Minutes
Wastewater Treatment Workgroup (WWTWG)
August 2, 2016
Teleconference

Summary of Actions and Decisions

ACTION: The WWTWG will approve the June minutes during their September conference call.

ACTION: Ning will provide further details on the data behind his proposed E3 scenario via email prior to the September WWTWG conference call.

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

ACTION: The WWTWG will approve the June minutes during their September conference call.

Phase III WIP Planning Target Methodology – Jeff Sweeney, EPA

The WWTWG discussed the Phase III WIP Planning Target Methodology, specifically, the E3 Scenario, No Action Scenario, and whether there is any need to revisit Phase II decision to set upper half of WWTP line at 3 mg/l equivalent; intercept at 8 mg/l. For information on those Model scenarios and how they were simulated in Phase II, please refer to Section 12.5.6 of the following documentation: https://archive.chesapeakebay.net/modeling/P5Documentation/SECTION_12.pdf

Discussion:

- Marya Levelev (MDE): What has changed in the last few years that would lead us to move to 2mg/L and .08mg/L?
- Spano: For this discussion I'd like to speak on behalf of wastewater treatment plant operators as opposed to in my role as chair. I'm alright with reducing the from 0.1mg/L to 0.08mg/L because it is only a 20% reduction, but the change from 3mg/L to 2mg/L is much more significant and I have an issue with that.
- Sweeney: This is a proposal Ning is putting out there. It is important to have equity amongst sectors. In the wastewater sector, we know there are significant plants operating at 2mg/L, so in a sense, this might even be a little lax. The non-point source sectors are talking about implementing every BMP on every available acre. E3 is supposed to be a theoretical maximum extent of effort, not even considering costs.
- Levelev: We want to know more about the data Ning has to support this proposal.
- Spano: Saying 2mg/L is achievable is about more than just whether you can get to 2mg/L now. It isn't easy to relate that to BMP implementation. Assuming a 2mg/L can be achieved is like assuming you could get 90-100% nutrient removal across every BMP. Plants are just now implementing ENR, and where they are getting concentrations around 2-3mg/L is because they are using capacity. I don't think having reached 2mg/L accurately reflects reality. I think it needs to be rigorous, but needs to be better supported. There needs to be more justification for why this is proposed.
- Sweeney: It is ultimately the Workgroup's decision. If you disagree with the proposal, you need to explain the rationale for your final decision to the WQGIT. E3 should represent the absolute limit of technology. If you had unlimited dollars, could you reach 2mg/L at all significant plants?

    - Spano: The problem is one would need to be able to achieve it in actual operation. Unless regulation is suspended, it could never be exceeded. It makes it nearly impossible to achieve, even at significant plants. There are ways of addressing with brand new technologies that maybe can, but don't know if we could do that across the entire watershed.
- Ed Stone (MDE): You don't want to use a number that could be a fluke, you need to use a number that is tied to a technology. We need to go to a field of experts to see what is on the drawing board. The non-significant facilities, where the limit of technology is closer to 3mg/L, we are proposing to set E3 at 8mg/L. That seems to contradict the concept of E3.
    - Sweeney: I think that is a possibility. That makes a lot of sense to me.
- Levelev: The proposed limit of technology for P would be a concern for us as well.
- Spano: If WWTPs were to become reuse plants and produced drinking water, then that would be a quantum change from what we are doing now and I believe that is imagining too far into the future. That would be a wholesale change in technology, not just implementing something at more facilities.
- Spano: Does anyone have a problem with using state data as opposed to Tetra Tech data?
    - Dave Schepens (DE DNREC): I would need to show this to our surface water section prior to comment.
    - No other comments were raised
- Sweeney: We will have to ask Ning why he is proposing the flow change. Maybe it is the better dataset we have that is more comprehensive, maybe he felt it was more manageable.
- Busch: In terms of using current progress year flow, I think using an individual progress year is a problem, because there is so much variability of plant flow from one year to the next. If we wanted to go that route, some kind of multiyear average would be more appropriate.
    - Sweeney: That makes a lot of sense for this scenario.
- Levelev: In reality, facilities need to be able to operate at their designs. The other option is to keep the tributary strategy.
- Spano: E3 can't be whatever we can eek out in a particular year. It has to be programmatically related to us doing a full court press. To ratchet down on the capacity flow and the nutrient concentration at the same time is unreasonable. To constrain flow and concentration would not allow us to handle growth in the region.
- Stone: What if you use the flow as an opportunity to create an emphasis on recycling. Go with a design of 20% recycling that is reality, but brings in the reuse concept without overdoing it.
    - Spano: Theoretically, I think that is something that could be considered but would require a wholesale change in regulations and constrains compared to what we currently have. That is imagining a future for which we don't have the pieces in place yet.
    - Stone: There is reuse going on in non-drinking water uses that might be more realistic. It doesn't need to be as dramatic as reinventing drinking water plants.
        - Spano: Yes, there could be some way of presenting a scenario. What I suspect is it would need to be a combination that considers concentration and flow together with caveats as opposed to splitting them up and driving both down.
- Spano: E3 led to broad sector-level assumptions that made it into the TMDL itself.
    - Sweeney: This will not define what you end up with in the state WIPs.

ACTION: Ning will provide further details on the data behind his proposed E3 scenario via email prior to the September WWTWG conference call.

Multi-Benefit BMP Project – Mark Sievers, Tetra Tech

Mark discussed Tetra Tech's project to quantify BMP impacts on multiple Chesapeake Bay Program Management Strategies. The project was proposed and selected last year as part of the Chesapeake Bay Program's annual GIT funding process.

Discussion:

- Schepens: Why use NSF 40 for BMPs? We use NSF 245 in Delware. I also see there is a septic denitrification BMP and I'm not sure how that is lumped in there.
    - David Wood (CRC): The BMPs names on Mark's list are the BMP names in NEIEN, based on the Onsite Wastewater Treatment Systems BMP Expert Panel report that was approved in 2014.
- Spano: Why exclude conventional WWTPs?
    - Sievers: Because they are related to cost-share conditions.
- Spano: If not included in the scope, I would observe that looking holistically at all sectors, there should be a disclaimer that this doesn't mean the same logic shouldn't always be applied to WWTPs.
- Spano: Anyone willing to be a volunteer to help Mark address some of these questions?
    - Schepens: You can send it to me in DE, and I will have our staff take a look. You may want to send an invite out to the data sharing committee from the WIP. I will send you the membership from the other states.

Updates and other business

- Attenuation Panel Update
    - A SPARROW run is being conducted in mid-August to provide the final analysis for the panel report. Report will be released by the end of August with approval prior to September 30th.
- Onsite Wastewater Treatment Systems panel
    - Panel work is currently on hold in order to ensure resources are fully devoted to completing the Attenuation Panel's work.
- WestVaCo Update
    - VA DEQ identified an operational explanation for the data abnormality. Therefore, the WWTWG approved the Modeling Workgroup's proposed process for adjusting loads from the Westvaco wastewater treatment plant for 1984-1996 based on monitoring data, in order to improve the accuracy of the model calibration. Gopal will include the explanation of the adjustment in the Beta 3 Model documentation.

Adjourn

List of Call Participants:

Name	Affiliation
Tanya Spano (Chair)	Metropolitan Washington Council of Governments
David Wood (Staff)	CRC, CBPO
Dave Schepens	DE DNREC
Jeff Sweeney	EPA, CBPO
Megan Thynge	EPA, CBPO
Ann Carkhuff	EPA, R3
Marya Levelev	MDE
Ed Stone	MDE
Greg Busch	MDE
Nasser Ameen	MWCOG

Rashid Ahmed	NYSDEC
Mark Sievers	Tetra Tech
Matt Richardson	VA DEQ
Megan Browning	WV DEP