

CHESAPEAKE BAY PROGRAM
WATER QUALITY GOAL IMPLEMENTATION TEAM

June 26, 2017 CONFERENCE CALL

Conference Call Phone Number: 866-299-3188 **Code:** 267-985-6222

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Summary of Actions and Decisions:

Decision: The WQGIT approved the “beyond attainment” approach proposed by the attainment and standards team.

Decision: The WQGIT approved the WTWG recommendation on nutrient reduction credits for shoreline management BMPs, noting the comment from Maryland regarding documentation of total suspended solid credits.

Welcome/Confirm Call Participants/Workgroup Updates – James Davis-Martin, Chair

- Peter Claggett, USGS/Land Use Workgroup Coordinator, provided an update on developing the 2025 historical trends and policy growth scenarios, which were recently discussed at the June 7 joint LGAC/LUWG Forum. The WQGIT will make a recommendation to the PSC on whether to use 2025 growth projections in the Phase III WIPs during their September 25-26 face-to-face meeting.
- Reminder – FY17 WIP Assistance Proposals are due to Lucinda Power (power.lucinda@epa.gov) on June 30, 2017.
- EPA will soon begin scheduling calls with the tidal jurisdictions to discuss revisions to the segment-shed language in EPA's interim Phase III WIP expectations document, and will then bring those language changes to the WQGIT.
- Tanya Spano: Thomas Grizzard, professor emeritus at Virginia Tech, has passed away—he's contributed so much to the Partnership, so I wanted to make that announcement.

Nutrient Reduction Credits for Shoreline Management BMPs –Matt Johnston (UMD)

Matt presented the WTWG's proposed revisions to the shoreline management BMP technical appendix for review and approval by the WQGIT.

Discussion:

- James Davis-Martin: Sediment load is a site-specific calculation, so what are the values at the bottom?

- Matt Johnston: That's just a single foot of shoreline management, that's your N removal per linear foot. The double asterisk is differing amounts of sand in the watershed that affect the fine sediment reductions you get.
- Marel King: STAC recently released a report on boat wakes and erosion. They recommended that impacts from boat wakes be incorporated into shoreline erosion estimates. Is there any way to incorporate those recommendations for this?
 - Lew Linker: The assessment of erosion is the recession of shoreline over time, but we don't assess what may have made the shoreline erode. Generally, we look at the whole slew of things causing erosion.
- King: Where are these loads allocated?
 - Johnston: We now have a shoreline load in Phase 6, which is where shoreline BMPs are credited. We also have another new source: stream bed, bank, and floodplain.
 - Davis-Martin: Are those natural or in another sector?
 - Johnston: They are in the natural category. We're not creating a new load for bed and bank, we're just shifting it from where it may have been somewhere else—that's so we can give credit to these BMP practices.
- King: If that is categorized under natural, we might want to consider that moving forward from a communications standpoint.
- Sarah Diebel: Those loads were shifted into this category from prior land uses, right? As far as the shoreline management BMPs you can get credit for, how can we make sure that those activities get credit in federal facilities?
- Linker: All those loads were accounted for in the 2010 Watershed Model, and anything after 2008 can be counted as a reduction on top of what was previously reported.
- Johnston: There is urban shoreline management in DOD facilities in a few jurisdictions.
- Jeff Sweeney: Up until now, we haven't reported explicitly erosion and control of erosion, but now it is explicit in the Phase 6 Watershed Model.
- Davis-Martin: It wouldn't affect the acreage of the facility, but the ability to report practices and get credit for implementing those on federal lands would change.
- Sweeney: When we report out the loads, federal facilities have natural loads just like agriculture and urban sectors do.
- Spano: Can Jeff relate some of that conversation to stormwater practices?
- Johnston: Stream restoration will be in that natural category, and before we attributed it to the general urban load. It's a little different in Phase 6.
- Spano: Is this a better way to quantify the results of those efforts?
- Dianne McNally: The original protocol went through the USWG, right? Do they need to give any comments on this?
- Johnston: This was approved with the understanding that the WTWG would go back and revise the numbers in this table where there was a request to add in this consideration.
- Norm Goulet: We reviewed this initially with older numbers. WTWG put together what they thought the most accurate values were for review here.
- McNally: If property owners put in living shorelines, how does it come up in reporting? Is it county level?

- Johnston: There was an analysis on what is and is not under management pre-2008. Post 2008, all linear feet should be reported to the state. Some will be lost if private landowners don't report, but if for instance NFWF grants are used for that, the reporting should come through.
- Davis-Martin: For VA, most of these activities need a state and county wetlands board permit. Those entities are collecting that information and that is reported. The challenge to date is on the verification side: we don't know what percentage is implemented versus what's permitted.
- McNally: That's helpful, thanks James.
- Jim George: I don't have any more input from the MD side.
- Davis-Martin: Any objections to approving the recommendations?
- George: MD DNR is still on the record with some dissenting documentation with TSS credits, and we want that reflected in the record.
- Davis-Martin: Other concerns?

Decision: The WQGIT approved the WTWG recommendation on nutrient reduction credits for shoreline management BMPs, noting the comment from Maryland regarding documentation of total suspended solid credits.

FY17 GIT Funding Priorities –Greg Allen, EPA

Greg provided a status update on the timing of the FY17 GIT funding request. Late July is proposed for the deadline to submit funding priorities from each GIT. This information has also been distributed via email in a memo to the WQGIT and its workgroups.

Discussion:

- Greg Allen: We have full GIT funding (\$829,666) available this year and we're looking at how the timeline is shaping up this summer. We have a couple steps that are new this year. We want cross GIT coordination, and we want earlier and more comprehensive input from GIT chairs. We also want the Chesapeake Bay Program Office (CBPO) web team to take early looks to make sure we're not putting out bids that the CBPO web team could do. Usually the first 2 priorities for each GIT get funded, and funding runs out around the third project. We have until August 4 for the WQGIT to decide on their top 3 project priorities. We will put these out to independent peer reviews before putting out the RFPs for bidding. There is a multipage guidance document we've been using that will go out no later than June 27.
- Davis-Martin: To our workgroups participating on the call today, think about projects that are of interest and will meet collective management strategies. We have about 3 weeks to develop proposals. At the end of July, we will rank our top 3 priorities.

CAST and Data Visualization Tools for Phase 6 Outputs—John Wolf, USGS and Olivia Devereux, Devereux Consulting

Olivia and John briefed the WQGIT on the Phase 6 version of [CAST](#), released on June 15, and data visualization tools to assist in the model review period. Olivia reviewed public scenarios available, how to access public reports, and how to create, access, and compare scenarios.

John Wolf gave a demonstration of the Watershed Model [Phase 6 Scenario Viewer](#). One feature in the Scenario Viewer is intended to be used in the cross-GIT mapping project. The demo also included the [nontidal water quality](#) data dashboard, [MD iMap](#) (MD Trust), and [Compare Scenarios](#) tool.

Discussion:

- Ted Tesler: On the data for the scenario background—is that BayFast or CAST?
 - Devereux: That’s included in CAST now.
- Davis-Martin: WQGIT, please make use of these resources going forward.
- Spano: We plan on evaluating these tools. Thank you Olivia and John for your efforts in making these tools user friendly.
- Davis-Martin: John, the links are on the CAST page right, under Geography BMPs?
- Devereux: WRTDS versus simulated is under model documentation, and the others are under geography and BMPs.
- Davis-Martin: The compare public scenarios link I saw was different than the one you showed. I have a split screen and you’re showing just one.
- Wolf: There is a glitch here that I want to acknowledge: the pop-ups point to Phase II WIPs, and that will be corrected the next couple days.

Results from the Initial Round of Phase 6 Scenarios— Jeff Sweeney, EPA/CBPO

Jeff presented the [results](#) of the initial round of requested Phase 6 scenarios. Jeff will also give an update on changes made to the E3 scenarios since October 2016. Scenarios updates included: 1985-2013 progress, Phase II WIPs, No Action, and E3 (which includes diploid oysters). The results presented comparing Phase 5 and Phase 6 loads are what’s available now to review.

Discussion:

- Sweeney: We will be running 2014-2016 progress years in November and December when states submit that data to CBPO by September 1, 2017.
- Beth McGee: Can you explain the increase in nitrogen loads from Phase 5 to Phase 6?
 - Johnston: The E3 is lower in Phase 6 because we have new BMPs to include. The higher loads that aren’t due to E3 could be higher fertilizer inputs.
 - Sweeney: We asked Gary Shenk to look into those differences between Phase 5 and Phase 6, and the answer is that the Phase 6 calibration is tighter, especially in the Potomac. Both long term and short term trends in the Potomac are very favorable on average, but Susquehanna is less so because of Conowingo.
 - Sweeney: This doesn’t mean that anybody is getting higher Phase III WIP planning targets, by the way.

- Linker: The Phase 6 calibration provides a much more accurate interpretation of loads. We know much more in retrospect than we have in previous versions.
- Spano: When you say you're excluding wastewater, you really meant WWTPs, and not onsite septics and community wastewater, right?
 - Sweeney: Yes, we have excluded industrial and municipal WWTPs, but that's all we've excluded.
 - Spano: OK, I just want to point that out.
- Russ Baxter: Why diploid and not triploid oysters in E3?
 - Johnston: Julie Reichert, coordinator of the Partnership's Oyster BMP Expert Panel, stated we don't have the breakdown yet of triploid versus diploid, and we were under the impression that most aquaculture is done with diploids
 - Baxter: The vast majority of aquaculture is done with triploids.
 - Johnston: OK, so we may have to go back and review that—it's a moving target.
 - Sweeney: The Phase 6 geographic isolation runs have not yet been run, but we expect to do that pretty soon.
- Sweeney: We do need a decision on what year to use for setting the Phase III WIP planning targets and for developing the Phase III WIPs. We are on track to run different base year options for the planning targets (e.g., 2010, 2013, 2017, and 2025) and explain to you why these are two separate decisions.
- Dave Montali: When I saw E3 for my state basins, I saw it go negative for sediment. Why is that? Will it be addressed?
- Sweeney: You have erosion from the stream bank and scour, but you also have deposition on the floodplain. The idea is that those actions should cancel each other out. You can arrive at a negative load if you have BMPs acting on the zero sum relationship along the way.
- Sweeney: We didn't get into the planning target development of sediment like we did for nutrients, and I think sediment will be different than nutrients this time around as well.
- Bill Angstadt: We now have fertilizer reduced by 250 million pounds and manure reduced 200 million pounds. How can these reductions result in an increase in nitrogen loads between Phase 5 and Phase 6 when agricultural loads are decreasing? How does this ag lift work?
- Sweeney: Those are just what-if scenarios—no action and E3. This does not translate to an ag lift or load reductions required from any sector—these are only hypothetical.
- Linker: If the Modeling Workgroup hasn't made a decision on this, we can take it up at our next meeting. A negative erosion load just isn't realistic, but it's something we can fix in the Phase 6 version of the Watershed Model.
- Montali: I thought it was a scenario builder issue, not modeling, but ok, if you can resolve it that works.
- Spano: When you start communicating this issue, it would help for you to start with the bottom line with the magnitude of change and then get into the weeds. You lose people when you start with detail right away. This is important to convey the integrity of the model updates, so it needs to be messaged right. Start with the big picture, not graphs and numbers.
- Diebel: How do the geographic isolation runs work in the context of relative impact or effectiveness?

- Sweeney: We run scenarios through the Watershed Model and the Water Quality Sediment Transport Model (WQSTM). We take a single amount of reduction and assess where in the watershed you get the biggest bang for your buck in terms of attainment of water quality standards. The idea is that in those places where the highest progress towards attainment is possible, those places are responsible for more loads.
- Diebel: I just don't understand the scenario used to determine that.
- Linker: These are scoping scenarios, with a specific load reduction repeated at different points around the Bay. It's documented in the 2010 Chesapeake Bay TMDL documentation.
- George Onyullo: We see generally higher loads in Phase 6, but this won't lead to a more challenging reduction needed—why? Is that because the loads going into the Bay are more absorbed than we originally thought, if the load input is higher than expected?
- Shenk: We wanted to see if the WQSTM responded relatively or linearly. We did find that the model responded in a relative sense. The Watershed Model is also responding in a relative sense. That doesn't make it any easier or harder to implement BMPs to achieve water quality standards.
- Davis-Martin: Are we still on schedule for releasing the WQSTM on July 1?
 - Lew Linker: We started the peer review process on June 5 and June 6.
- Davis-Martin: Changes to Ag E3 include forest buffer estimates for crop and pasture, wetland restoration, land retirement, tree planting—that's close to 25% land retirement in E3.
- Sweeney: We will be discussing that on Thursday with the AgWG. There's concern there and we'll review that.
- Davis-Martin: When you retire 25% of ag land to something natural, there is a significant amount of reduction in loads. It's not practical to retire a quarter of land we grow food on, but that's another discussion. Areas already buffered with grass are also being converted to trees as well right? And grass buffers are sometimes lumped in with pasture?
 - Lindsey Gordon: That's correct.
- Mark Dubin: We will have a discussion of this at the AgWG meeting on Thursday, and additional discussion in July. We will take decisional action on E3 for Ag during our July meeting. What you're seeing right now has not been approved yet by the AgWG.
- Jim George: On slide 17, the change in urban runoff caught my eye. Is there anything in slide 17 that jumps out at you?
- Johnston: That's the same reaction I had until I took out point sources.

Briefing on Water Quality Attainment Updates – Peter Tango (USGS/CBPO) and Qian Zhang (UMCES/CBPO)

Peter and Qian presented an [overview](#) of water quality standards (WQS) attainment progress for WQGIT feedback and comment. Topics covered the attainment criteria, the assessment approach, as well as new efforts to extract more information from the attainment assessment to inform insights on progress. The team also introduced a potential extension of the assessment approach that includes 'beyond attainment' patterns. The team is seeking feedback from the WQGIT on what is easily understood about the existing WQS indicator, what is difficult to

understand, and recommendations on prioritizing next steps for future presentations of results, improved messaging, and extending the analyses to support overall messaging on WQS attainment in tidal waters of the Chesapeake Bay.

Discussion:

- Peter Tango: We get asked a lot about doing more with the data we have, so here we are working with attainment data and working on new directions.
- Qian Zhang: Today, we want to get your input on where we're going and solicit some of your ideas as well.
- Power: What they want is to be able to move forward based on the feedback we provide them with today.
- Davis-Martin: I like the additional assessment methods. It does reveal additional information. I don't know if we can use it in our decision making, but good to know nonetheless.
- Spano: I like the intent of what you're doing. One really important thing is to understand what's already been communicated from the RIM stations, and how that may differ from monitoring actions. How does this analysis support, complement or tell a different aspect? I want to make sure this is not done in isolation.
- Zhang: This is done in conjunction with trends from rivers and other stations.
- Davis-Martin: On number 8: I like the idea of exploring volume based indicators. One step further could be volume-days, some way to include a temporal component. That would be interesting as well.
- Tango: Looking at possibilities, we are looking for things we can tease out that are new.
- Spano: I suggest they also look at climate impacts. As an indicator that helps support, inform, or convey the storyline here.

Decision: The WQGIT approved the “beyond attainment” approach proposed by the attainment and standards team.

Review of Phase 6 Peer Reviews and Fatal Flaw Comments—Standing item for any issues that need to be resolved.

Lew Linker gave an update on the peer reviews of the Watershed and Water Quality Sediment Transport Models, as well as the status of the fatal flaw review. The log of fatal flaw comments is available on the Phase 6 Model and Midpoint Assessment pages under [WQGIT Projects and Resources](#), and is updated every Tuesday until the fatal flaw review period is complete.

Discussion:

- Diebel: Will we have more detail on issues with fatal flaws that MD and DE have submitted for the P model for soil data?
 - Johnston: The AMS is dealing with this issue. We don't have any grand plan, so we asked MD and DE to take this issue to the AgWG when they're ready.
- Diebel: Is there a log of \overall and fatal flaw comments located somewhere?

- Power: We have an excel spreadsheet posted to an internal Sharepoint site that we will post to the WQGIT and Modeling Workgroup calendar pages for people to access. We will update the spreadsheet every Tuesday through July 31.
- Diebel: We have until July 31 to submit comments, and we don't want to duplicate comments.
- Power: If you do have a comment, we have a process in place—in order for a comment to be considered during the fatal flaw review period, please send to Gary Shenk. The process is articulated in the Phase 6 strategy review document the Partnership approved prior to the start of the fatal flaw review period.
- Davis-Martin: I think the update frequency should be at least weekly through July.
- Linker: Agreement round the table here. We're logging who submitted the comment and when, as well.
- Diebel: That would be helpful for folks who maybe have or are recognizing the same issue.
- Spano: There should be a slide that tells people where the issue has gone to be resolved.
- Davis-Martin: Is that on the list used to track the status of issues?
- Jim George: When will the 2015 scenario be available? That would be the old 2015 progress scenario for Phase 6.
- Sweeney: We won't be able to run that scenario until after September 1, since that's the deadline for states to submit 2014-2016 data in Phase 6 format through NEIEN, plus wastewater data.
- George: Phase 6 generally has higher nitrogen and lower phosphorus for nonpoint source loads, right?
- Johnston: That's right for now, but there are a lot of decisions that could change that. One is Conowingo, another is time scale to run the APLE model on.
- Davis-Martin: That one comment on P soil needs to be resolved as soon as possible.

Adjourned

Participants:

James Davis-Martin, VA DEQ
 Teresa Koon, WV DEP
 Lucinda Power, EPA CBPO
 Lindsey Gordon, CRC
 Michelle Williams, CRC
 Dianne McNally, EPA R3
 Bill Angstadt, Angstadt Consulting
 Sarah Diebel, DOD
 Chris Thompson, Lancaster County Conservation District
 George Onyullo, DOEE
 Teresa Koon, WV DEP
 Dave Montali, WV DEP
 Lew Linker, EPA CBPO
 Gary Shenk, USGS
 Olivia Devereux, Devereux Consulting

Mark Dubin, UMD
Norm Goulet, NVRC
Ted Tesler, PA DEP
Matt Johnston, UMD
Chris Day, EPA R3
Laura Free, EPA CBPO
Jeff Sweeney, EPA CBPO
John Wolf, USGS
Jeremy Hanson, VT
Peter Tango, USGS/STAR coordinator
Emily Dekar, NYSDEC
Jenn Volk, UDel
Karl Blankenship, Bay Journal
John Schneider, DNREC
Dinorah Dalmasy, MDE
Lauren Townley, CBC
KC Filipino, HRPDC
Marian Norris, NPS
Sarah Latessa, NYSDEC
Kristen Wolf, PA DEP
Marel King, CBC
Anne Jennings, CBC
Jenn Sincock, EPA R3
Joe Wood, CBF
Kate Creef, VA/MAMWA
Marya Levelev, MDE
Tanya Spano, MWCOG
Greg Allen, EPA CBPO
Karl Berger, MWCOG
Jim George, MDE
Qian Zhang, UMCES
Russ Baxter, VA Dept of Natural Resources
Emily Trentacoste, EPA CBPO
Chris Yearick, USC
Heidi Bonnaffon, MWCOG
Joan Smedinghoff, CRC