Watershed Technical Workgroup Conference Call

December 1, 2016

Meeting Summary

Summary of Actions and Decisions

ACTION: The WTWG has been asked to participate in the following upcoming meetings in order to approve the series of upcoming BMP expert panel reports: December 13th Wetlands Workgroup; December 15th Agriculture Workgroup; December 19th Agriculture Workgroup. Additional information for each meeting can be found on the CBP calendar page, and each panel report is posted to today's WTWG calendar page.

ACTION: Matt Johnston will add a caveat to the Oyster BMP Panel report technical appendix that the CBP will look into adding additional NEIEN geographies to the report.

ACTION: Matt Johnston will add a caveat to the Oyster BMP report technical appendix that the WTWG will work with Modeling Workgroup in early 2017 to figure out how best to allocate reductions from tidal BMPs, including setting a potential load reduction cap.

DECISION: The WTWG approved the Oyster BMP Expert Panel's first incremental report and technical appendix, with the two caveats that the WTWG will explore adding new eligible NEIEN geographies for reporting the practices, and will work with the Modeling Workgroup to discuss potentially establishing a load reduction cap.

ACTION: In March 2017, Matt Johnston will discuss options for simplifying the parts of the schema and NEIEN appendix that are not used.

CAST Tools for Phase 6

Olivia Devereux (Devereux Consulting) reviewed the Midpoint Assessment website, and specifically discussed the page reviewing the Phase 6 CAST transition. A spreadsheet of current P6 source data is available for download. VAST has now transitioned to CAST. When the Bay Program officially transitions to the Phase 6 Watershed Model, MAST will be part of P6 CAST as well. The office is working to make sure the functionality that the states need will be maintained. When the Phase 6 Model is final and approved, Phase 6 CAST and BayFAST will be released.

Discussion:

- Jason Keppler (MDA): All the historic progress data will be loaded in there as well as current progress submissions?
 - Devereux: Correct. Users will need to be able to work off of some initial conditions for each year, so we will have that. For progress scenarios, we'll have that for the years where we're running both Phase 5 and Phase 6, and we will probably need to have a 2010 scenario as well. We may not have every year available but we are still working through those details.
- Jeff Sweeney (EPA): We only officially asked for the historic BMPs through 2013, but in hindsight we probably should have asked for everything out to the current year. I think we wrote into your implementation grant guidance that we will also need historic BMP data for 2014, 2015

and 2016 if you have it. Some of you have already submitted it. I think you have a year to submit it, but we could really use it as soon as possible.

- Bill Keeling (VA DEQ): Will CAST run HSPF for the hydrology for sediment loading, or just nutrients?
 - Devereux: It will not run the time-variable version, but it will run the static version used for management purposes.
- Sweeney: As a reminder, you won't need to submit data to the Bay Program for us to run these scenarios in Phase 6, you'll be able to do it yourself through CAST.

Oyster BMP Expert Panel Report

Julie Reichert (ORP) and Jeff Cornwell (UMCES) reviewed the panel recommendations and Matt Johnston (UMD, WTWG Coordinator) reviewed the technical appendix.

Discussion:

- Keeling: As I have mentioned before, based on my discussion with VMRC, I don't think we'll have the geography scales requested in the report. We'll have bushels harvested in a river reach. We won't have lat/long or site specific information. We may need to consider a different form of geography.
 - o Johnston: You wouldn't have the county going into the middle of the stream?
 - Keeling: I don't know what VMRC has. They have told me they can't share individual bed information, or anything that could locate the grower, so it would need to be some kind of aggregate.
 - Johnston: We haven't put tidal segments into NEIEN, so it is something we'd need to work on.
 - Keeling; Because of those restrictions, I don't know if this will be much of a BMP for VA anyways.

ACTION: Matt Johnston will add a caveat to the Oyster BMP Panel report technical appendix that the CBP will look into adding additional NEIEN geographies to the report.

- Keppler: If we can report oysters by county, the load reduction will be split equitably among the tidal segments in that county?
 - Johnston: Yes, that is correct.
- Keppler: What land uses in those segment sheds would the nutrient reductions apply to? Would it be distributed evenly among all the representative land uses?
 - O Johnston: In the Phase 6 Model there will be nutrients associated with a shoreline load, per LR segment adjacent to tidal waters. In the summary BMPs, we can put this anywhere. We can put it in ag, or by itself. But in the model, it is removing loads from the shoreline load that will be added into Phase 6.
 - Keeling: Will there be any cap on that? There is not a lot of N coming out of the shoreline. Is it possible we could overwhelm that load with the oyster harvesting BMP? Are we subject to a cutoff?
 - Johnston: I don't think you'd ever hit that cutoff. To reduce 100,000 lbs of N you need 67 million oysters harvested. And VA is around 20 million across the state.

- Keeling: But if we are doing site-specific reporting of pounds reduced, you may not have 100,000 lbs of N in that area, maybe just 500lbs. In that instance you could have larger load reductions than what is available. I think there should be a caveat that there may need to be a cap.
- Johnston: I will talk this over with Gary Shenk (USGS). We are taking the load off a shoreline load, but that load does not account for all the N in the water, so you actually can go negative with the load. Stream restoration is a good example. Streams are a sink in a reach of a stream in many cases, so sometimes it even starts as a negative. I just don't know what the best approach is to deal with it. I'm afraid it would be artificially capping the load reductions.
- Keeling: I am opposed to this way of accounting because the reductions are occurring in a place other than where we will receive the credit. That said, I won't oppose the approval of the report, but I think it is a mistake to give credit for something in the Watershed Model that is done in the estuary.
- Keppler: There has already been talk in Maryland of oyster aquaculture being involved in nutrient trading. I'm assuming the shoreline loads would need to be addressed in our WIPs. I guess the trades and load reductions will work themselves out, but we need to figure out how to do trading.
- Keeling: If we put in living shorelines in the same area as oyster aquaculture, then we are attacking the same load source and we could easily go negative.

ACTION: Matt Johnston will add a caveat to the Oyster BMP report technical appendix that the WTWG will work with Modeling Workgroup in early 2017 to figure out how best to allocate reductions from tidal BMPs, including setting a potential load reduction cap.

- Norm Goulet (NVRC): Don't we have provisions with other BMPs, that no more than some percent of a source can be reduced from a BMP?
 - Johnston: We have that recommendation from WTWG to MWG, but they have not yet approved that recommendation. They told me that there is no reason we can't go negative with a load. I am fine with putting in caps, but I think we need a consistent rule.
 - o Goulet: I think we need to put that on a future agenda.
- Johnston: With those two additions to the technical appendix, is there anyone who can't live with the report?
 - No objections were raised.

DECISION: The WTWG approved the Oyster BMP Expert Panel's first incremental report and technical appendix, with the two caveats that the WTWG will explore adding new eligible NEIEN geographies for reporting the practices, and will work with the Modeling Workgroup to discuss potentially establishing a load reduction cap.

Phase 6 BMP Panel Updates

Matt reviewed the timeline for review and approval of various BMP expert panel reports.

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for each meeting can be found on the CBP calendar page, and each panel report is posted to today's WTWG calendar page.

Discussion:

- Johnston: I'm working on getting an approach to reduce the number of Cover Crop BMPs that are reported. I will bring that approach forward when we have it worked out with the panel.
 - Keeling: I am on board with reducing the number of cover crop categories.
 - o Ted Tesler (PA DEP, WTWG Chair): I absolutely agree.
- Keeling: Conservation Tillage will still be stackable, correct?
 - Johnston: Correct.
- Johnston: At this time, I recommend reporting your cover crops data as you always have and we will work out any changes once the report has been finalized.
- Keeling: When we have multiple measures for the same BMP, it makes it very difficult to deal with in our automated system. It is better if we have acres represented one way.
 - Johnston: There is an easy way to do that. After December 31st, I can pull the data from NEIEN and see the unique values that were submitted, and that allows me to wipe out anything that wasn't reported. That might be the way to start.
- Keeling: The schema requires the code and a description of the code. We don't understand why
 we need to provide the description. There is some redundancy in the schema that could
 probably be eliminated.

ACTION: In March 2017, Matt Johnston will discuss options for simplifying the parts of the schema and NEIEN appendix that are not used.

Phase 6 BMP Data Update

Matt reviewed the latest results of Phase 6 historic BMP reporting.

Discussion:

- Keppler: Let's say the decline in BMPs is because we haven't been able to do inspections. If a
 few years from now we go back and inspect a BMP that fell off the record, and discover it is still
 functioning, would the history be updated, or would we just see the implementation level
 increase going forward?
 - o Johnston: We would update the history every two years to reflect that new information.
- Tesler: Are we still doing overlapping high residue on conservation tillage?
 - O Johnston: No, you report the percent of your acres under each of the BMPs, non-overlapping. The CTIC data, or anything like it, should not overlap.

Matt reviewed a subset of the default land use groups in NEIEN appendix.

Discussion:

Keppler: I think this is helpful. Jurisdictions will still have the ability to break out land uses if they
choose, but it looks like not many are doing it. It seems a lot of work is put into individual land
uses and I'm just trying to see if we will take advantage of it.

- Alana Hartman (WV DEP): We broke them out because we used to get more credit for putting riparian buffers on trampled pasture.
 - Johnston: If there are buffers behind a fence, those are separate. Maybe you meant to submit them on stream exclusion.
- Hartman: For nutrient management, we acknowledge that the pasture acres will likely get zero credit.
 - Johnston: That is correct for core credit. I have recommended to everyone to break it
 out between pasture, hay and row. If you don't, you could run into a situation where
 you have a ton of acres under nutrient management but it is all going to row crop, but if
 you don't have a ton of row crop acres, you may not get full credit because you might
 get cut off.
- Keppler: In our conservation plans, we can track the amount of cropland that is under plans. I'm assuming we have the ability to mix and match between column B and column C in your table?
 - Johnston: You can mix and match between column B and the available land use groups.
 The same will be true for your 2019 milestones and Phase III WIPs. When putting those together, you will select a land use group or land use.
- Keppler: How soon will we have the breakout by county of these land uses?
 - Johnston: You can see that now on the Tableau website. They are by county and by year.
- Hartman: Now that the review period is over for the Phase 6 land uses, would that data be updated?
 - Johnston: Yes. Once there is a final Phase 6 model in the new year, those land uses will go up on Tableau.

Adjourned

List of Call Participants

Member Name	Affiliation
Ted Tesler (Chair)	PA DEP
Matt Johnston (Coordinator)	UMD, CBPO
David Wood (Staff)	CRC
Tyler Monteith	DE DNREC
Marty Hurd	DOEE
Greg Sandi	MDE
Robin Pellicano	MDE
Jason Keppler	MDA
Emily Dekar	USC
Bill Keeling	VA DEQ
Alana Hartman	WV DEP
Jeff Sweeney	EPA
Olivia Devereux	Devereux Consulting
Julie Reichert	ORP
Jeff Cornwell	UMCES
Norm Goulet	NVRC