

## Wastewater Treatment Workgroup Conference Call

April 4, 2017

### Meeting Summary

Calendar Page: <http://www.chesapeakebay.net/calendar/event/25004/>

---

#### Summary of Actions and Decisions

**Action:** The WWTWG will continue to review the CSO coverage on the [Phase 6 Land use viewer website](#) and provide comments where needed. The WWTWG will pursue approval of the CSO and sewer service spatial coverage from all jurisdictions at the workgroup's May conference call.

**Action:** The WWTWG will discuss adding groundwater discharge as a third population category along with sewer and septic, and how to provide this data at the May conference call.

**Action:** Greg Allen will convey the WWTWG's comments on the draft workplan to Tetratech.

**Decision:** The March meeting minutes were approved, on the condition that the corrections below are applied.

#### Welcome, Introductions, and Announcements — *Tanya Spano (Chair)*

- Dave Schepens asked to correct the spelling of his name in the March minutes.
  - Minutes were approved, pending the correction recommended by Dave Schepens.
- PA, WV and DC representatives were not on the call.

**Decision:** The WWTWG approved the March meeting minutes.

#### Comments on Sewer Service Areas in Phase 6 Model – Jurisdictions

CSO and sewer service area spatial coverage that is currently available on the [Phase 6 land use viewer website](#). WWTWG members agreed to do an initial review and submit any major comments using the online tools. The workgroup will hold a follow-up discussion on this topic.

**Action Requested:** Workgroup approval of the CSO and sewer service area spatial coverage if no further comments or updates.

#### *Discussion*

- Ning Zhou, VT CBPO: I spoke with Peter Claggett last week— we need formal approval from WWTWG to sign off. This directly relates to sewershed and CSO issues.
  - Tanya Spano, MWCOG: Not everybody has CSOs, so who has provided confirmation with GIS?
  - Zhou: I haven't received any feedback.
  - Spano: Has anybody sent anything?
  - Jeff Wight, MDE: We are all good in MD.
- Zhou: For CSO load estimates, we used direct load estimates. When CSOs were separated, we converted that land to urban LU. For DC's CSOs, I've been working with George, so that should be in good shape.
  - Spano: To clarify, these are loads and not GIS layers?

- Zhou: CSO loadings and GIS layers are two separated submissions from the states. For CSOs that have no loading data submitted, Tetra Tech method will be used to estimate the CSO loads based on the CSO GIS layers.
- Spano: Did PA, WV, or NY have CSO's?
- Zhou: Yes, they have. Rashid, have you had a chance to review the CSO area online?
- Rashid Ahmed, NYSDEC: Our GIS staff did not have access to the data, but the viewer looked ok. Our GIS staff contacted CBP staff but we need follow-up.
- Zhou: PA sent me some overflow data examples from Lancaster.
- Spano: what about WV?
- Zhou: There were some CSOs in WV that need confirmation.
- Spano: If land use remains CSO, then you need the loads to be properly represented, going back and going forward. If CSOs are separated, then the land cover needs to be updated. Have we missed any states? We can't approve this fully, but from the states that are here, we have partial approval of the CSO layers.

**Action:** The WWTWG will continue to review the CSO coverage on the [Phase 6 Land use viewer website](#) and provide comments where needed. The WWTWG will pursue approval of the CSO and sewer service spatial coverage from all jurisdictions at the workgroup's May conference call.

#### **Populations on Sewer and Septic** –Peter Claggett (USGS)

The workgroup discussed the tabular summary of bay watershed populations on sewer and septic service.

- Spano: Is any of this linked to wastewater plants?
  - Claggett: All of our sewer data is by land river segment, divided into populations on septic and populations on sewer.
  - Spano: When we do cooperative forecasting with MWCOCG, we know what population to map our forecasts on to. Is there a reason you're not doing that?
  - Claggett: We did try to do that in the past. That was done by someone at MD Dept. of Planning, which was manual and very time consuming. The Clean Water Needs survey should be completely networked but it's not, and we haven't had the resources to network those populations manually.
- Marya Levelev, MDE: You're correcting MD data—I'm wondering how you're doing that.
  - Claggett: We're using land river segment, and back-casting that to see how it's changed using the model. We use your data to validate what we're doing and make refinements. We're ground-truthing with your data, but we're not altering it.
  - Zhou: I have a question related to rapid infiltration. On Solomons island, their WWTP does not discharge to surface water, it discharges to ground through rapid infiltration basins. Is that counted as a sewer?
  - Levelev: Will it be shown as sewer population or septic, if it's discharged to groundwater?
  - Claggett: I think we'd count it as sewer, but I'd have to get back to you.
  - Levelev: I had thought that the Bay program counts groundwater as nonpoint source, not point source, and sewer and septic are point sources.
- Zhou: What about monitored large onsite systems? For instance, how do we treat the VA's onsite monitoring systems?
- Spano: When you send the tabular information, is all of this accessible on the new website that we're reviewing?

- Claggett: The latest sewer data is from March 9<sup>th</sup>, which will be up on the website on the phase 6 viewer. That shows the areas we have said are on sewer. So if those areas don't correspond to your knowledge, you need to let us know.
- Spano: Ning and Michelle, when you send out any data related to CSOs and sewer/septic, make sure you send out the link to the land use viewer with every email you send out.
- Zhou: We have sewershed and traditional septic, and now we have ground discharge. Should we put this under sewer/septic or create a new category?
  - Claggett: We've never asked for that information before. If that's the category we need mapped, then I need the workgroup's help to identify those areas if we need this over the phase 6 review process this summer. We need the same kind of information for groundwater discharge as we needed for sewer/septic, which would be polygons.
  - Spano: If you have a sewer in a box, then you need to estimate population in that box.
  - Claggett: We don't take general data like X septic systems in Town Y. It's too prone to error. We would need a map/polygon of these new areas and then we can address that in the phase 6 model.
  - Spano: Peter is asking for the boundary to properly characterize this category, but will apply the same population estimate rules.
  - Levelev: In MD, we have flow data for groundwater discharges.
  - Zhou: For groundwater discharge, we have a direct load estimate from Greg Busch. What Peter would need is a separate shapefile with population. Discharge has already been taken care of, so this is a separate issue.
  - Spano: I would ask for updated links from Peter, slides, and that we key this up for the next WG conference call and figure out what data and how to provide data to Peter.

**Action:** The WWTWG will discuss adding groundwater discharge as a third population category along with sewer and septic, and how to provide this data at the May conference call.

#### **WWTP Toxic Contaminants Project update** –Greg Allen (EPA CBPO)

Greg Allen presented the Tetrattech workplan for an investigation of the impact of WWTP upgrades on toxic contaminant loads.

- Greg Allen: We have a draft workplan from TetraTch, sent to both the Toxic Contaminants workgroup and the WWTWG for comment. One of the TCW members mentioned that current detection methods are for higher chlorinated PCBs, and may be too high a detection limit for the kinds of PCBs we may see in WW effluent. We will have to see what alternative methods we can find that would give us a low enough detection limit for what we are looking for. We do know that MDE is using the lower detection limit method. We will also be looking at sites outside the Bay watershed. We're in exploration phase right now.
  - Allen: I've also received other comments that this draft workplan doesn't refer to TMDLs very effectively, so we need to figure out how the final product can be optimized to support local TMDLs. We also got a comment from Micka Peck who pointed out the detection limit problems in data.
  - Spano: Only comment we got was from George O in DC, that he saw no "fatal flaws" in the workplan. One thing I'd like to address is your comment about WW plants not being the source of PCBs—PCBs are in wastewater and it passes through WWTPs, so we need to make

- sure to specify that WWTPs are not the source of PCBs. To clarify, this is an evaluation only of what would be conventional WWTPs, correct? We're not looking at alternative systems?
- Allen: The intent was to only focus on conventional WWTPs, before and after nutrient reduction upgrades. We want to piggyback on what's already being invested in nutrient and sediment TMDLs.
  - Spano: We just had this conversation about land applications with Marya Levelov.
  - Zhou: I believe the focus here is on conventional vs ENR upgrades on sewer treatment plants.
  - Spano: I agree with the TCW comments on detection limits. This report can't draw conclusions if analysis is insufficient to detect what we're looking for. The mass balance issue is also fraught with problems. I would hate for the report to draw any conclusions without being able to back up those conclusions. Can we have some language that recognizes those limitations on the biosolids fractions?
  - Allen: We will add some language to reflect your comments as to when we can consider whether the data we collect are sufficient to draw conclusions or not. And we will continue working with the WWTWG to keep working on these drafts. We will get comments to Tetra Tech and they will get started. The next thing the WG will see is the results of the phase 1 literature review, probably in midsummer.
  - Zhou: We have a toxics inventory document, resolving some issues related to detection limits of chemicals including PCBs. Our toxics database would have a good historical data. It doesn't look at before/after upgrades effect on toxics, but it might be good background data to look at.
  - Spano: Greg has heard our comments, so there's no need to come back for formal approval or endorsement. Michelle and Ning will work with MD to get their data and distribute that to the WWTWG. Greg, when do we anticipate the phase one analysis to come back?
    - Greg: I would think maybe June/July at best.
    - Tanya: We will put a placeholder down in the agenda for this in the summer. We may want to have joint discussions with TCW or just submit our comments on the analysis but we can plan for discussion down the line.

**Action:** Greg Allen will convey the WWTWG's comments on the draft workplan to Tetrattech.

**SSO and Bypass**—Ning Zhou (EPA CBPO)

Ning Zhou presented MD SSO and bypass data with modeling findings to show their relative importance to the model simulation.

- Spano: I caution folks to remember that concentration and flow equals load, and if either one is off we might have a false value.
- Zhou: If the state has some estimate on the concentration, we have a default value we use. DC has that, and maybe VA too.
- Spano: Since this is Maryland's data being represented, I want to give MD an opportunity to comment on this information, so let's make sure we leave space to do that.
- Levelov: How do you use data from NGOs vs state data?
  - Zhou: We don't actually receive data from NGOs, they just ask us on how the models handle spills.

- Spano: we need to make sure we're accountable and transparent. This should be posted, but should be labeled as a DRAFT product not to be taken as reality. We have to make sure that conceptual things like this are clearly labelled.
  - Zhou: Thanks, good point. I should put a big draft label on these slides.
- Zhou: Option 1: Recommendation to WQGIT to include SSO and CSO bypass in future phase 7 model. Option 2: WG continues to investigate this issue.
- Spano: 1 and 2 can be variations of the same option. If we feel there's enough to warrant a recommendation at this time, we can look into it. I think investigating the data is part of doing that, and we may put off making a recommendation until later. Any questions for Ning's data? Particularly MD?
- Spano: Regarding labelling of this graphic, I'd like the graph to be relabeled as WRTDS vs the model. We need to specify what "simulated" means.
  - Zhou: Simulated means the model output. So WRTDS is graphed against the model.
  - Spano: Ok, can you add a label to this graphic before it is posted?
- Brockenbrough: It looks like we're under-calculating some wet weather loads.
  - Zhou: That's right.
  - Spano: Echoing Allen's comment, I don't see any problem pursuing this, but it doesn't seem to me that we're in a position to recommend this to the GIT until we get the accuracy and context to recommend this for a model.
- Spano: Everybody's got SSOs and many have CSOs. Does MD have this data?
  - Zhou: MD's website has a database of SSO, CSO, and bypass.
  - Spano: I would check that we have any other bypasses. It sounds like the group can continue reviewing this but we're not at the stage where we can take this to the WQGIT at this time.
- Levellev: Can you put the presentation online?
  - Zhou: I will after some modification.
  - Shepens: Once you put it online, can you send out an email that this is up on the calendar page?
  - Spano: We do also need to specify the draft nature of this product before we post it online.

**Decision:** The workgroup resolved to continue investigation of SSO and bypass modeling findings for possible future recommendations to the WQGIT to include SSO and bypass in a future phase of the watershed model.

#### **Updates and Other Business:**

- Webinar topics—Tanya and Ning
  - Examples of low cost retrofit projects at small PA plants will be presented by PADEP at a later date.
- Spano: If you aren't already plugged into WQGIT MPA work, make sure you take a look at the [Midpoint Assessment schedule](#) and [Phase 6 review document](#). We will be looking at what our tasks are as a WG going forward.
  - *Post-meeting note:* The link above refers to draft documents discussed at the most recent WQGIT meeting on April 10, 2017 (meeting page [here](#)). These documents are still under review by the WQGIT following feedback at the April 10 WQGIT conference call. The WWTWG will be notified when the Midpoint Assessment schedule and review process documents have been approved by the WQGIT.

**Adjourned**

<b>Name</b>	<b>Affiliation</b>
<b>Tanya Spano, Chair</b>	<b>MWCOG</b>
<b>Ning Zhou, Coordinator</b>	<b>VT CBPO</b>
<b>Michelle Williams, Staffer</b>	<b>CRC</b>
Rashid Ahmed	NYSDEC
Dharmendra Kumar	PA DEP
Dave Schepens	DE DNREC
Marya Levelev	MDE
Jason Keppler	MDA
Jeff White	MDE
Allen Brockenbrough	VA DEQ
Matt Richardson	VA DEQ
Peter Claggett	USGS
Greg Allen	EPA CBPO
Lana Sindler	MWCOG