DRAFT AGENDA
Wastewater Treatment Workgroup (WWTWG) Teleconference
Tuesday, April 3, 2018, 10:00 AM – 12:00 PM
Conference Line: 202-991-0477
Participant Code: 903-7008
Adobe Connect: http://epawebconferencing.acms.com/wwtwg/
Calendar Page: Link

Summary of Actions and Decisions:

Decision: The WWTWG approved the March 2018 and February 2018 call summaries.

Action: Mohsin Siddique will discuss feasibility of a DC boat pump-out program with DC WWTWG and WQGIT representatives.

Action: The WWTWG and Modeling Workgroup representatives will be provided with boat ownership and load estimates by county for review.

Action: The WWTWG will review the Boat Pump out BMP expert panel recommendations through April, and submit comments to Vic D'Amato **by COB April 24.** The WWTWG will be asked to approve the expert panel recommendations for presentation to the WTWG and WQGIT at the May 1 WWTWG conference call.

Action: The WWTWG will continue review of the draft proposal to include SSO and bypass issues in a future iteration of the Watershed model. Jurisdictions will review available SSO and bypass data in their jurisdictions to determine feasibility to represent SSO and bypass loads and trends in the CBP modeling tools.

10:00 AM **Welcome, Introductions, and Announcements** —Tanya Spano (Chair)

Action item: Approval of March minutes and February Minutes.

Discussion:

- Note: Tanya Spano is unavailable for this conference call; Allan Brockenbrough is facilitating for Tanya.

Decision: The WWTWG approved the March 2018 and February 2018 call summaries.

10:10 AM **Boat Pump-Out BMP Expert Panel Report Presentation**-- Ning Zhou (consultant), Lewis Linker (EPA CBPO), and Vic D'Amato (TetraTech)

The Chesapeake Bay Boat Pump Out BMP Expert Review Panel was requested by the WWTWG and convened in February 2016. The panel developed the baseline load estimates for the recreational boating

nutrient load into the Maryland and Virginia portions of the Chesapeake Bay and provided recommendations on related BMP crediting and verification.

Decision Requested: The WWTWG will be asked to approve the Boat Pump-Out BMP Expert Panel Report and recommendations for inclusion in the future Watershed Model.

Discussion:

- Ning Zhou presented on the history of boat pump-out as a potential BMP and related regulations on boat discharges in domestic and international water as well as progress in the Expert Panel to produce the report. Vic D'Amato presented the analysis of boat ownership, use and potential nutrient impacts of implementing boat pump-out by county in the Bay watershed.
- Lew Linker: The expert panel did a great job on the analysis of boat use, current load and potential reductions by county in the watershed. We now have the answer of what kind of problem this is for loads, and although overall in the watershed, this is less than 100,000 lbs N—small in the overall nutrient loads of the Bay. However, it can have significant effects locally where there is a lot of boat discharge in the tidal Bay.
- Vic D'Amato presented recommendations of the Expert Panel:
    - Add VA and MD estimates as loads in model
    - Direct dischargers into Bay tidal waters: DE? D.C.?
    - Add boat pump-out as programmatic BMP
    - Recognize and incentivize improved practices
    - Minimize burdens (e.g., to marina operators)
    - Allow flexibility in programs and verification
    - Direct metering is gold standard (see VA Beach proposal for Lynnhaven River NDZ pump-out program)
    - Marine facility survey
    - Estimates versus baseline as in VA and MD
- Linker: I think DE is too far up in the tidal waters to see any impact from this in the Bay. However, DC has a robust boating population and might benefit from a boat pump-out program.
    - Mohsin Siddique: I can reach out to DOEE and Katherine Antos to inquire about the applicability of Boat Pump-out as a program in DC.

Action: Mohsin Siddique will discuss feasibility of a DC boat pump-out program with DC WWTWG and WQGIT representatives.

- Linker: This can be easily included in a Phase 7 Watershed Model. Vic and experts have been able to quantify this load, and since it is small, it should be fairly easy to include in the model because it's not likely to affect calibration. This BMP would need to go through the WTWG and the WQGIT, but I don't see any technical problems with adoption of this BMP in our modeling tools.
- Linker: I would request to access the worksheet by county for boat ownership and estimates of load by county. It would be nice to have a spatial plot of estimated boat discharge loads to see where they have the most impact in the watershed (likely clustered around the shoreline)
    - D'Amato: We have not done GIS analysis yet on this, as all we have are spreadsheets, but that would be an informative analysis to look at.

Action: The WWTWG and Modeling Workgroup representatives will be provided with boat ownership and load estimates by county for review.

- Allan Brockenbrough asked about compliance rates for the no discharge rule within 3 nautical miles of shoreline.
    - Linker: we're not sure that there is 100% compliance with that rule beyond lip service.
    - D'Amato: We have some of that information, and the Coast Guard might have resources with that information. That might be useful information to describe in the report for entities considering pump-out programs to know about how this rule is used.
- Brockenbrough: What about usage of boat pump-out in vessels that have storage capacity? That will be an important point in VA, since this originated from a permittee's request for credit for these practices in lieu of implementing stormwater controls. VA will take a close look at the report to see if the original vision has been satisfied from the original request of the permittee.
    - D'amato: We had significant input from stakeholders in Virginia Beach, but our concept has evolved somewhat as we continued through the work.
- Linker: We have insights from the Midpoint Assessment that nutrient species really matter in how they affect hypoxia in the Bay. Inorganic sourced nutrients might have less of an impact than discharged human waste from boats—that is a consideration for the next generation of modeling tools, to include this in the break-out of nutrient species.
    - Ning Zhou: The WWTWG established a standard split for Phase 5 and 6, and as long as we know the treatment type, we can split the P and N into our standard splits. The issue would be with MSD—we're not sure what the split would be because we don't have a standard treatment type for MSD.
    - Linker: Ammonia and nitrate and orthophosphate all have around the same effect on DO. The organic N compounds have different reactivities in their effects on hypoxia. We can make some initial assumptions here about the splits that will be better than no assumption. The CBP counts total N and P, but the species are useful for communicating to stakeholders for planning purposes.
- Brockenbrough: Speaking for VA, we will have to take more time to review the report and recommendations before we approve it.
    - Zhou: We have a scheduled WQGIT meeting at the end of this month, we would like to set a timeline for this review.
    - Brockenbrough: Is there interest in other jurisdictions to look at this in detail? Otherwise I recommend that we review through April and call for approval at our May 1 call.
- Lew Linker: Here are my recommendations to enhance the report:
    - Expand the Excel worksheet to include counties for MD & VA and best estimated spatial breakout in the tidal Bay.
    - Provide nutrient load estimates in millions of pounds.
    - Provide a spatial plot of Chesapeake tidal waters w/ boat nutrient discharge loads estimated.
    - Provide Total Organic Carbon estimates.
    - Provide estimated nutrient species splits.

Action: The WWTWG will review the Boat Pump out BMP expert panel recommendations through April, submit comments to Vic D'Amato by COB April 24. The WWTWG will be asked to approve the expert panel recommendations for presentation to the WTWG and WQGIT at the May 1 WWTWG conference call.

10:50 AM **Draft Recommendation to Include SSO and Bypass Issues in a Future Model** –Ning Zhou, consultant

The WWTWG continued to review the SSO and bypass flows/loads issue and consider the issue's applicability for a future input category for the Watershed Model. Additional review will include review of wet weather flows in other tributaries across the Bay watershed, and the individual aspects of the SSO and CSO bypass issue. The WWTWG will consider a recommendation to the WQGIT to approve the SSO and bypass flows/loads for incorporation into a future watershed model at the March WWTWG call.

Decision Requested: WWTWG to recommend adding SSO and bypass flows/loads as a future input category for the Watershed Model; and briefing to the WQGIT at an upcoming conference call.

Discussion:

- Ning reviewed the draft memo regarding SSO and bypass modeling gaps and a proposal to address this modeling gap in a future iteration of the Watershed Model. (Previous discussion on this topic was conducted at the April 2017, September 2017, and February 2018 WWTWG conference calls).
- Zhou: We get frequent questions from our stakeholders, especially in Baltimore on how the model handles SSO and bypass issues, and the answer is that our current models do not measure SSO or bypass events.
- Montali: What's the difference between SSO and bypass?
    - Zhou: Under the permit conditions, SSOs are not permitted, but bypass of the influent is covered under permit conditions.
- Montali: Why is SSO strength so much greater than CSO?
    - Zhou: CSO is purely a wet weather event, and the WWTPs have to capture the first most concentrated flush. SSO's can happen anytime and they are not contained at all.
    - Montali: I would caution that the strength of SSO should be carefully considered.
- Zhou: We don't have to recommend any final number, this is just a preliminary policy proposal to consider SSO and bypass in the new model. If needed, we can convene a panel to determine the technical considerations and numeric loads after a recommendation to include this in the model.
- Brockenbrough: I don't have conceptual objections to include this in the model. I think there might need to be review of the assumptions here but I would be fine with taking this to the WQGIT.
- Montali: We don't have data in WV for this, and that might be the case everywhere with the exception of MD. These discharged are illegal under NPDES, so they are not tracked. This would have to be a case by case evaluation, and you couldn't make estimates across the watershed. Capturing episodic events would also be very difficult here. If Blue Plains is the only facility that has bypass, why can't that just be monitored as another outfall and captured in the permit tracking?
    - Zhou: I've been wondering about that too. SSO and Bypass are not required under the standard DMR report, so the only tracking and implementation right now is at the state level.
- Montali: If the information is out there, then there would be a way to capture. The other question: is this really that much of an issue in achieving the Bay nutrient reduction goals? If the data exists, then we can use that. But if there is no data, then it would require too much effort to track and model.
    - Brockenbrough: You'd include them in the model but not as a WLA because they are illegal.

  - Linker: Looking at the preliminary data, it seems that globally these loads might not make a huge difference but they could be very important to local areas.
  - Montali: Legally, these discharges should be handled anyway because they are illegal. No matter if you model them or not, you are legally required to eliminate them.
- Marya had a question about crediting SSO elimination
  - Zhou: We are very new to this. We'd need to model it first before we talk about reduction.
- Linker: There has been some work to track down and reduce illegal discharges.
  - Brockenbrough: MS4 jurisdictions have some practices like that in the stormwater sector, but I'm unaware of similar programs for the wastewater sector.
- Montali: We are starting informally with this issue in WV, to establish which our plants have chronic SSO problems, and determining what, if any, data is available. With the larger states,you have to decide whether it is feasible to get the site specific information that you need.
  - Brockenbrough: We have data but not a comprehensive database. We'd have to go back and see what kind of effort it would require to do that analysis in VA.
- Allan Brockenbrough called for consensus to move forward on this issue,
  - Marya Levelev: We would need to look at this further to see how it can be feasibly represented in the model.

Action: The WWTWG will continue review of the draft proposal to include SSO and bypass issues in a future iteration of the Watershed model. Jurisdictions will review available SSO and bypass data in their jurisdictions to determine feasibility to represent SSO and bypass loads and trends in the CBP modeling tools.

11:30 AM **Updates & Topics for Next/May 1st WWTWG Call**

- Decision on Wastewater 2025 forecast analysis
- Review of Wastewater Hockey Stick Assumptions
- Finalizing documentation of 2010 No-Action & E3 Decision Rules
- State updates on wastewater aspects of Phase III WIP developments
- WWTWG Vice Chair – Calling for nominations
- Other WWTWG topics?

11:45 AM **Adjourned**

Next conference call:
Tuesday, May 1, 2018 (10:00 am to 12:00 pm)

Call Participants:

Participants	**Affiliation**
Ning Zhou	Consultant
Michelle Williams	CRC
Vic D'Amato	TetraTech
Lew Linker	EPA CBPO-Modeling Workgroup
Allan Brockenbrough	VA DEQ
Matt Richards	VA DEQ
Mohsin Siddique	DC Water

Rashid Ahmed	NYS DEC
Maria Schumack	PA DEP
Megan Browning	WV DEP
Dave Montali	TetraTech
Marya Levelev	MDE
Geroge Mwangi	DNREC
Ray Tighe	VDH
Jack Hayes	DNREC
Doug Austin	EPA CBPO-SEE
Joel Blanco	EPA R3