

CHESAPEAKE BAY PROGRAM WATER QUALITY GOAL IMPLEMENTATION TEAM

October 23, 2017 CALL SUMMARY

Meeting Page

Summary of Actions and Decisions:

Action: Members interested in volunteering to review and provide input to the web and research team should contact Aera Hoffman (ahoffman@umces.edu) and Emily Trentacoste (trentacoste.emily@epa.gov). They will convene a committee to provide input on articulating the user cases for these products in order to develop this tool. Initial volunteers are as follows: George Onyullo, Norm Goulet, Tanya Spano, Gary Shenk, and Lew Linker.

Action: Liz Chudoba will provide resources offline on the work of the Chesapeake Monitoring Cooperative. The WQGIT should contact Liz Chudoba (lichudoba@allianceforthebay.org) and Emily Bialowas (ebialowas@iwla.org) with additional questions and input on the proposed CMC-CBP MOU.

Action: Gary Shenk will discuss including shoreline loads and oyster aquaculture BMPs in the Phase 6 No Action and E3 scenarios at an upcoming WQGIT conference call for WQGIT input.

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

- Announcements:
 - Atmospheric deposition modeling [webinar](#) is scheduled for October 31.
 - December Face-to-Face meeting: Will take place December 4-5 in Annapolis, MD. Michelle Williams will contact invitees this week for RSVPs.

Data Visualization Tools for Geo Runs and Draft Planning Targets –John Wolf, USGS

John briefed the WQGIT on options for data visualization tools to assist in the Partnership's review of the Phase 6 geographic isolation runs and the draft Phase III WIP planning targets.

Discussion:

- John presented some prototypes on data visualization tools and next steps that the WQGIT wants to take for tool development. These prototype tools will help facilitate the review of the draft Phase III WIP planning targets. Live demo of draft tools and interactive map was also included, reflecting draft Phase 6 scenarios and relative effectiveness.
- URL for the preliminary visualization tool:
<http://gistest.chesapeakebay.net/mpa/geoisoruns/>. This is open to the public for review but is a very early draft at this point.

- Wolf: Here is the potential on the tech side for the defensibility of the model: We shouldn't be using this for open water designations as much as it is intended for deep channel and deep water. But, if you go to the tidal fresh for the James, you can see where the major contributions of nitrogen are coming from—largely in the upper watershed. I think this is a good indication of the reliability of the model.
- Wolf: We want to develop tools that will really help—the next steps will be to reach out to our core group that volunteered, and we will be scheduling meetings in the near future to develop these tools.
- Tanya Spano: Thank you, this is very helpful. My suggestion is for a lot of the caveats you have mentioned and how will we communicate those caveats: an interface for general users that communicates how this should be used or what gaps there might be in the tool. Can you include an interface like that?
 - Wolf: We haven't yet gathered that user research but we will develop something like that.
- Norm Goulet: I volunteer to be on that small group steering committee.
- Sarah Diebel: We have these visualization tools for reviewing the geo runs and planning targets—have you talked to those involved in Chesapeake Progress or Chesapeake Stat? Is there a connection there or is this separate?
 - Wolf: This is related to the water quality standards indicator. The web team is a common group between the two, but I think this is a more technical audience this tool will be developed for. We are in touch with the status and trends workgroup for Chesapeake Progress.
- George Onyullo: One issue with the TMDL is the issue of scale. I don't know that data visualization will be free of that issue. As we develop better tools, we have to consider the issue of local scale.
 - James Davis-Martin: We have to make sure this is available at a workable scale.
 - Spano: What are the cautionary notes? That should be included in the interface for any issues of scale.
 - Dave Montali: Make sure you include units in the visualization tools. Is this relative efficiency or absolute pounds? They need to have units in the end result. I like the stoplights and the color coding scheme with green and red. With the non-tidal stations and calibrations and WRTDS loads—will that be updated with the final model release? Will you be including that table from Gopal with the plus/minus for the WRTDS loads?
 - Wolf: We can include those updates and discuss potential enhancements with Gary and Gopal.
- Davis-Martin: A lot of these tools allow users to select geo areas and zoom in and out. What if a user wanted to narrow the range or establish a threshold value or something?
- Wolf: Tableau is capable of doing that, but that might add complexity—there is a tradeoff between complexity for general audiences versus technical audiences. We want to know more about the user cases before we commit to building in that functionality.
- Davis-Martin: What would be helpful in your WIP planning efforts for this tool in terms of review?

- Goulet: Dividing this out between sectors would be important.
 - Wolf: That might be better for the modelers to answer.
- Lew Linker: We could break out the sectors with a pie chart or something. It's a good idea to break out by source sectors.
 - Goulet: One of my main concerns is addressing unregulated stormwater, but we need to look at the data first to sort it out.
- Spano: Being able to separate wastewater out as well would give us a better idea for land based practices. Is there a timeline for release of this tool?
 - Wolf: I don't have specifics right now, we'd have to discuss that in our internal group and determine how long it will take to meet user needs.
 - Linker: We should have some well-developed tools ready for the PSC meeting on December 19-20, and it would be great to have those for our December 4-5 meeting too. We'll have the final model tools ready soon and we can work with those final numbers to do those breakouts by different scales and sectors. There is more certainty at higher scales so there is a tradeoff there.
- Spano: Can we track progress on this tool as we go forward? We need to make sure the WQGIT and Modeling Workgroup can use this before we can send it to the PSC.
 - Linker: We are preparing for our December meetings but we will continue to get feedback on this tool beyond December. We need to keep the general public in mind too with these tools.

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Updates on Activities from the Chesapeake Monitoring Cooperative –Liz Chudoba, Alliance for the Chesapeake Bay

Liz Chudoba and Emily Bialowas presented updates from the Chesapeake Monitoring Cooperative (CMC), the citizen's monitoring project funded by the CBP. The work of the CMC may be of interest to local governments and stakeholders, especially in regard to supporting efforts for the development and implementation of local planning goals in the Phase III WIPs.

Discussion:

- Emily and Liz presented on the quality assurance protocol (QAP) development status, breakdown of tiers of data quality for citizen monitoring data, and products developed to assist citizen groups in establishing monitoring programs. Citizen groups can apply to be part of the CMC through an online toolkit, and the CMC is developing a database for the Chesapeake Data explorer. CMC is developing an MOU between state agencies and CBP to commit to using monitoring data from citizens and nontraditional partners. Emily and Liz requested input on the tiered framework, training programs, and QAP process

development. This proposed MOU is also going through CBP workgroups, STAR, and the WQGIT workgroups.

- Spano: There are a lot of watershed groups locally that can be engaged. I'd like to know who is already engaged with you to know who we have and who still needs to be engaged.
 - Chudoba: The prioritization report has a list of all the groups we have worked with so far. I will pass on a link to that report for review.
 - McNally: Did you consider using STORET as your database—the EPA monitoring data repository?
 - Chudoba: We need the database to offer a few extra services, but all of our data will eventually go into STORET.
- Mica Peck: Our citizen monitoring would be more focused on bacteria, is that an option?
 - Chudoba: Yes, we do the whole suite of chemical and biological monitoring.
- Goulet: Are you working with state partners in monitoring efforts?
 - Chudoba: Yes, we are.

Action: Liz Chudoba will provide resources offline on the work of the Chesapeake Monitoring Cooperative. The WQGIT should contact Liz Chudoba (lichudoba@allianceforthebay.org) and Emily Bialowas (ebialowas@iwla.org) with additional questions and input on the proposed CMC-CBP MOU.

Modeling Workgroup Progress – Lew Linker, EPA

Lew and Gary presented outcomes from the October 17 Modeling Workgroup quarterly meeting, including progress on the calibration of the Phase 6 Watershed Model and Water Quality Sediment Transport Model, and initial findings from draft key scenarios.

Discussion:

- Presentation included changes to the Watershed Model and Water Quality Sediment Transport Model:
 - Watershed Model updates: The model now includes shoreline erosion values. Shoreline loads result in about a 1% increase in nonattainment in deep channel CB4. Organic nitrogen scour was also added in the Phase 6 Watershed Model.
 - Updates to Water Quality Sediment Transport Model: Run 223 was selected since it was the most accurate in terms of nitrogen and phosphorus limitation in the Bay.
- Linker: This is only a short summary. We can expand or shorten these updates as we move forward based on WQGIT input.
- Davis-Martin: When will we see the graphs being updated with the new geo runs from run 223?
- Shenk: Would you like to see those with the September Watershed Model inputs? I thought we'd wait until we get the final results after recalibrating the Watershed Model.
 - Davis-Martin: No, we should wait until we get everything finalized.

- Linker: We can bring this in the graphs by mid-November.
- Davis-Martin: We want to have as much information as possible, as early as possible. It shouldn't be a surprise when we come to the December meeting.
- Tanya Spano concurred.
- Katherine Antos: So we will have updated stoplight plots by mid-November?
- Linker: Right.
- Davis-Martin: What about shoreline and oysters?
 - Shenk: It's not something we can touch on here, that's a longer update. We had a No Action scenario for shoreline that removes all the shoreline protection and did not include much additional in the E3. We don't have a full appreciation for how those work in the planning targets and what states will be expected to do for those. We will make a presentation at an upcoming WQGIT call to lay out those issues.
 - Davis-Martin: We will identify No Action and E3 value settings for these unique BMPs—shoreline management and oyster practices.
 - Shenk: That's how we will include it in the planning targets method and how we will account for these credits generally.
 - Davis-Martin: The WQGIT should start thinking about this issue and crediting those in the model, and we will come back to this issue during a November conference call.
- Davis-Martin: Thank you to Lew and Gary for sticking with the schedule. We would like the Modeling Team to keep us informed of any potential scheduling challenges early on.
- Spano: I want to reiterate the fact that we don't want the rush in the schedule to compromise the solid work the Modeling Team is doing.

Action: Gary Shenk will discuss including shoreline loads and oyster aquaculture BMPs in the Phase 6 No Action and E3 scenarios at an upcoming WQGIT conference call for WQGIT input.

Adjourned

Call Participants:

Brittany Sturgis, DNREC
 Chris Brosch, DDA
 George Onyullo, DC DOEE
 Greg Sandi, MDE
 Lauren Townley, NYS DEC
 Nicki Kasi, PA DEP
 Dave Montali, WV DEP
 Ann Jennings, CBC
 Dianne McNally, EPA R3
 Jenn Volk, EPA R3
 Bill Angstadt, Angstadt Consulting

Tanya Spano, MWCOG
Sarah Diebel, DOD
Chris Thompson, Lancaster County Soil Conservation District
Lew Linker, EPA CBPO/Modeling workgroup coordinator
Loretta Collins, UMD/AgWG coordinator
Norm Goulet, Northern VA Regional Commission/USWG Chair
Ted Tesler, PA DEP/WTWG Chair
Lucinda Power, EPA CBPO/WQGIT Coordinator
Kelly Gable, EPA R3
Jeff Sweeney, EPA CBPO
Lindsey Gordon, CRC/WQGIT staffer
Jeremy Hanson, VT
Joan Smedinghoff, CRC/Communications Workgroup
Gary Shenk, USGS
John Wolf, GIS team
Katherine Antos, DC DOEE
Tanya Spano, MWCOG/WWTWG Chair
Marel King, CBC
Mica Peck, EPA R3
Kevin McGonigal, SRBC