

Watershed Technical Workgroup Conference Call

September 1, 2016

Meeting Minutes

Summary of Actions and Decisions

DECISION: The WTWG approved the August meeting minutes as-written.

ACTION: Matt Johnston will revise Question 8 of the Oyster Aquaculture technical appendix in order to remove a typo.

ACTION: Matt Johnston will add a question to the Oyster Aquaculture technical appendix to state that point in time when the oysters end their grow-out should be the point when the reduction efficiency is applied.

DECISION: The WTWG approved the Manure Treatment Technology BMP expert panel report technical appendix.

DECISION: The WTWG approved the Urban Tree Canopy BMP Expert Panel report.

ACTION: Chris Brosch and Matt Johnston will discuss flock count defaults for AWMS reporting.

ACTION: Matt Johnston will make a revision to the Nutrient Management technical appendix to allow reporting of percentages.

Introductions and Announcements

DECISION: The WTWG approved the August meeting minutes as-written.

Matt Johnston (UMD, Coordinator): We do have a draft technical appendix for the Phase 6 Nutrient Management Expert Panel. Later on the agenda, I will show how the NEIEN appendix is set up for the BMP. You can start to report Phase 6 Nutrient Management, but we do anticipate changes.

Oyster Aquaculture BMP Expert Panel Report Briefing

- Bill Keeling (VA DEQ): Who would be measuring the 50 oysters as part of the verification recommendations?
 - Ward Slacum (ORP, Panel Coordinator): We are under the impression that these are just recommendations by the panel. If the state wants to use oysters as BMPs, they would develop a verification protocol that would describe who is responsible for measuring the oysters. It could be in the state verification method, or they could rely upon self-reporting.
- Ted Tesler (PA DEP): When oysters are cultivated, they are in the open stream channel?
 - Slacum: They are in the Bay proper.
- Tesler: Are there flow restrictions or baffling?
 - Slacum: No, not typically.
- Keeling: Would this BMP include oyster dredging?

- Slacum: There are two major practices by the aquaculture industry. One is propagating oysters in containers in the water, like cages or rafts. Some are in the water column, some on top and some on bottom. The other practice is similar to historical harvest where aquaculturists have a lease, deploy spat on shell on the bottom and they maintain that location. Those are harvested through dredging or tongs.
 - Johnston: To clarify, this panel is not recommending any credit for the harvesting of wild oysters at this time, this is strictly an aquaculture BMP.
- Keeling: Harvest using dredges, even for aquaculture, creates disturbance to the bed floor. Putting sediments into the water column during the harvest process is my concern.
 - Slacum: I can't say for sure, but I know the unintended consequences section of the report would address concerns like that.
- Keeling: I don't know if the state will ever get as much detailed information as is proposed. We may not get latitude/longitude, only aggregated river basins.
 - Johnston: The technical appendix touches on that and basically allows states to report any acceptable geographies. Those would be adjacent land geographies. A lat/long in the water is the best thing to report, however, if you wanted to report county wide or basin wide, that is still acceptable.
- Keeling: Is it a credit to the Watershed Model or the Water Quality Sediment Transport Model (WQSTM)?
 - Johnston: The Watershed Model because that is our management model. WQSTM is not run every time there is a progress run. Think of it as similar to the shoreline management BMP.
- Keeling: I don't see why we couldn't take a run of the WQSTM to determine where the oysters are actually located, looking at the loads from that cell and subtracting the mass reduced.
 - Johnston: We can't do that every time we run a new version of progress.
 - Keeling: You would just run it once. This would be an implicitly captured source, so we would need some sort of cap applied here. This is not happening in the watershed, yet we are proposing to reduce loads in the watershed.
 - Johnston: We tackled this same issue in the algal flow way technology report and shoreline management report. In both those cases, the partnership agreed that these types of in-situ BMPs would be simulated in the watershed model because that is the partnership's management model.
- James Davis-Martin (VA DEQ): What land use classes get the credit for the reductions?
 - Johnston: It is distributed across all the land use classes at the end of the edge of stream load. It is not a sector-based BMP, it is just a load reduction BMP.
- Jeremy Hanson (VT): What is the timeline for finishing up this report?
 - Slacum: We are expecting to have a release webinar on September 22nd to begin the 30 day comment period.
- Keeling: If all I receive is that in the Rappahannock, there were x triploid and y diploid oysters harvested. How would I report that?
 - Johnston: You would have to work that out within your state.
- Keeling: We may need to explore expanding the approved NEIEN geographies.
 - Johnston: I believe the HUC6 would work, but we can look into state river basins as well.

ACTION: Matt Johnston will revise Question 8 of the Oyster Aquaculture technical appendix in order to remove a typo.

- Davis-Martin: Could you clarify the process Ward described of relocating oysters in the midpoint of their life and reporting that for credit?

ACTION: Matt Johnston will add a question to the Oyster Aquaculture technical appendix to state that point in time when the oysters end their grow-out should be the point when the reduction efficiency is applied.

- Slacum: We assumed that there would be a need to actually credit both locations, where they were originally propagated we assume that location would want to credit that portion of their life cycle, and the next location would be a smaller portion of that. If you move to a second location, they would need to grow into a larger size category for the credit to be appropriate, and the difference in the size classes would be what is creditable.
- Keeling: If the only data I receive says the oysters started in the Rappahannock and finished in the Rappahannock, this would be applicable?
 - Slacum: Correct.
- Johnston: My gut reaction is it is not worth the extra effort from a management side, but the science tells us you get more benefit from whichever location sees the majority of the growth. It is just more burden on the tracking and reporting.
 - Davis-Martin: I'd say report it at the site where majority of the growth occurred, but in reality it would probably always be reported at the final harvest location.
- Davis-Martin: Because these oysters are removing N and P from the water and we are trying to apply reduction to the watershed, shouldn't the entire watershed draining to the harvest location be credited with the reduction?
 - Johnston: I think we had similar comments on the shoreline management credit, and the decision we came to was no, the land river segment adjacent to the practice would receive the credit.
 - Davis-Martin: I don't know that this is the same as shoreline management because that reduces erosion from a specific shoreline. It might be more similar to algal flow ways. If this is an assumption we need to make in order to simplify crediting, ok.

Manure Treatment Technology BMP Expert Panel report

- Keeling: The panel made recommendations on reductions that may be tweaked a little based on the Modeling Workgroup recommendations?
 - Hanson: Correct. It would be a small adjustment to the efficiencies based on how air deposition is handled.
 - Johnston: Correct, and this air deposition change would impact all BMPs that affect ammonia.
- Johnston: I'd like to remind the group how the BMP was set up in NEIEN. This is a nitrogen reducing BMP because more N is taken out of manure and off-gassed. But it is also a manure transport BMP. For operations that use these BMPs, you would report them as a manure

transport BMP, but in the new way defined in the appendix. The key is not to double count the manure transport.

- Keeling: So if the manure run through these technologies is ultimately transported, I cannot report it as manure transport, I need to report it as this technology?
 - Johnston: Correct. County from, county to, and the number of tons as an animal type by the technology. County from and county to can be the same if the manure does not leave the county.
- Keeling: I am not sure how we will keep this straight from manure transport when we have brokers receiving from multiple sources with the comingling of manure.
 - Tesler: I think doing it as an order of process, doing MTT tons first, then the remaining transport. But you are right that the difficulty is tracking the source data.
- Keeling: It is the difficulty in re-working our manure transport tracking.
- Tesler: We will entertain a motion to approve the MTT report.
 - No objections were raised.

DECISION: The WTWG approved the Manure Treatment Technology BMP expert panel report technical appendix.

Urban Tree Canopy BMP Expert Panel Report

- Davis-Martin: How is the Urban Forest Planting BMP reported?
 - Hanson: You report the actual acreage of the planting.
- Tesler: How does this mesh with the old tree planning BMP?
 - Johnston: States have always been able to report historic tree plantings as either a count or as acres based on a defined conversion rate. Now we have new definitions for how many trees equal one acre. That means that when reporting a count, the number of acres you receive credit for will change. When reporting acres, you need to make some means of estimating how many trees are on there.
 - Tesler: I think we would use the previous definition to make that estimate.
- Keeling: We are not talking a huge acreage. If we need to provide inspection data to continue its use beyond the calibration, we would need to meet this new definition. If there is no inspection, these will be coming out of the history anyway.
 - Hanson: The credit duration for urban forest planting is 15 years, and for urban tree canopy expansion it is 10 years.
- Davis-Martin: Doesn't the back-out procedure apply here?
 - Johnston: Correct. For all land use change BMPs the back-out procedures would apply.
- Davis-Martin: When does the back-out procedure apply?
 - Johnston: 2012 is the current back-out year. Back-out allows us to describe a steady state going forward. We assume the Ag Census plus imagery combine to take into account the BMPs prior.
 - Davis-Martin: So you're saying you assume all tree canopy reported prior to 2013 is accounted for by updated land use information?
 - Johnston: Yes, it is assumed to be in the land use data.

- Davis-Martin: I think the panel recognized that there is a growth period where it wouldn't be captured in the imagery. I'm just suggesting that back-out for forested land use practices should not apply to 2013, but 2003, or something like that.
 - Johnston: If that were the case, every acre planted in 2016 shouldn't receive credit until 2026. I don't think this just effects this BMP, but all of our BMPs. I do think we need to have the back-out conversation at the next WTWG meeting.
- Keeling: I don't have a problem with using the new definition from post-calibration forward. But I don't see why we should apply it retroactively to a history that is most likely going to be backed out or aged out.
 - Johnston: That is a good point. The previous assumption was 100 stems per acre. Instead of asking you to revise this, could you put your old numbers into the NEIEN appendix and just divide that number by three.
 - Keeling: I don't support the transformation variable because the Department of Forestry was recommending rates based on what they already have. It is going back to who reported it and confirming all of that.
 - Rebecca Hanmer (FWG Chair): I want to weigh in and support what Bill is saying. You are talking about a small acreage. This will work itself out over time. It is an area of uncertainty for very little gain to apply the new definition at this time.
- Johnston: We can add something to the technical appendix that historic acres can be accounted for as-is. That the new definition applies to acres reported after 2013.
- Keeling: My history doesn't have this BMP as urban forest planting. It is probably tree planting applied to an urban land use. I was hoping this was something we could just do in Scenario Builder (SB) for the history. SB will map whether we called it tree planting or something else, it would map to urban forest planting.
 - Johnston: Everything in the history can't map to urban forest planting because a lot of trees were planted as street trees, and would qualify for the urban tree canopy expansion BMP, not urban forest planting.
- Keeling: Virginia only agreed to this BMP if the historic acres mapped to the new urban forest planting credit.
- Greg Sandi (MDE): Most of what we get is from DNR and is the contiguous reporting. The individual street trees are just starting to come in from our MS4s. Historically, we have been doing forest condition plantings.
 - Johnston: If that is the case, Greg and Bill, and the acres truly are forest planting, we have it added to the appendix and you can report it the same as forest. It doesn't require you to change the acres you've reported, just change the BMP name.
- Sandi: So you are saying take what we had reported as tree planting historically and call those acres urban forest planting?
 - Johnston: Correct.
 - Sandi: That is not a problem for us.
 - Tesler: That is not a problem for us either.
 - Alana Hartman (WV DEP): What if we don't have time to change the name of historic BMPs, you won't put in a conversion factor to the old BMP names?

- Johnston: In order to have them show up as urban forest planting, yes, you would have to change the names. To show up as urban tree canopy expansion, no you wouldn't have to do anything.
- Keeling: I am not seeing urban tree canopy expansion listed as a BMP name in the NEIEN appendix.
 - Johnston: That will be added as soon as we have approval of the technical appendix.
- Tesler: Motion to approve the report?
 - No objections were raised

DECISION: The WTWG approved the Urban Tree Canopy BMP Expert Panel report.

Historic BMP cleanup

- Tesler: I am concerned with our ability to count flocks.
 - Johnston: We left everything in the NEIEN appendix that we had in Phase 5.3.2. If you have the ability to do this, you can do this. It is just another option.
 - Chris Brosch (DDA): I'm trying to get something better than the number of systems but may not have the flock counts. I think a default from the Model would be more useful than something we'd have to defend down the roads.
 - Johnston: I can double these and put in a transformation variable in the NEIEN appendix. Just contact me offline and we can decide if we should add those.

ACTION: Chris Brosch and Matt Johnston will discuss flock count defaults for AWMS reporting.

- Brosch: We could hedge our bets on the Nutrient Management report by doing it in a similar way to how we're handling conservation tillage. We don't have a great idea of how many acres there are. We'd like to get "percent" worked in as a reporting method in case we need to use it to accommodate our records with the new report. Especially for core nutrient management.
- Johnston: Do others agree that having percent be available as a reporting option for nutrient management would be useful? It would allow you to report the compliance rate if that is the direction the partnership is going.
 - Tesler: I'm not against it, but I am not sure we would use that option in PA.
- Johnston: Maybe we can open it up and add the percentages. We could use them in Beta 4 but it would be dependent on getting partnership approval of the Phase 6 report.
 - Mulkey: We don't have any problem with that either.
 - Brosch: If we do that, the appendix should reflect that request.

ACTION: Matt Johnston will make a revision to the Nutrient Management technical appendix to allow reporting of percentages.

- Tesler: How about erosion and sediment control on extractive?
 - Johnston: We don't have extractive as a land use in Phase 6, so it will be dropping out.
- Hartman: You said the Beta 3 run assumed that acres entered as tier 1 were equal to core nitrogen. Do we need to delete the tier 1 acres and enter them as core N?
 - Johnston: Yes.
- Keeling: There is nothing that allows you to report manufactured treatment devices (MTDs) in the history. What happens if a panel or decision is made to give them some kind of credit?

Would we be allowed to modify historic record to include these? I have been excluding thousands of records from the history, but I understand there will be an effort to get them reportable, so we will need to address that.

- Johnston: Is that something that you could hand over BMP names you're tracking and we could put them in as draft?
 - Keeling: The MS4s are counting them, but they are all over the place as far as how they're reported. I haven't been reporting them because I didn't have a mechanism. I was thinking MTD would be by the BMP, then have them as draft and record the acres treated.
 - Norm Goulet (NVRC): That's a good idea but probably too simplistic. We will probably end up with several different classes of MTDs. Lumping it all together will probably not solve your history problem, but overall I do agree with you.

Adjourned.

Member Name	Affiliation
Matt Johnston (Coordinator)	UMD, CBPO
David Wood (Staff)	CRC
Chris Brosch	DDA
Tyler Monteith	DE DNREC
Brittany Sturgis	DE DNREC
Greg Sandi	MDE
Norm Goulet	NVRC
Sara Latessa	NYSDEC
Bill Keeling	VA DEQ
James Davis-Martin	VA DEQ
Jeremy Hanson	VT
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