N and P as part of their treatment process?

Abel Russ: I don't think they do, I do think they add aluminum, but not as relevant with the TMDL

Norm Goulet: this the problem with these tools. They were never set up to be accounting tools for the TMDL. In addition to the coagulant add on there are also backwashes etc. So, it would have to be done on a plant-by-plant basis.

James Martin: the other thing that occurred to me is that the sediment loads from the facilities didn't seem that large.

Olivia Devereux: so, we don't have source then that end model is calibrated then that load will get calibrated to something. There is inconsistency on whether it's included or not. This is really a Phase 7 question. It's not something to address right away. Right now, we are trying to get a better understanding of what is going on.

Abel Russ: I think these aren't substantial loads but some of the bigger ones the net load is millions of pounds of sediment, but now it's a net sink instead. So, for some of them it is a significant amount.

Greg Sandi: we have been approached by a facility so we can do nutrient trading. It wouldn't be bad to figure out who is investigating this. I don't which workgroup would investigate it. Not sure if this would be a WWTWG problem since these deals with drinking water more than wastewater. It would be nice to have someone from that industry help us get our heads around it.

Dave Montali: in looking at each one separately, the discharges are wastewater, so the permits for these facilities don't have N and P included so they could be filtered back discharges. I would that the sediment load for a surface water intake would be a sink because discharges are held to technological based requirements. What sources are we going to include in the Bay? Of course, the sewage plants are contributors to N and P but most of the filtration plants were not included because N and P were not nutrients of concern for those discharges.

Cassie Davis: we noticed when going through our data that some facilities would have days where they would flush so then the monthly average would be artificially high because of those days.

Lisa Beatty: I was a safe drinking water inspector and trainer for 5 years. I think there needs to be a clear distinction between drinking water and wastewater because they are very different. The technology for drinking water has improved greatly over the years. Most facilities in PA have even changed the way they intake so they don't have to use as much coagulant. Some of these plants are taking on N as well. I think we need to research those things before we decide to include in CAST 2021. I would be willing to help with this issue if it is a priority, although we do need consider confidentiality as it is something that could be tampered with.

Dave Montali: In my mind it might not be the safe drinking water folks it may be the permitting folks because I think it's more the discharges that we are concerned about and not the safe drinking water folks.

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Lisa Beatty: that happens when you have a filtration plant that does filtration to waste. I think more research needs to be done and think about if this a priority in Phase 7 or are there bigger fish to fry for Phase 7.

Norm Goulet: the NPDS reports will have the discharge limit, but it won't have the information on whether it's a net sink.

Lisa Beatty: these plants have the monitoring data, but it would a before and after. I think that would be a coordinated effort with all the safe drinking water folks

Abel Russ: some of the facilities do include the intake information. For the facilities don't have that it's distorted because you only have discharge reported and not the river intake.

Olivia Devereux: it sounds like a next step would be to discuss this with the WWTWG?

Norm Goulet: the WWTWG wouldn't have the safe drinking water folks, it might have to be an ad hoc group to address this. The easiest way to do this would be for the WTWG to establish an ad hoc committee for a short period of time.

Lisa Beatty: I think that's why we need to figure out if it is a priority since we have so much other things going on.

Abel Russ: it's not so much the ones in CAST now but the ones aren't. I don't think these will have an impact, but it might be worthwhile to figure out if these are significant or not.

Action: more follow up would need to be done before determining if water filtration treatment plants is something that the WTWG would need to address in a smaller group.

12:00 PM – **Meeting Adjourn**

Next Meeting: February 3, 2022, from 10:00 to 12:00 PM

Call Participants

Hilary Swartwood, CRC

Jordan Baker, HRG

Norm Goulet, NOVA

Vanessa Van Note, EPA- CBPO

Alana Hartman, WV DEP

Arianna Johns, VA DEQ

Bill Keeling, VA DEQ

Chris Brosch, DDA

Cassandra Davis, NYSDEC

Clare Sevcik, DNREC

Clint Gill, DNREC

Dave Montali, Tetra Tech

Elizabeth Hoffman, MDA

Emily Dekar, USC

Greg Sandi, MDE

Helen Golimowski, Devereux Consulting

James Martin, VA DCR

Jeff Sweeney, EPA- CBPO

Jeremy Hanson, CRC

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Jessica Rigelman, J7 Inc.

John Maleri, DOEE

Karl Blankenship, Bay Journal

Katie Brownson, USFS

Kevin Du Bois, DoD

Leon Tillman, NRCS

Lisa Beatty, PA DEP

Loretta Collins, UMD

Lori Brown, DNREC

Mollee Dworkin, DNREC

Olivia Devereux, Devereux Consulting

Ruth Cassilly, UMD

Sarah Lane, UMCES

Ted Tesler, PA DEP

Abel Russ, Environmental Integrity Project