



Wastewater Treatment Workgroup (WWTWG)

Thursday January 22nd, 2025

10:00 – 11:30 AM

[Visit the meeting webpage for meeting materials and additional information.](#)

Purpose: This is the monthly meeting of the Wastewater Treatment Workgroup. Main topics included updates on Beyond 2025, the Sewer Service Area for Phase 7 and the Sanitary Sewer Exfiltration method for Phase 7.

Minutes

I. Welcome and Announcements

Lead: Jamie Heisig-Mitchell, WWTWG Co-Chairs

Jamie gave an overview of the meeting's agenda and reminded workgroup members that the deadline for new data to be submitted for inclusion in the final version of the Phase 7 CSS Layer is Friday, Jan 23rd.

Decisions:

1. The WWTWG approved the [September 2025 WWTWG Meeting Minutes](#).

II. Beyond 2025 and CBP Updates

Lead: Petra Baldwin, WWTWG Staffer

Petra shared updates on the Beyond 2025 process, including adoption of the revised *Watershed Agreement* with a Reducing Excess Nitrogen, Phosphorus and Sediment Outcome. She also shared current plans for changes to the CBP structure and governance, noting these involve ongoing discussions at the Management Board and will slowly be developed and solidified before July 2026. Petra highlighted the WWTWG's focus on remaining Phase 7 tasks for the short-term.

III. Sewer Service Area Update

Lead: Jackie Pickford, USGS

Jackie gave an update of the status of the Sewer/Septic model for Phase 7, including work done since the last meeting and an update on the timeline (given the federal furloughs in Fall 2025) for review of the minor improvements to the Sewer Service Area and backcast. Jackie gave an overview of some of the improvements to the Sewer Service Area. The backcast updates are still in progress.

Actions:

1. WWTWG will have the opportunity to review the Sewer Service Area between January 30th - February 13th. Jackie will share the updated layer for a red flag review for errors. No new or updated county or sewer data is being accepted. Please send any questions or comments to Jackie (jpickford@chesapeakebay.net).

2. WWTWG will have the opportunity to review the Sewer/Septic backcast in early-mid March to flag errors as well.

Discussion:

- Ivy Ozmon, HRPDC asked whether this data is being compared to the [EPA sewershed data](#). Jackie responded that if this is the same as the clean water needs survey, then it was used in her methods. Jackie will investigate whether it can be used for validation of the sewer service areas.
 - Peter Claggett, USGS asked if it was downloadable. Ivy responded she thinks it is downloadable by request.

IV. Sanitary Sewer Exfiltration Update

Lead: Joseph Delesantro, EPA and Alex Gunnerson, CBPO Contractor

Joseph gave a background reminder on the Sanitary Sewer Exfiltration model structure and optional state provided inputs of fraction gravity line and fraction new or rehabbed. He noted they were set to be conservative to not make it unfair to jurisdictions not reporting the optional inputs. Joseph then gave an overview of the spatial representation of these inputs, and Alex requested feedback from the workgroup on what scale data is available for these and thus what it should be standardized to. Discussion and comments are included below.

Joseph and Alex then posed questions to the workgroup on what historical records are available and considerations for the backcasting for these optional inputs. Discussion and comments are included below, including potential for establishing a default value for percent gravity line and percent new/rehabbed for backcasting. There was also discussion on whether these should be accounted for through BMP reporting with the Grey Infrastructure BMP instead of in this SSE estimation method, but it was agreed to stick with the optional inputs in the SEE estimated method as the best path. Finally, Alex asked for feedback on establishing a definition for rehabilitation in model documentation, which workgroup members agreed would be helpful. Alex outlined that for reporting these optional inputs, they should be sent via email to Alex and Joseph this time (due April 3), but in future they would be reporting through the point source app.

Actions:

1. Joseph and Alex will make some figures or visualization to describe how the spatial representation for the SSE optional inputs would work.
2. Joseph and Alex will do research to help propose a default value for percent gravity line to present at the next meeting. If you have any information or suggestions to help with that or general comments on either optional input, please reach out to Joseph (jdelesantro@chesapeakebay.net) and Alex (agunnerson@chesapeakebay.net).
3. Please provide any comments on the below proposed definition for rehabilitation by Tuesday, February 10. WWTWG will be asked to approve this at the February meeting.
 - a. Rehabilitation Draft Definition: “For the purposes of estimating sanitary sewer exfiltration loads, rehabilitation is the systematic repair, renewal, or replacement of existing sanitary sewer pipes, joints, and laterals to restore hydraulic integrity and to prevent or reduce infiltration of groundwater into the system and unintended exchange of wastewater with surrounding soils, groundwater, or stormwater conveyances.”
4. If you plan to submit optional inputs for the SSE estimation for your jurisdiction, please send them to Alex and Joseph via email by April 3, 2026.

Discussion:

- Standardizing Reporting Scale and Spatial Representation

- Dave Montali, WVDEP shared they are still unsure whether they will pursue this, but likely do not have anything more detailed than NPDES permit scale. The optional rehabbed input would likely be length of sewer line within some NPDES permit.
- Ivy Ozmon, HRPDC agreed with Dave. The Hampton Roads data is for the full service area, but may be able to be broken down into the NPDES permits.
 - Jamie Heisig-Mitchell, HRSD elaborated that Hampton Roads has multiple facilities clustered in an urban area that each have individual NPDES permits and sometimes the sewer area for a specific facility cuts across different localities. It would be imperfect if it is done at the NPDES scale.
 - Joseph recognized that a coarser spatial scale may actually be more accurate and not misrepresent some diversions and other changes through time at a finer NPDES scale.
- Ivy asked if Joseph could provide some geographic examples of how these data line up if they're associated with NPDES vs. a sewer service area.
 - Joseph responded they will make some figure that describe how this spatial representation works to bring back to the workgroup.
- Dave asked if they have considered what happens in the future for system expansions? There will be some places in WV that will have sewer extensions potentially every year.
 - Joseph responded that should be accounted for by the increased flow that would be reported through the point source app. That increased flow at the facility level would be reduced to calculate the dry weather flow. And then, for the spatial expansion, that would be covered at whatever frequency of updates are made by the GIS team to the SSA method.
 - Dave asked whether any change and expansion would then be considered new sewer. Joseph responded that makes sense. The way we have this conceptualized now is that it's a percentage of system pipe length. We'd be able to update the areas that are new, but we wouldn't necessarily have an update to the percentage of the system that is new. We might have to rethink doing this as a percent of gravity line sewer vs. population or area or some other factor. That might get more difficult in terms of current and historical reporting since I doubt that's something facilities/jurisdictions have calculated. Dave agreed this will get trickier in the future, but we should explore how significant it is. They agreed to consider and discuss more later.
- Historical Record and Backcast
 - Dave asked how they initially plan to populate these values now – asking states for values or applying a default value?
 - Joseph responded that they are initially asking states for the value. Considering this likely has an effect of 5-20% on the SSE estimation, it is a fairly small impact. They would appreciate having this level of resolution, but it shouldn't be significantly moving anyone's load if they're not able to present it.
 - Dave considered what would need to be done to get these values for WV, given that especially for the historical record it would take a lot of work. He suggested that for states that cannot report data for this, there should be a default value.
 - Jamie reminded the workgroup this process had evolved a lot over the last year, but that at one point it was discussed to only apply this to a certain density of urban area and not to rural systems, which might minimize the number of systems that this would impact and thus need to gather data for.
 - Joseph responded that the way it's set up now is to pull from all the significant wastewater facilities that are reported through the point source

app. The approach is to make these factors fairly conservative, so as not to punish more rural areas or places that have not set up the data organization needed to provide this data. Generally speaking, we do not like to model something in select areas, we like to try and represent it across the entire watershed. This is a decision of the workgroup, but he would lean towards a default value as opposed to restricting where we apply this estimate.

- Dave responded that he likes the idea of having default values, at least for the percent gravity part, and maybe there can be reasonable assumptions made on places with relief and those without relief to have different numbers.
- Alex asked what members thought about the ability to report history and potentially establish default values for percent new/rehabbed as well.
 - Bel Martinez da Matta, MDE shared that they reached out to some facilities to see if they have this data available. She's not sure how much historical information they have, so it would be a big lift probably.
 - George Mwangi, DNREC (in chat) shared that in Delaware that's not information that they collect. It would have to be requested from the facilities if they have it.
 - Bel asked for clarification on the graph on slide 6, which indicated a cap for percent rehabbed. So how much of an impact would this have in the estimate if we don't have that historical information available? Joseph responded that the dotted line on the graph is an example for Baltimore since that is a place he was able to estimate the value for, which came out to approx. 2% of the system recently rehabilitated in the 10-year timeframe resulting in a 4.5% reduction in exfiltration.
- Dave considered whether it would be easier to handle rehabbed projects under the Grey Infrastructure BMP instead of directly characterizing it in the SSE estimation.
 - Joseph responded it could be easier on their end to report via a BMP, but his understanding is people don't really report with that BMP because it's too onerous because there is a requirement for measurement of pre- and post-rehab exfiltration for segments rehabbed.
 - Joseph posed whether the group would like to remove this part of the estimate method entirely, if it seems it cannot be reliably reported at all.
 - Jamie noted that it is voluntary, so if it stays in the method and people don't report it then it would be fine.
 - Joseph confirmed that was the original thinking and making it a conservative estimate would ensure those who do not report are not penalized for it.
 - Alex added that people also do not have to report every year, so you could still submit data irregularly even if you don't always have consistent data.
 - Joseph added that, if so, there would have to be some interpolation between data points or keeping the value constant until the next time it is reporting.
 - Dave suggested a new or updated BMP could be utilized for this, particularly noting this won't move the needle that much and should be looked at as a pollutant reduction.
 - Dylan Burgevin, MDE clarified whether Dave is referring to the Grey Infrastructure Discharge Elimination specific sewage pipe exfiltration BMP and asked how it would be used.

- Dave noted he doesn't have much experience with this BMP, but wanted to raise the possibility. He suggested potentially looking into what the BMP requires now and how it may be interpreted with respect to exfiltration for the long-term.
- Clifton Bell, Brown & Caldwell noted (in chat) that the grey infrastructure BMP is too onerous to use.
 - Jamie noted that maybe there are opportunities moving forward to change the BMP and make it easier to use, but that is a separate challenge to address.
 - Clifton elaborated that much of this work is being done all the time by localities due to consent orders, but they don't go through and count it as a BMP because it is onerous.
 - Clifton suggested, since WWTWG already approved this method as it is, including the optional inputs, it should be kept this way and for those that don't report it then the value can be really low or zero.
- Alex suggested that if the group is interested in exploring a BMP, then it could be a separate endeavor.
- Joseph added that, from previous discussions with Gary Shenk, his understanding is the process is very long and difficult to assemble an expert panel to reopen or make a new BMP.
- Joseph summarized that they will go ahead with keeping the optional values in the SEE estimation method. They have an approach for backcasting the percent gravity line, which Joseph and Alex will try to propose default values for. And then for percent new/rehabilitated the suggestion is to not do any backcasting. Data is not expected to be submitted every year for those that do report, and a simple constant value interpolation would be used between reported values.
- Defining Rehabilitation
 - Jamie shared support for having a definition for documentation and suggested sending the draft language to everyone to read through in their own time.
 - Bel shared support and suggested it could be helpful to reach out to jurisdiction to request and outline exactly what we're looking for.

V. Recap of Actions and Decisions

Lead: Petra Baldwin, WWTWG Staffer

VI. Adjourn

Next Meeting: Thursday, February 26, 2025

Attendees:

- Jamie Heisig-Mitchell, HRSD (WWTWG Co-Chair)
- Petra Baldwin (WWTWG Staffer)
- Jackie Pickford, USGS
- Joseph Delesantro, EPA ORISE/CBPO
- Alex Gunnerson, CBPO Contractor
- Ivy Ozmon, HRPDC
- Dave Montali, Tetra Tech
- Clifton Bell, Brown & Caldwell
- Bel Martinez da Matta, MDE
- Eric Duncan, VADEQ
- Melissa Kret, VDH
- Andrew Malmgren, LASA
- Bob Buglass, WSSC
- Dana Hales, EPA R3
- Jess Rigelman, CBPO Contractor
- Megan Thynge, EPA
- Lew Linker, EPA

- Shannon McKenrick, MDE
- Dylan Burgevin, MDE
- Kevin Bronson, DNREC
- George Mwangi, DNREC
- Zach Steckler, PA DEP
- Rebecca Ransom, USGS
- Peter Claggett, USGS
- Bill Mann, William & Mary
- Cindy Ross