

CHESAPEAKE BAY PROGRAM WATER QUALITY GOAL IMPLEMENTATION TEAM

February 13, 2017

Meeting Summary

Meeting Materials: <http://www.chesapeakebay.net/calendar/event/24826/>

Summary of Actions and Decisions:

Decision: The WQGIT endorsed the STAC workshop proposal entitled ‘Integrating Science on Watershed and Estuarine Change: Support for the Mid-Point Assessment and Beyond’.

Decision: The WQGIT agreed not to explicitly represent federal agricultural lands in the Phase 6 suite of modeling tools. In the future, the WQGIT agreed to consider issues such as accountability in reporting of federal agricultural BMPs, setting goals/targets for federal facilities that account for their responsibility, and working towards a better spatial representation of federal agricultural lands.

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

- Michelle Williams was introduced as the new WQGIT staffer. She will start her new position on February 21st.
- James Davis-Martin briefly summarized the Management Board SRS meeting that took place in Cambridge, MD.

STAC Workshop Proposal Endorsements – Zoe Johnson, NOAA, and Jeni Keisman, USGS

Zoe presented the STAC workshop proposal entitled ‘[Assessing Impacts of Changes in Weather Patterns and Extreme Events on BMP Siting and Design](#)’, and Jeni presented the STAC workshop proposal entitled ‘[Integrating Science on Watershed and Estuarine Change: Support for the Mid-Point Assessment and Beyond](#)’.

Discussion: ‘Assessing Impacts of Changes in Weather Patterns and Extreme Events on BMP Siting and Design’

- Jeremy Hanson: I understand the overall focus is on structural or multi-year BMPs – is this true, or will more annual BMPs play into workshop discussions?
 - Zoe Johnson: That’s something the steering committee will have to consider, but it will probably lend itself more to BMPs that are multi-year and long-term.
- Nicki Kasi: I’m concerned about timing and how we would use these results. By the time everything has been pulled together and finalized, we’ll be mostly finished with the WIPs. So what’s the expectation on how we use this?

- James Davis-Martin: I sense the qualitative alternatives we considered for climate change aren't just about the Phase III WIPs, but also about the adaptive management process moving forward.
 - Mary Gattis: Maybe the jurisdictions would be able to inform which BMPs would be looked at in this workshop?
- Nicki Kasi: I don't know how I would take these results and use them effectively any time soon since we've already gone through the BMP process and regulations have already been implemented.
- Sarah Diebel: I think this would be very helpful for implementers who would be spending a lot of time and money on structural BMPs to comply with the TMDL. All of this with the understanding that we already have established regulations.
 - Zoe Johnson: One of our climate change options was tied to the 2-year milestones, so it's not necessarily tied to the WIP III development. Every milestone period, you would consider new information on the impact of climate change on BMPs.
- Teresa Koon: I wanted to suggest that during this first workshop, we involve USDA-NRCS in the beginning of these discussions. That way, if there are changes necessary for the BMPs they install, they get incorporated from the beginning.
- Norm Goulet: I agree with Nicki a little bit. I don't see this as any help in terms of the WIP III process, but I do agree with the concept as a whole. I see this as being a gigantic effort – looking at two distinct sectors, and how climate change potentially impacts structural urban facilities is a huge task.
- Mary Gattis: I would like there to be consideration for someone from the USWG to serve on the steering committee for this group.
 - Tanya Spano agreed, and noted that there will have to be some degree of prioritization with the BMPs.
- George Onyullo: This study seems useful, but the only thing I felt wasn't fleshed out fully was the consideration of scale.
- The WQGIT did not reach consensus to endorse the STAC workshop proposal on climate change, citing concerns with scale and implementation in the Phase III WIPs.

Discussion: 'Integrating Science on Watershed and Estuarine Change: Support for the Mid-Point Assessment and Beyond'

- Scott Phillips: We wanted to have this workshop in late Fall 2017 so that it would sync up with the Phase III WIP development.
- Nicki Kasi: I like this because it would allow us to document progress as we execute our WIPs. This looks beyond the mid-point and the writing of the WIP, and looks to 2025 to see how we can adjust?
 - Jeni Keisman: Correct. Each cycle provides these insights that would help to inform the next cycle.

- Jeremy Hanson: A comment – this may be something you want to submit a proposal for every year. There's a lot of these things going on, and not too many opportunities for continuing these cross-cutting discussions. Perhaps that's something to consider.

Decision: The WQGIT endorsed the STAC workshop proposal entitled 'Integrating Science on Watershed and Estuarine Change: Support for the Mid-Point Assessment and Beyond'.

Trends to Support Development of draft Phase III WIPs - Joel Blomquist, USGS

Joel presented an [update](#) on the explanation of observed trends to support development of the Phase III WIPs.

- Jeremy Hanson: Clarifying question on the non-tidal dashboard – will you be incorporating the high-resolution Phase 6 land use into this visualization tool?
 - Joel Blomquist: I don't know off-hand. I think there will be a bit of give and take on what's incorporated, given the Phase 6 model uses a different characterization of the high-resolution categories.
 - Gary Shenk: I imagine it could be whatever we want it to be. I do know that annual loads for WRTDS and the Phase 6 watershed model will be posted there. We just need to update it, and the rest of the information hosted there is what we find useful.
- Beth McGee: In terms of additional data layers – could you include BMP implementation information in this? I know there's confidentiality issues with the agricultural federally-funded practices. Could those be aggregated?
 - Joel Blomquist: There's a few ways we're looking at doing this. We have an approach that would characterize the expected BMP aggregated effects for different pieces of geography over time. We will probably use that as our primary method of showing BMP implementation levels over time and geographically. There shouldn't be issues with privacy at the scale we're working at.
- Jim George: You mentioned being able to do this at a state-scale. I presume the SPARROW loading aligns fairly well with the Phase 6 model?
 - Joel Blomquist: It should. The benefit of the SPARROW is that you have a lot more spatial variation driven largely by land use, so it would help you focus on the right land use areas. One thing we'll have to incorporate is changes to the Phosphorus model as the Conowingo infill issue has changed the relative delivery rates of areas upstream from Conowingo Dam; the current model was calibrated based on conditions pre-infill.

Cover Crops Panel Appendix A (Technical Appendix) – Matt Johnston, UMD, Mark Dubin, UMD

Matt and Mark briefed the WQGIT on the [Cover Crops Panel's Technical Appendix](#), which was recently approved by the AgWG. Included were updates on eligible land uses and efficiency values for this practice in Phase 6.

- James Davis-Martin: Could you touch on the efficiencies of the commodity cover crops? Because they're now on a distinct land use that includes small grains, the panel's recommendations for commodities started from a different baseline from what we traditionally have.
 - Matt Johnston: The panel gave us 3 commodity cover crop practices. Instead of saying the earlier you plant that crop the better the reduction, they said that if you delay that crop, you will get a better benefit on that acre of land.
- James Davis-Martin: That's the change in mindset only as it relates to commodity cover crops that places the model benefit in reverse order. And why is the traditional with fall-manure application important?
 - Matt Johnston: I don't believe that every state in the watershed restricts winter applications of manure. So we've heard from our experts across the watershed that it's a good thing to incentivize planting a cover crop if you are going to apply manure anyway.
 - Mark Dubin: The intent of the panel was to address organic applications, and is primarily attributed to liquid manure systems which need to empty their storage systems in the fall.
- Sarah Diebel: Regarding the deadline for reporting historic practices – did I hear that we can submit the historical record every year now?
 - Matt Johnston: Every year, the EPA puts out grant guidance for the jurisdictions that directs them on how to submit BMPs and point-source BMPs each year. Going forward, EPA will be inviting the jurisdictions to revise their entire history, though it won't be required.
 - James Davis-Martin: Does that mean we re-calibrate the model based on that new history each year?
 - Matt Johnston: It's a pseudo-recalibration of BMPs; the new information would provide us with new baselines per county, and the model can calculate new loads based on that new information.
 - Gary Shenk: The decision that we made a few years back was that every 2 years we wanted to incorporate new information. This was based on our attempt to freeze the Phase 5.3.2 model for half a decade, and the Partnership wanting to incorporate the latest information. This wouldn't necessarily involve a re-calibration, but we have the principle in mind that we're measuring the change in effect of implementation from one period to another.
- Ted Tesler: Looking at this equation for combining BMPs, it seems like there would be a piece of efficiency value lost if these practices were done on a particular acre, and not spread over the entire realm of acres?
 - Gary Shenk: That's correct – we're not going to know whether it's one acre that has 5 BMPs, or whether they're equally spread. The assumption is that they're

equally spread, so you have some overlap that's proportional to how much you have to spread.

- Ted Tesler: So we couldn't report them uniquely, only in aggregate?
 - Gary Shenk: That's the way it's been.
- James Davis-Martin requested an update on the methodology on progress reporting of history and the re-running of past year's progress pending work from the WTWG and MWG.

Optimization Functionality in Phase 6 CAST – Gary Shenk, USGS, Lew Linker, EPA, and Bill Ball, CRC

Representatives from the CBP Modeling Team and the Chesapeake Research Consortium provided an [update](#) on the development of the optimization functionality tool to be implemented in the Phase 6 CAST tool.

Discussion:

- Scott Phillips: When you get to co-benefits, we have some work from Tetra Tech to look at co-benefits of BMPs on water quality outcomes. Will that be involved in this, or will there be some outreach strategy to get input from other goal teams?
 - James Davis-Martin: Tetra Tech has engaged other goal teams as part of their work to establish co-benefit scores for each BMP.
 - Scott Phillips: I'm thinking that maybe as part of the advisory team, at certain points you could reach out to the goal teams to potentially prioritize co-benefits.
 - Gary Shenk: I don't think it will be a problem to build co-benefits into the optimization, I just have concerns about quantifying them.
- James Davis-Martin requested a follow-up presentation on the progress of developing these tools.

Federal Agriculture in the Phase 6 Model – Gary Shenk, USGS, and Mark Dubin, UMD

Gary presented the [options](#) for representing federal agricultural lands in the Phase 6 suite of modeling tools, and Mark briefed the WQGIT on the [formal recommendation](#) from the Agriculture Workgroup regarding this issue.

Discussion:

- The Federal Facilities Workgroup's recommendation was consistent with the Agriculture Workgroup, and also considered additional ways to evaluate federal progress by assigning goals or targets and comparing them to what is being implemented on the ground.
- Sarah Diebel: I feel like modeling federal lands like it is currently done still accounts for the agricultural loads that are occurring, and I support working with EPA and the

jurisdictions to identify ways to develop goals/targets to utilize in a CAST scenario of something similar to help establish what's needed. I'm also happy to work with jurisdictions that don't necessarily have reporting templates. So overall, I support the first option for not explicitly simulating federal ag.

- Nicki Kasi: I think we should move forward with what the workgroups have recommended, especially considering this is a small percentage of land in the watershed.
- James Davis-Martin: Those are all great points, and I especially agree with Sarah's recommendation to work on this further and enhance communication between the two groups.
- Sarah Diebel: Regarding where we know the federal ag to be on federal facilities – the federal facilities editor tool provides the ability for facilities to enter the percentage of low vegetation that is agriculture.
- James Davis-Martin: Does anyone have concerns with moving forward with Option 1 noting the concerns: accountability in reporting, setting goals or targets in federal facilities that account for agriculture responsibility, and better representation of the agricultural lands that exist.
 - No dissenting opinions were voiced.
- Sarah Diebel questioned the process that led to this situation, and asked if it could have been addressed earlier.

Decision: The WQGIT agreed not to explicitly represent federal agricultural lands in the Phase 6 suite of modeling tools. In the future, the WQGIT agreed to consider issues such as accountability in reporting of federal agricultural BMPs, setting goals/targets for federal facilities that account for their responsibility, and working towards a better spatial representation of federal agricultural lands.

- Sarah Diebel asked if there was still going to be a face-to-face meeting in March. Lucinda replied that the midpoint assessment schedule was tentatively shifting, and a face-to-face meeting would likely be pushed to April or May.

Participants:

Name	Affiliation
James Davis-Martin	VA DEQ WQGIT Chair
Teresa Koon	WV DEP WQGIT Vice-Chair
Lucinda Power	EPA WQGIT Coordinator
Lindsey Gordon	CRC WQGIT Coordinator
Ann Carkhuff	EPA
Chris Day	EPA
Jen Sincock	EPA
Kelly Gable	EPA
Suzanne Trevena	EPA

Lew Linker	EPA
Jeff Sweeney	EPA
Ann Jennings	CBC
Marel King	CBC
Beth McGee	CBF
Dinorah Dalmasy	MDE
Jim George	MDE
Paul Emmart	MDE SSA
Bruce Michael	MD DNR
John Schneider	DE DNREC
George Onyullo	DOEE
Dave Montali	WV DEP
Kristen Wolf	PA DEP
Ted Tesler	PA DEP
Nicki Kasi	PA DEP
Jill Whitcomb	PA DEP
Chris Thompson	LCCD
Jenn Volk	UD
Tanya Spano	MWCOG
Bill Angstadt	Angstadt Consulting
Sarah Diebel	DoD
KC Filippino	HRPDC
Matt Johnston	UMD
Emily Dekar	USC
Norm Goulet	NVRC
Mary Gattis	LGAC
Sally Claggett	USFS
Kevin McGonigal	SRBC
Zoe Johnson	NOAA
Gary Shenk	USGS
Jeni Keisman	USGS
Scott Phillips	USGS
Joel Blomquist	USGS
Jeremy Hanson	VT
Michelle Williams	Ches. Conservation Corps