**Chesapeake Bay Program**

# Wastewater Treatment Workgroup (WWTWG)
# Meeting Minutes

Thursday, June 26th
10:00 AM to 11:15AM
Meeting Materials

## Actions and Decisions

**Decision:** The WWTWG approved the April 2025 Meeting Minutes.

**Action:** The CSO Small Group will meet with CBP modelers to discuss the base conditions and assumptions in the model. Petra will send out an email to schedule this for early-mid July. Jess Rigelman will share preliminary information in the meantime about CSO data in CAST.

**Action:** Joseph Delesantro, EPA ORISE/CBPO will determine unattenuated loads for exfiltration broken up by jurisdiction with the expected range for attenuation. If possible, he will also provide attenuated loads per jurisdiction before the July WWTWG meeting.

**Action:** The most recent update on the exfiltration method is provided here. If you have any further comments on the phosphorus attenuation question or other aspects of the method, please email Joseph (jdelesantro@chesapeakebay.net) ASAP. The workgroup will be asked to make a decision on this in the July WWTWG meeting.

**Action:** Workgroup members tentatively proposed to not pursue SSO loads given the limited data available from jurisdictions and the small percentage of urban load from the data received so far. If you have any comments about SSOs, please reach out to Jamie (jmitchell@hrsd.com), Joseph (jdelesantro@chesapeakebay.net), and Petra (Baldwin.Petra@epa.gov) ASAP. The workgroup will be asked to make a decision on whether or not to pursue SSOs at the July WWTWG meeting.

**Action:** Please provide any updates from your jurisdiction on the documentation of state's perspectives for not pursuing the Boat Pump Out BMP by **EOD Friday Aug 1st** to Ivy Ozmon (iozmon@hrpdcva.gov), HRPDC and Petra Baldwin (Baldwin.Petra@epa.gov), CRC. Additionally, if you have any feedback on the threshold that would require the group to revisit this BMP in the future, please include that in your update to the documentation. The workgroup will be asked to finalize this in the Aug WWTWG meeting.

## Meeting Minutes

10:00 **Introduction and Announcements**
WWTWG Co-Chairs: Jamie Heisig-Mitchell, HRSD & Justin Carl, Alex Renew (10 min)

**Decision:** The WWTWG approved the April 2025 Meeting Minutes.

Petra Baldwin, WWTWG Staffer, updated workgroup members on the Phase 7 development timeline and the decisions that need to be made within the WWTWG before Sept 30.

- Dave Montali, Tetratech/WV DEP asked for clarification on the two septic/sewer mapping decisions. Petra shared that the workgroup heard an update from the GIS team on this item in October 2024 and was reminded to send feedback on the Sanitary Sewer Data Review in April 2025. In July, the workgroup will be hearing an update on this for a requested decision to approve the methods.
- Dave Montali asked if the workgroup is expected to present an overall briefing on decisions to the WQGIT. Petra responded that given that most decisions happening in the WWTWG are sector-specific, the decisions will be made within the workgroup. However, the WQGIT may request informational briefings on some items in August. This is still being determined.
- Ed Cronin, Brown & Caldwell asked to meet with the modeling team to gain more insight into the base conditions and assumption in the model for CSOs to better understand what data they need the workgroup to validate.
    - Jess Rigelman, CBPO Contractor briefly shared how the model treats areas that have become MS4 that used to be combined through annual point source submission from jurisdictions and how CSO loads are run in CAST.
    - Dave Montali asked to clarify that the workgroup is not proposing a major change to the base condition or method.
    - Ed Cronin clarified the workgroup is not seeking a major change. The main questions the workgroup needs more information on about the model are: 1) What are the base conditions (1985)? 2) What was the basis for the TMDL or WLA for a community? 3) How are we showing and documenting progress?

**Action:** The CSO Small Group will meet with CBP modelers to discuss the base conditions and assumptions in the model. Petra will send out an email to schedule this for early-mid July. Jess Rigelman will share preliminary information in the meantime about CSO data in CAST.

10:10 **Sanitary Sewer Exfiltration Update -** Joseph Delesantro, EPA ORISE/CBPO (30 min)

Joseph shared an update on the exfiltration estimation method, focusing on attenuation of nitrogen and phosphorus from the point of exfiltration to the stream. At the last meeting, the workgroup had indicated a preference for treating this as a "direct load" where attenuation is defined separately from land-to-water factors. Joseph suggested adapting the attenuation method for septic where there are two zones (soils and groundwater) of attenuation, with modifications to account for the greater connectivity of urbanized landscapes and exponential of relative distance to streams. Joseph noted that this works well for nitrogen, but is more difficult for phosphorus attenuation since it was set at 100% in the septic method and literature values were limited and highly variable. Joseph proposed instead to extend the nitrogen attenuation method to phosphorus, assuming 100% baseline attenuation and applying the sewer discounting via the percent difference in septic to sewer nitrogen attenuation. He ran through example loads to streams using this method for Baltimore and HRSD.

- Clifton Bell, Brown & Caldwell asked why the precent attenuation of phosphorus was higher than the percent attenuation of nitrogen while the percent urban load was significantly higher.

- Joseph responded that the short answer it that it's the denominator there. Even though we're attenuating the phosphorus down significantly more than we're attenuating the nitrogen down, the estimated phosphorus from development in CAST is that much lower than nitrogen.
- Clifton asked whether the further work on phosphorus attenuation in septic systems that could not be determined at the time of the report would be pursued in the future. If so, he mentioned an option for exfiltration would be to tie it to that future work to be consistent with septic methods.
- Joseph mentioned that while the report suggested future work to consider phosphorus attenuation, he did not think that was necessarily planned or scheduled.
- Dave Montali asked if the phosphorus attenuation value from the test cases is anticipated to be relatively stable across the whole watershed or what kind of range might be expected. If the attenuation rate is much lower in some areas, we need to make sure that that makes sense.
- Joseph noted that the two test cases had similar values. He anticipates the largest differences will be in areas with higher groundwater tables because that is where the Zone 1 attenuation reduction will be most modified and the attenuation equation would predict higher transmission (i.e. less attenuation).
- Jamie Heisig-Mitchell reminded the workgroup that following feedback from this meeting, this will be put forward for decision by WWTWG members at the July meeting.
- Joseph asked the workgroup whether or not they needed the attenuated load estimates to be extended to the entire watershed before making a decision on the exfiltration method.
- Ed Cronin asked for the most up to date and comprehensive review of this analysis. Joseph noted his slides are cumulative so today's presentation is the best source for that.
- Dave asked if we have all the necessary information to even calculate an exfiltrated volume load everywhere in the watershed and if there is a way to normalize loads so jurisdictions can see the load for their state relative to others or show the relative impact of the optional state inputs.
- Joseph noted all aspects of the method are either values already defined by this workgroup or data that is already part of the state reporting. There are two optional inputs from jurisdictions and we only have it for Maryland and Southeast Virginia, but those have a fairly small impact.
- Dave expressed that states may be hesitant to approve a method when they don't know how much load we're talking about.
- Joseph offered that the unattenuated loads can be broken out by state now. However, attenuated loads would require more work and may not be able to be done by the July meeting. He can, however, more easily offer a range that is expected for attenuation if that is sufficient.
- George Onyullo, DOEE agreed with Dave's worry about being able to expand the test cases to across the watershed given the availability of information.
- Dave commented that what we're doing here is not necessarily a new load. If we represent exfiltration, then there's an expectation that the developed stormwater load will go down approximately the same amount. But, are we confident that all our systems will actually do that and how will it be calibrated once we put this direct load in the model?
- Joseph responded that if we're attributing a certain load to urban nonpoint sources and if we add in that a certain amount is coming from sanitary sewer exfiltration then that calibration will

result in less of the load coming from the urban stormwater. But, once we go through the calibration, that final number will be a little bit different and that cannot be done prior to the execution of the model for the year of review.

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10:40 **Small Group Status Updates -** Various (30 min)

Following the updates provided at the April WWTWG meeting and the May Joint Meeting with USWG, the Exfiltration/SSO Small Group met again in May to continue their efforts. A volunteer from each small group shared a brief verbal status update of any work that has occurred in the interim.

SSO Data - Jamie Heisig-Mitchell, Joseph Delesantro, and others.

- Jamie gave a summary of jurisdictions' responses to what data is available about SSOs and in what format for ease of extraction.
    - PA's SSO data is in PDFs. While they are moving to digital format there is no easy mechanism for data extraction at this time. Sarah Ryan, PA DEP confirmed this and added that with the new system they will be able to at least easily identify when SSOs have happened but estimating the volume is a little more difficult.
    - WV has no chronic SSOs. Dave Montali confirmed this.
    - MD has already provided their data and it's one of the test cases already.
    - NY has a dataset available that is reasonably easy to evaluate, but only back to 2020. Cassie Davis, NYDEC noted that under Historic Sewage Discharge Data there is an additional excel spreadsheet with data in tabs from PDFs going back to 2013.
    - VA has two databases for Southeast Virginia, which has been provided and is one of the test cases, and the rest of the state (ECHO) which is not very easy to extract information from. Erica Duncan, VA DEQ confirmed ECHO is the least cumbersome place to find data though it would still not be easy.
    - John Rebar and Kevin Bronson, DNREC shared that DE is in the same position as PA.
    - George Onyullo, DOEE shared that DC does not have much change in their dataset but are working on some things and will provide an update afterwards.
- Joseph shared some of the preliminary analysis he's been able to provide from SSO data from Maryland and Southeast Virginia to give an idea of what SSO loads look like as a percentage of CAST developed load, and any information that can help define what "chronic" is. In the Maryland data, most reported SSO locations had repeated reports, report causes were

described but not classified, and SSO loads accounted for 0.5% and 0.7% of the CAST developed load in example years. In the HRSD data, formatting inconsistencies made repeated locations hard to identify, report causes were well classified, and SSO loads accounted for only 0.07% of the CAST developed load in an example year. Both had inconsistent reporting of recovered volumes.

- Dave Montali asked how location was defined. Joseph responded it is sometimes outlets and sometimes addresses.
- Ivy Ozmon, HRPDC asked if it would be possible to account for recovered volumes by subtraction with the two datasets and would be interested to see if there's a large difference in load. Joseph said that would be feasible to do.
- Jamie noted that inconsistencies in the format of locations in the HRSD data is likely due to differences in reporting from HRSD and from the cities individually.
- Dave posed to the group whether there is the time, capability, and priority to continue to pursue this given the short timeline ahead, staffing cuts to the modeling team, the apparent smaller contribution from SSO loads, and the gaps in information about inputs. WV doesn't care one way or another.
- Bel Martinez da Matta, MDE agreed with Dave. Because it is such a small percentage of the load, it wouldn't be a priority for Maryland either to pursue the SSOs.
- Jamie agreed. At this time, given some of the data constraints and gaps that exist across the watershed, she does not think this is realistically achievable for this version of the model. This is probably not the highest priority.
- George agreed. DC loads in this space are not going to change much. These updates are just to fulfill the purpose of a data update in the calibration space, and the needle is not going to move for DC.
- Jamie suggested that the workgroup come back and decide on this in the July meeting.
- Dave reminded the workgroup that SSOs are illegal independent of the model and TMDL. The controls are going to go on whether we account for them in the model directly or not. Jamie noted that throughout the watershed where there are chronic SSOs, those entities are already under a state or federal order to control them.

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CSO Data – Ed Cronin, Justin Carl, and others.

- Ed Cronin briefly shared that they've gotten the final information needed from Maryland, so the next step is to schedule a meeting with the modeling team, proposed earlier in today's meeting, to make sure they understand what's in the model and how to provide the best update.

Boat Pump Outs – Ivy Ozmon

- Ivy noted that only Maryland and Virginia have submitted their rationale for not pursuing the boater pump out BMP. She reminded jurisdictions to send that in, given the tentative plan to wrap this item up at the August WWTWG meeting.

**Action:** Please provide any updates from your jurisdiction on the documentation of state's perspectives for not pursuing the Boat Pump Out BMP by **EOD Friday Aug 1st** to Ivy Ozmon (iozmon@hrpdcva.gov), HRPDC and Petra Baldwin (Baldwin.Petra@epa.gov), CRC. Additionally, if you have any feedback on the threshold that would require the group to revisit this BMP in the future, please include that in your update to the documentation. The workgroup will be asked to finalize this in the Aug WWTWG meeting.

11:10 **Recap of Actions and Decisions** - Jamie Heisig-Mitchell (5 min)

11:15 **Adjourn**

**NEXT MEETING: Thursday, July 24th, 2025**

***Attendance:*** *Jamie Heisig-Mitchell (HRSD), Petra Baldwin (CRC), Ed Cronin (Brown & Caldwell), Dave Montali (Tetra Tech/WV DEP), Jess Rigelman (CBPO Contractor), Clifton Bell (Brown & Caldwell), Bob Buglass (WSSC), George Onyullo (DOEE), Ellen Egen (AquaLaw), George Mwangi (DNREC), Victor Landis (PA DEP), Kevin Bronson (DNREC), Ivy Ozmon (HRPDC), Joseph Delesantro (EPA ORISE/CBPO), Bel Martinez da Matta (MDE), Justin Carl (AlexRenew), Dama Hales (EPA R3), Sarah Ryan (PA DEP), Bill Liu (BDP EnviroTech), John Rebar (DNREC), Marel King (CBC), Megan Thynge (EPA CBPO), Lew Linker (EPA CBPO), Gilles Kauer (BDP Envirotech), Eric Li (BDP Envirotech), Joy Lin (BDP Envirotech), Ramen Patel (BDP Envirotech), Erica Duncan (VA DEQ), Cassie Davis (NY DEC), Charles Xie.*

## Acronym List

BMP: Best Management Practice
CAST: Chesapeake Assessment Scenario Tool
CBP: Chesapeake Bay Program
CSO: Combined Sewer Overflow
GIS: Geographic Information System
HRSD: Hampton Roads Sanitation District
EPA: [U.S] Environmental Protection Agency
SSO: Sanitary Sewer Overflow
TMDL: Total Maximum Daily Load
WLA: Wasteload Allocation
WQGIT: Water Quality Goal Implementation Team
WWTWG: Wastewater Treatment Workgroup