



**Chesapeake Bay Program
Watershed Technical Workgroup (WTWG)
Conference call
Thursday, April 7, 2016**

Minutes

Summary of Action and Decision Items

ACTION: WTWG members should review the draft Manure Treatment Technology BMP expert panel's Scenario Builder appendix and send any comments to Jeremy Hanson (jchanson@vt.edu).

ACTION: WTWG members should review the draft Manure Treatment Technology BMP expert panel's Scenario Builder appendix and send any comments to Jeremy Hanson (jchanson@vt.edu).

ACTION: WTWG members should review the proposed trading schema for NEIEN, and provide any comments to Matt Johnston (mjohnston@chesapeakebay.net) and Pat Gleason (Gleason.Patricia@epa.gov) comments on trading schema. Formal approval of the schema will be sought in May.

ACTION: If WTWG members have any additional requests that they would like the Modeling Workgroup to consider during the development of the Phase 6 Model, please send them to Matt.

ACTION: Matt will follow up with Virginia on their xml codes and how to submit pervious and impervious acres treated by urban BMPs in Phase 6.

ACTION: WTWG should please send nominations for a representative to serve on the Boat Pump Out BMP expert panel to David Wood (Wood.DavidM@epa.gov).

ACTION: Matt will distribute the proposed changes to the land use BMPs for Phase 6 to the WTWG with any additional follow-up that was requested during the March call.

Welcome and Introductions – Matt Johnston, UMD, Coordinator

David Wood (CRC) asked signatory members to confirm their primary and alternate representative to the Workgroup.

- Marty Hurd will be primary for the District of Columbia.

ACTION: WTWG members should review the draft Manure Treatment Technology BMP expert panel's Scenario Builder appendix and send any comments to Jeremy Hanson (jchanson@vt.edu).

Preliminary Agricultural Panel Reports Plan – Mark Dubin, UMD

Mark described a process for presenting preliminary agricultural panel reports throughout 2016 in an effort to ensure enough time is provided for changes to the modeling tools and NEIEN prior to the October, 2016 calibration of the Phase 6 Model.

Discussion:

- Johnston: We are trying to bring information about the reporting requirements prior to the panel releasing the final report in order to provide additional time to collect and revised historic BMP data.
- Dubin: We were asked to map out the status and timelines for all the BMP panels. We felt that the timelines for delivering the final reports likely wouldn't line up well with the timeline this workgroup and the modeling team, so we started developing preliminary panel reports. We are working to have these released in time for the April 21st AGWG meeting. These papers will include the BMP definition, limiting conditions of the BMP, units for the data tracking, land uses it would apply to in Phase 6, and how likely the recommendations might be to change. These preliminary reports will also include a section on the recommendations for how to manage converting historical implementation data into the new BMP structure being recommended by the panel.

Manure Treatment Technology Panel – David Wood, CRC

David presented the draft Scenario Builder technical appendix for the Manure Treatment Technology Panel.

Discussion:

- Johnston: I would like to emphasize that we are setting this up like manure transport. If you are treating manure with these technologies and then transporting it, you only report the MTT BMP. I would also like to emphasize that we are not making any assumptions about storage systems. That needs to be tracked separately.
- Alisha Mulkey (MDA): If I look at the list of technologies, solid/liquid separation isn't on the list but we can report this for transport?
 - Johnston: Correct, the liquid separation makes the manure drier and easier to transport. In Phase 5 we couldn't give everyone the option to report wet or dry tons, but in Phase 6 we give states the option to report either.
- Mulkey: The only way we would be have transport data is if they are part of cost share program. I won't have records of the separate waste streams to report the solid piece separately.
 - Johnston: The panel can't determine how each state tracks manure transport, so this was the way they had to deal with this practice.
- Greg Sandi (MDE): With solid/liquid separation, if we just are transporting the solids but the liquids are applied on the fields, that complicates things. Capturing the different streams of these different nutrients and what is being volatilized is a challenge. The liquids could be separated out and land applied or shipped somewhere else.
 - Johnston: These are good questions and I need to think some more about how the math works out with separating and tracking these waste streams independently. I will get back to you.
- Clint Gill (DDA): Chris Brosch wanted just to note that he is fully supportive of the report and this appendix.

ACTION: WTWG members should review the draft Manure Treatment Technology BMP expert panel's Scenario Builder appendix and send any comments to Jeremy Hanson (jchanson@vt.edu).

Water Quality Trading in NEIEN – Olivia Devereux, DEC

For the 2016 Progress model assessment and forward, NEIEN schema changes are necessary to track implementation associated with nutrient trading and offsets – if reported by jurisdictions.

Discussion:

- Tom Simpson (Independence Virginia): On slide 2, it says it isn't necessary to report additional trading information for BMPs certified for use in a trade, but not sold or otherwise used. But on

slide 3 it says in highlighted section that jurisdictions may need to report if a credit was certified but went unused. Could there be confusion if it has the potential to be counted as a BMP but is for sale?

- Devereux: It should only be a trade or offset if the credit is sold.
 - Pat Gleason (EPA): We might want to think about the wording, because something can be certified but not created. Some will be generated but not sold.
- Simpson: Without getting into detail, my thought is, assuming these are private sector generated credits, they are generating credits then to sell them. If we count them for BMP credit, I guess we would need to remove the BMP credit once they are sold.
 - Devereux: It is a timing issue. If you generated the credit in 2015 but no one buys it until 2018, it would count towards the TMDL in 2016-17, but in 2018 it would count towards the sector where it was bought as a trade.
 - Simpson: That makes sense but as more of these are sold I think it will be more of a challenge.
 - Devereux: I guess that is risk the states are willing to take on if a lot of trading credits are generated but never purchased.
- Jeff Sweeney (EPA): If point sources are the buyer or seller, is there a Technical Memo that describes that process? NEIEN is just for nonpoint source BMPs.
 - Devereux: Those loads would have to be tracked in the point source data.
- Sweeney: So there will be a similar mechanism on the point source side for their tracking?
 - Devereux: Yes, and that is usually coming through the permits, but we will need to identify that.
- Marty Hurd (DOEE): The second bullet on the blue slide, I assume it is more complicated if you have only given a portion of the BMP for trade.
 - Devereux: That is why there is a field for portion. You identify the amount of the BMP as well as the BMP type that is being traded.
- Hurd: Great. Looking at the schema, it looks like it's possible for a BMP to be traded to more than one buyer?
 - Devereux: Right. If I have 100 acres I could sell 30 to an MS4 and 40 to a point source.
- Hurd: Would the WTWG be asked to review validations or checks on this? Would you want checks to make sure more wasn't traded than were generated? There also looks like some new codes we would need to look at.
 - Devereux: I don't know if the trade sector values are in there but they are ones we should be familiar with. I will make sure they are posted on the meeting website. In terms of validations, there should be some built into the NEIEN postprocessor.
- Hurd: I see there is a trade begin and end date. What if the BMP has a lifespan of 10 years, and the BMP is traded for year 5 and 6 but not for 7-10. Does it come back to its original location?
 - Devereux: Yes. That is set by the trade begin and trade end date. Those dates must fall within the lifespan.
 - Hurd: Thanks, it looks good.
- Johnston: What if they report a trade in year 11?
 - Devereux: They can't get credit outside of the BMP lifespan. That would be a problem for the states if they sold it, but for the Bay Program tracking and accounting, that isn't an issue.
 - Gleason: It would need to be recertified at a particular point in time, so there are other things out there in place to make sure what's happening is real.
- Sweeney: To address this generally, the point of this effort is that there are a lot of different trading programs out there with different tools and credits. At the end of this, EPA needs to make sure that if the state tools are saying there is a 10 pound net nitrogen benefit, but the model says there is only a 1 pound net benefit, that will raise eyebrows and we need to address that.
- Sandi: When I look at how we may potentially trade, it may not just be in acres. We normally report acres of a BMP, but we trade away pounds. Would we need to reconcile that on our end?

- Devereux: That doesn't have to do with NEIEN. We would use the information from these two model runs, and it wouldn't be BMP by BMP.
- Sandi: Maybe we want to add in a little more specific geographic information for the trade buyer just to make sure.
 - Devereux: That would be fine.
- Johnston: I am not hearing any heartburn over this. We'd like you all to take more time to review this and bring feedback to Pat and myself and we will ask for approval at the May meeting.

ACTION: WTWG members should review the proposed trading schema for NEIEN, and provide any comments to Matt Johnston (mjohnston@chesapeakebay.net) and Pat Gleason (Gleason.Patricia@epa.gov) comments on trading schema. Formal approval of the schema will be sought in May.

Update on Requests to Modeling Workgroup – Matt Johnston, UMD

Matt provided a list and status update of Phase 6 requests made by the WTWG and Ag Workgroup to the Modeling Workgroup.

Discussion:

- Johnston: This is a list of items we've asked the Modeling Workgroup to address in the Phase 6 model. I wanted to give an update on where they stand. I presented this yesterday to the chairs of the Modeling Workgroup and members of the modeling team. They will present these for decisions by the MWG during their July quarterly.
- Sarah Lane (MD DNR): On separating fine and coarse sediments, I know the dissenting document on the shoreline erosion control had some literature on nearshore benefits of certain size sediments. I see a little disconnect between the modeling team saying there is no data. Are they saying there is no literature to break out how much is coarse vs fine for the TMDL?
 - Johnston: I should have clarified, yes. There isn't data to break out the fine and coarse sediments. Near shore benefits has always been broken out as fine and coarse and will continue to be. This is more for non-tidal loads.
- Lane: Is there a way to reframe this question on what we are really asking to be modeled so we aren't messing with what we don't have information for but allows us to capture what we know about nearshore?
 - Johnston: I can definitely clarify that these are watershed inputs, from the tributaries.
- Simpson: For question two, would each stream segment be assigned a nutrient and sediment load that would be taken away from the upland part? A lot of nutrients in streams or floodplains came from upland. There is some continual interaction where they transition from being upland nutrients to stream segment nutrients.
 - Johnston: In terms of sediment, there is an overall sediment load we know goes to bay. Before, the stream load was implicit, but now it will be broken out. In each segment there is a stream load that might go negative if they are net depositional, while others are providing sediment scour.
 - Simpson: I like that part. It is tougher to allocate with nutrients.
- Johnston: We are in the open review for Phase 6. As a workgroup, we can continue to make recommendations for the MWG to look at. If there is anything I didn't mention beyond these four, please let me know and I can bring them forward.

ACTION: If WTWG members have any additional requests that they would like the Modeling Workgroup to consider during the development of the Phase 6 Model, please send them to Matt.

Timelines – Jeff Sweeney, EPA and Matt Johnston, UMD

Jeff and Matt provided timelines for the Phase 6 modeling effort, release of 2015 Progress, release of 2015 Milestone evaluations, and revisions to draft 2017 Milestones.

Discussion:

- Johnston: These first few months of 2016 we have really been focused on Progress. Now I will transition into focusing on the BMP cleanup effort. Between now and July, I would like to schedule calls with each state to talk about what their data looks like. We really want to improve for the July beta.
- Robin Pellicano (MDE): In the last WTWG meeting there was an agenda item on changes in land use BMP crediting for Phase 6. Has anything been provided to the workgroup as a follow-up to that discussion? Is that something that needs to be talked about prior to September?
 - Johnston: Yes, we introduced it last month and asked for comments. We didn't receive any. I will send it out again after this call.

ACTION: Matt will distribute the proposed changes to the land use BMPs for Phase 6 to the WTWG with any additional follow-up that was requested during the March call.

- Hurd: Is the Land Use Workgroup on a schedule to provide historic land use/land cover data for review? We have had issues in the District where parklands were being characterized incorrectly. It would be helpful for us to look at that historic data.
 - Johnston: There are actually two chances for you to review that. The first is through the LUWG process. They are collecting local data on the land uses and that is before it is thrown in with all the other sector data. The second opportunity is when you see base conditions later this month for the beta 2 calibration. You can review the total acres of each land use with that base condition, and that is what is really going into the model. Comments on that can come to me.
 - Sweeney: There is also the high res land cover database that is going into Phase 6. They are behind schedule. They are discussing now what the schedule impacts might be. There will be a topic on Monday on the WQGIT meeting agenda to discuss the delay.
- Johnston: As a reminder, while one portion of the Phase 6 process is running behind, our portion is still moving on the same schedule. There is no proposal to say that if the land use data comes in late that we extend historic data collection. We will still aim to hit that September 30th deadline.

Submitting Land Use Codes for Phase 6 – Matt Johnston, UMD

VA requested the ability to submit pervious AND impervious acres treated by urban BMPs for the Phase 6 effort. Matt reviewed a list of pros and cons to this approach and ask for feedback from members.

Discussion:

- Johnston: Virginia contacted me and asked why, if they are submitting a wetpond, can't they submit that it treats 10 acres of pervious and 2 acres of impervious. It is currently set up so it can only treat 12 total acres. We may need to tweak something in NEIEN to allow that, but it can be done. I do want to caution everyone though. As you put together historic BMP data, if you try to get very specific with all of the land uses in the model, there will be more opportunities to run out of available acres to credit those BMPs. I encourage you to use the defaults unless there are BMPs where it makes particular sense to be more specific.
- Kristy Woodall (VA DEQ): Will you follow-up with how to do that if we do want to separate that out?
 - Johnston: Yes. I just got word this morning that it can be done, so we will follow up to look at your xml and see how we could do it.

- Sweeney: We have looked at this many times and you really need to be able to substantiate and track with land uses they go on. We just want to make sure there isn't any targeting of specific land uses.

ACTION: Matt will follow up with Virginia on their xml codes and how to submit pervious and impervious acres treated by urban BMPs in Phase 6.

Updates from Panel Members – Group

- Wood: The new Boat Pump Out BMP expert panel needs a WTWG representative, so we would like to ask for volunteers.
 - Sandi: I'd nominate Bill Keeling.

ACTION: WTWG should please send nominations for a representative to serve on the Boat Pump Out BMP expert panel to David Wood (Wood.DavidM@epa.gov).

- Johnston: The AWMS panel is meeting today and will have their open stakeholder session this afternoon. They are basically looking at, in the P6 model, how much manure can be recovered before and after a storage shed is built.
- Johnston: The Phase 6 Nutrient Management panel has been meeting for a while now and right now, they are thinking about possibly including Nutrient Management acres in the way nutrients are spread across the watershed. Some crop acres have more need or less need, and that would be part of the baseline condition based on whether those acres have a Nutrient Management plan or not. That is still being debated and that approach hasn't been included in either beta version of the model as part of nutrient spread. They are also considering additional credits for timing and placement of nutrients.
 - Sweeney: Keep an eye on the Nutrient Management panel because it will impact the BMP history.
- Sandi: Impervious surface disconnection panel is finalizing their recommendations. They are setting it up to be reported three different ways. One is a generic default credit, the next is using stormwater performance standards, and the third is something similar to stream restoration. They are still fleshing that out and it will probably be out to the USWG in May.
 - Johnston: We all know how challenging it is to track and report three different ways. Has that been discussed in the panel at all?
 - Sandi: They wanted to provide the ability to report in different ways for flexibility. My sense is people will either report the default of the stormwater performance standard method.
- Lane: Floating Treatment Wetland panel is finalizing their report and it should be released in June to the USWG. They are looking at existing wet pond systems, so urban or agriculture land uses could apply. I am looking at NRCS codes for agriculture and crosswalking them with the BMP, so I could see it also having to go to the AGWG.
- Wood: The Tree Canopy panel's Scenario Builder appendix should be released soon. It is expected to be a land use change BMP.

Adjourned

List of Call Participants

Member Name	Affiliation
Matt Johnston (Coordinator)	UMD, CBPO
David Wood (Staff)	CRC
Olivia Devereux	DEC
Clint Gill	DDA
Tyler Monteif	DE DNREC
Marty Hurd	DOEE
Pat Gleason	EPA
Jeff Sweeney	EPA
Tom Simpson	Independence Virginia
Sarah Lane	MD DNR
Alisha Mulkey	MDA
Greg Sandi	MDE
Robin Pellicano	MDE
Norm Goulet	NVRC
Kristy Woodall	VA DEQ
Mark Dubin	UMD
Alana Hartman	WV DEP