



**Minutes
Wastewater Treatment Workgroup (WWTWG)
Teleconference
Tuesday, February 3, 2014, 10:00 AM – 12:00 PM**

Summary of Action and Decision Items

ACTION: Steve McLaughlin will forward more information on the cost analysis done on boat pump-out facilities to the Wastewater Treatment Workgroup members.

ACTION: CBPO staff will work with Steve McLaughlin and John Paine to schedule another presentation to address any remaining questions.

ACTION: Ning Zhou will work with the states individually to provide them each with the list of facilities included in the Bay Program's current dataset. Ning will also work with the state's technical staffs to help them identify data needs and how to get them.

ACTION: Ning will distribute an example historic data clean-up template to the group for their review.

ACTION: Ning will work individually with the states and their technical staffs to develop interim steps for developing a complete biosolids dataset.

ACTION: Ning will send the ICIS data pull results to each state.

ACTION: Draft path forward framework will be developed by CBPO staff and distributed to the WWTWG by February 27, 2015.

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

- Tanya convened the call, and verified call participants.

BMP Proposal – Steve McLaughlin, City of Virginia Beach, Ning Zhou, VT, and John Paine, URS

- Ning provided some background information on the Boat Pump-out Facilities in No Discharge Zones BMP and how it had been addressed by the Chesapeake Bay Program in the past. John and Steve spoke to the rationale behind Virginia Beach's new proposal.
 - For more information, please see Virginia Beach's [proposal memo](#).

Discussion:

- Ning Zhou (VT, CBPO): Ten years ago, the Chesapeake Bay Program began investigated tracking loads from boat discharges, but at the time, not many jurisdictions had good enough data to support the effort. Since we do not have a dedicated wastewater load for boat discharges in the Chesapeake Bay Watershed Model, we would need to come up with a load first, then reduce it with BMP credit. I think we can find a way to get credit by working with the Urban Stormwater Workgroup (USWG).
- Tanya Spano (Chair): For clarification, we can't make a decision regarding this BMP without first consulting the USWG, so this is just a first step.
- Steve McLaughlin (City of Virginia Beach): Our partners from the Hampton Road Sanitation District conducted monitoring analysis to quantify load reductions.

- John Paine (URS): We conducted an exhaustive literature review. In Maryland, they cited a paper that suggested that boat discharges accounted for 1% of Nitrogen loads to the Chesapeake Bay. We understand the data shortage, but we took 9 sets of samples from the Lyndhaven River to generate these numbers. While bacteria was the primary driver, they did speak to nitrogen and phosphorus reductions directly within the report.
- Allan Brockenbrough (VA DEQ): Could you speak to the characterization of the flows moving forward? Are the pump-outs metered?
 - Paine: They would be metered moving forward and they would also take grab samples. We would definitely be willing to install those meters moving forward. We did not have them for this study though.
- McLaughlin: This proposal seems to fit well with the Grey Infrastructure expert panel report that was recently published. They are very similar.
- Spano: Are methods for how to implement this BMP embedded in the proposal?
 - McLaughlin: No this is primarily a proposal for how to track and remove these materials that were going to the receiving waters in real life, rather than what a percent reduction would be estimated to do.
- Spano: There is still a mechanistic aspect that would need to be thought through.
- Ron Furlan (PA DEP): Did you determine cost per pound of nutrient renewed?
 - Paine: We have done a lot of research on that, and I will forward everyone the complete table. This is a potentially cost effective BMP. We found \$15-75/lb TN/year and \$200-1,000/lb TP/year.
- Spano: Any other specific questions? Cost and verification would be two other items we would like more information on. We will continue this discussion, thank you for bringing this forward.

ACTION: Steve McLaughlin will forward more information on the cost analysis done on boat pump-out facilities to the Wastewater Treatment Workgroup members.

ACTION: CBPO staff will work with Steve McLaughlin and John Paine to schedule another presentation to address any remaining questions.

Septic Data Sharing Project – Maureen Pepper, EPA

- Maureen provided an update on the progress of the Septic Data Sharing Project.
 - For more information, please see her [presentation](#).

Discussion:

- Maureen Pepper (EPA): The data collection protocol and letter of agreement are under review with the states. The Chesapeake Bay Program will host the data that will be collected. In March/April, CBPO will obtain signatures on the letter agreement in coordination with their communications offices during a potential “event”.
- Spano: Thanked Maureen and Joyce Hudson (EPA) for their work, as well as the jurisdictional colleagues. When this is ready to go out, we do want to bring this to the public’s attention. It is a good model, with lots of good lessons. In terms of storing/retrieving the data, will it be beta-tested before the rollout?
 - Pepper: That is not something that will necessarily be shown on the date of the rollout, but yes, it will be done on the EPA end, to make sure the process works.
- Spano: When the event is planned, please coordinate with Ning and David so we can share it with the workgroup members.

Historic Data Cleanup – Ning Zhou, VT

- Ning reviewed the timeline and process that has been outlined for the historic data cleanup effort for the phase VI model, and presented the summary of the current data used for phase V model.
 - A draft dataset is due by June 30, 2015, and a final dataset by September 30, 2015.
 - For more information, please see the [summary document](#).

Discussion:

- Zhou: This will be a workgroup priority for the next several months, and all the way through this year. While a lot of this effort is directed to non-point source data, we still have a lot of areas that we can improve upon, especially on non-significant facilities.
- Zhou: Our past efforts were sort of piecemeal, changing our focuses throughout. Our efforts now are focused on looking all the way back to 1985 to make sure we have good facility lists for every individual year from 1985-2014.
- Zhou: We used numbers compiled by Tetra Tech, and filled-in back to 1984 to generate the number of facilities by year, and there are a lot of errors in these numbers.
- Zhou: There is a huge file with a list of facilities included in this count, and I will send that to the states individually. Here we will talk about the steps and process, and I will work with the technical staffs of the states individually over the next few months.

ACTION: Ning Zhou will work with the states individually to provide them each with the list of facilities included in the Bay Program's current dataset. Ning will also work with the state's technical staffs to help them identify data needs and how to get them.

- Allan Brockenbrough (VA DEQ): This is a herculean task and I have no-one to put on it. I question the value because these facilities were non-significant for a reason.
- Spano: What we are hearing is that if you parse out the table into industrial, significant, and non-significant facilities, you might find that the data discrepancy lies largely in the non-significant facilities, which does not make up much of the load.
- Zhou: We can prioritize our efforts based on the loads from the facilities we think are coming in. As long as the states feel comfortable with their approaches, and document it, I think that is fine. All methodologies and estimates made in this effort must just be documented.
- Brockenbrough: We originally estimated that non-significant facilities only made up 5% of the point source loads at the time we made that call.
- Spano: How are other states feeling about Allan's concerns?
 - Marya Levelev (MDE): I think we feel similarly. I think we have good implementation on municipal facilities, but I don't think we'll have the capability to clean up the data for industrial facilities.
 - John DeFriece (DE DNREC): We are in relatively good shape in Delaware. Can we just look for corrections to what we already sent you? Or do we have to resubmit everything?
 - Zhou: That will be the starting point. I will send whatever is in the Phase 5 model calibration, and the states can work backwards in time from there.
- Spano: Is there a date cutoff where it doesn't make sense to spend any more effort?
 - Levelev: We have years where there are paper records, but to go back that far would be impossible.
- Spano: We need to figure out the point where there is no longer a benefit to the states and to the Bay Program.
 - John Weidman (NYSDEC): We have some data, we can go back and look.

- DeFriece: Fixing intake pass-through values would have a bigger impact than fixing the databases of the smaller facilities.
 - Zhou: That is a good point, since we have had a long-time issue with the industrial facilities. This would be a good opportunity for us to look at those facilities and make those corrections.
- Spano: Ning, could you take a state with a smaller number of facilities and send an example to the states with regards to what data and level of specificity you are looking for? It might be better for the states to weigh in on what data is needed. It will show the range of data the ultimate spreadsheet will include.
 - Ning: Ok, for the individual year it will be exactly the same as for the progress runs.

ACTION: Ning will distribute an example historic data clean-up template to the group for their review.

- Lori Mitzel (PA DEP): Is the issue that you may not have all the facilities as far back as you think they were there, or that you don't have the actual nutrient values?
 - Zhou: Those are two different efforts, but one effort is to determine when the facilities are actually active.
- Mitzel: There is no way we can get that information. It probably doesn't exist anymore. We could maybe get a start date of the initial permit issuance, then make an assumption about when it might have started. Can we start with what is in the WIP and work backwards?
 - Zhou: Assumptions are fine in this case. And yes, that will work for whatever facilities you list in the WIP.
- Spano: If the WIP is the baseline, anything prior to that gets harder and you have to evaluate if the level of effort required to get precision is worthwhile.
- Mitzel: If data from ICIS has already been used, we can't give you anything better.
- Dave Schepens (DE DNREC): In Delaware we are losing staff, and I don't think we can keep up all of the new data cleanup requests.
- Spano: The WIP and the load are two key aspects of timing significance. We need to use those as areas to set different priorities. We need a plan and a schedule, but we need to have a clear thinking so that by the next call we have fundamental agreement of how to move forward. When you say a draft, what do you mean?
 - Zhou: A draft of a clean database.
- Spano: I will work offline with Ning and David to draft up the language of a framework so we can reach an agreement at the next call because we need to move forward. When reaching the path forward, we already know that we will need to document what has been vetted, what reasonable assumptions are, and what a reasonable path is.
- Ning: This will be a big document, so whatever we do, we need to put very careful language in there to be very defensive.

Biosolids and Spray Irrigation Data – *Ning Zhou, VT*

- Ning reviewed the sample data have been provided by several jurisdictions and emphasized that the timeline for establishing this new dataset is the same as the timeline for the historic data cleanup effort.

Discussion:

- Zhou: Due dates are exactly the same as the historic data cleanup and this is a new dataset we need to create. Using ICIS, we can only get data going back to 1994, through a category called sludge land application. This data is not complete though, we need more than this. We can use

it as a backup, but it is nowhere near everything. From this data set, there is a clear trend that sludge land application going up.

- Levelv: I think it is important to point out that the trend is not necessarily driven by more application, but that there could just be better data in the database.
 - Spano: To help address that question, it would help if we had a comparable chart with flow. Also, the zeros should be excluded unless the application is actually zero, so that missing data isn't improperly reflected.
- Zhou: In the data summary from states, you can see that the number of facilities do not match the ICIS database numbers.
- Levelv: There is a lot of data, and no one to go through it. I don't know what is in ICIS and what is in the files.
- Zhou: Maryland sent me a lot of data. We only have state submitted data from Maryland, Virginia, and New York, and just for the years listed on the summary table. If species values are not available, we can use defaults.
- Zhou: Also, there are several facilities located outside of the watershed, but the land applications could be within the watershed. Do we treat that as an imported load?
 - Brockenbrough (VA DEQ): Brian Hawthorn in our land application program should be able to help you sort through that.
- Spano: Ning, what do you need from the states to move this forward?
 - Zhou: We need to come up with interim steps, such as when we will start this effort. I will work with individual states and their technical staff. We can discuss how to get plans started.

ACTION: Ning will work individually with the states and their technical staffs to develop interim steps for developing a complete biosolids dataset.

- Spano: If this workgroup is supposed to help confirm a plan, this workgroup has a responsibility for ensuring the effort for this data collection is coordinated with the effort to clean-up the historic data.
- Zhou: I will send ICIS data pull, state-by-state, back to the states.

ACTION: Ning will send the ICIS data pull results to each state.

- Spano: I suggest Ning share historic data and the ICIS data pull individually and find out what is needed from the states so that 3 weeks from now, he can develop what the proposed plan is, so I can review it and we can get it out in advance of the call so we can have a decision by March.
- Spano: Are the states comfortable with that approach?
 - All states agreed
- Spano: I want to be conferring with Ning and David no later than February 23rd, so the plan will be distributed to the workgroup no later than February 27. Separately, I want to figure out how to get the same data for the MWCOG region as well.

ACTION: Draft path forward framework will be developed by CBPO staff and distributed to the WWTWG by February 27, 2015.

Maryland Rapid Infiltration (RI) project – Greg Busch, MDE

This agenda item was moved to the March 3rd WWTWG conference call.

Updates and other business

VA Septic BMP Proposal Update – Marcia Degen (VA Dept of Health)

- Marcia Degen (VA Dept of Health): I have been working with Ning to start another panel to look at two generic BMPs: peat systems to a pad, and separating drip systems from low pressure systems to see if the data warrants kicking generic low pressure up to a higher level of efficiency. We hope to have those up and running by late spring.

2014 Progress Run – Ning Zhou

- Zhou: We already included several jurisdictions data in the previous progress run. Now we have Blue Plains data and Virginia data, which we will include in the draft final run later this week. Once that run is complete, I will send a summary output to each state. I will be doing that next week.

Adjourn

Next conference call:

Tuesday, March 3, 2015

List of Call Participants

Name	Affiliation
Tanya Spano (Chair)	Metropolitan Washington Council of Governments
Ning Zhou (Coordinator)	VT, CBPO
David Wood (Staff)	CRC, CBPO
John DeFriece	DE DNREC
Jennifer Roushey	DE DNREC
Dave Schepens	DE DNREC
Brian Churchill	DE DNREC
Bryan Ashby	DE DNREC
Marcia Fox	DE DNREC
Maureen Pepper	EPA
Mary Levelev	MDE
Greg Busch	MDE
John Weidman	NYSDEC
Ron Furlan	PA Dept. of Environmental Protection
Lori Mitzel	PA Dept. of Environmental Protection
Marcia Degen	Virginia Dept. Of Health
Eric Aschenbach	Virginia Dept. Of Health
Allen Brockenbrough	Virginia DEQ
Steve McLaughlin	City of Virginia Beach
John Paine	URS
Shaun Bradbury	
Valerie Breznicky	