

CHESAPEAKE BAY PROGRAM WATER QUALITY GOAL IMPLEMENTATION TEAM

March 14, 2016 CONFERENCE CALL

Minutes

Summary of Action and Decision Items

DECISION: The WQGIT supported the recommendation to develop a data visualization tool to assist with the review of the Phase 6 Model.

DECISION: The WQGIT endorsed the recommended schedule for developing the agriculture components of the Phase 6 Model. The schedule will guide the Agriculture Workgroup and Agriculture Modeling Subcommittee's efforts throughout 2016.

DECISION: The WQGIT confirmed Ed Kee (Delaware Secretary of Agriculture, DDA) as the chair of the AgWG and Lindsay Thompson (Delaware Maryland Agribusiness Association) as the vice-chair of the AgWG. Both will serve 2-year terms.

DECISION: The WQGIT approved the proposed Phase 6 Model relative land use loading rates for the tree canopy over pervious land use, and the tree canopy over impervious land use. The approval is conditional upon a future research requirement being included in the Tree Canopy Expert Panel report to more directly assess nutrient fluxes associated with tree canopy. Additional research on the impacts of tree species and leaf litter on nutrient reduction efficiencies were also requested.

ACTION: WQGIT members and interested parties should provide nominations for membership on the Local Area Targets Task Force to Katherine Antos (Antos.Katherine@epa.gov) by COB Thursday, March 24th. In addition to the name of the nominee, please also provide their resume or a brief bio.

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

Discussion:

- Chris Brosch (DDA) presented a proposal to develop a data visualization tool that would process data from the beta Phase 6 model in order to aid partner review of each beta version.
- James Davis-Martin (Chair): Chris' presentation also highlights that there is some duplication of effort, as each state is doing an individual analysis.
- Brosch: Another outcome is making this data more accessible to those who may not otherwise have the ability to tackle a task this large. It could make it more accessible to the localities.
- Tanya Spano (MWCOG): One of the issues that has been raised in the past about evaluating the new model had to do with the real need to parse out the data and ground-truth it. I see a great advantage to this effort.
- Marel King (CBC): How will we raise awareness of this tool to local governments?

- Spano: For MWCOG, as soon as the tool is available we would do a regional assessment and then we would reach out to our members and let them know it is available.
- King: What would be a way to coordinate feedback from that process?
 - Spano: From our perspective we would just alert the states and CBPO simultaneously.
 - Davis-Martin: I agree, I think the partnership has a framework for soliciting and receiving feedback. It would be done via email to the appropriate workgroup(s).
- Davis-Martin: Are there any objections to moving forward with developing the proposed data visualization tool?
 - None were raised.

DECISION: The WQGIT supported the recommendation to develop a data visualization tool to assist with the review of the Phase 6 Model.

Next update:

- Davis-Martin: There are a few steps in our model development process that we really need to get resolved and into our next beta version.
- Bill Angstadt (Angstadt Consulting) presented the following proposed timeline:
 - WQGIT desires to affirm the need for these “Finished” Scenario Builder components for Beta 3 run (July 2016):
 - Manure Nutrient Applications
 - Inorganic Fertilizer Nutrient Applications
 - Legume Fixation
 - Nutrient Uptake
 - The timeline WQGIT would suggest Ag WG consider at their March 17, 2016 meeting are:
 - "Finished" SB components presented by AMS at April 21, 2016 AgWG meeting
 - Comments and changes submitted by Ag WG be considered and presented to May 2016 AgWG meeting
 - Delivery to Model Team – June 1, 2016
 - July 12, 2016 WSM beta 3 run outputs
 - Ag WG begins review for “fatal flaws” and “unintended consequences” at July 21, 2016 Ag WG meeting – to move towards adjustments for Beta run 4 (or intermediate sub-runs of SB)

- Davis-Martin: We are asking for WQGIT endorsement of correspondence to the AGWG spelling out the details of this schedule, and urging them to have the Agriculture Modeling Subcommittee (AMS) provide those Scenario Builder elements at the April 21st AGWG meeting. Are there any objections to this proposal?
 - None were raised.
- Mark Dubin (UMD, AgWG Coordinator): The AGWG leadership would be welcoming of a recommendation from the WQGIT.

DECISION: The WQGIT endorsed the recommended schedule for developing the agriculture components of the Phase 6 Model. The schedule will guide the Agriculture Workgroup and Agriculture Modeling Subcommittee's efforts throughout 2016.

Confirmation of Agriculture Workgroup Chair and Vice Chair – Mark Dubin, UMD

Discussion:

- Davis-Martin: Are there any objections to confirming the new chair and vice chair of the AgWG?
 - None were raised.

DECISION: The WQGIT confirmed Ed Kee (Delaware Secretary of Agriculture, DDA) as the chair of the AgWG and Lindsay Thompson (Delaware Maryland Agribusiness Association) as the vice-chair of the AgWG. Both will serve 2-year terms.

Revised Tree Canopy Land Use Relative Loading Rates – Rebecca Hanmer, FWG, Justin Hynicka, MD DNR and Olivia Devereux, DEC

In September 2015, the WQGIT conditionally approved the inclusion of up to three proposed tree canopy land uses in the beta version of the Phase 6 Watershed Model, pending a re-evaluation of the science on the relative loading rates of the tree canopy land uses. Rebecca, Justin and Olivia presented the revised tree canopy relative land use loading rates for inclusion in the Phase 6 Watershed Model.

Discussion:

- King: Is this saying that “tree canopy over impervious” has a higher relative load than “buildings and other” without tree canopy?
 - Olivia Devereux (DEC): Yes. “Roads” have high N and P loads, and the “tree canopy over impervious” loading rate calculation includes acres from all of the underlying land uses, including “roads” as well as “buildings and other”.
- Spano: As I understand it, this rationale makes sense and is an improvement. Norm, is there anything that still needs to be considered from the Urban Stormwater Workgroup (USWG) perspective?
 - Norm Goulet (NVRC, USWG Chair): A number of questions were raised at the USWG, but they were resolved. We didn't have any fatal flaws, and Justin has taken some of our comments into consideration. As time goes on, it would be

great to have more information, and we can adjust the loads at that point, but this is an improvement.

- Davis-Martin: You mentioned that the concern from the Modeling Workgroup was related to leaf litter. Could you give us some information about leaf litter and how it factors into the recommended rates?
 - Justin Hynicka (MD DNR): The street sweeping expert panel has looked at this topic in great detail. For tree canopy over impervious, it would be a net zero impact from leaf litter, because there is a benefit from interception of rainfall, offset by the increase in load from leaf litter. The increase is only in the fall, and the trees are reducing nitrogen and phosphorus loads the rest of the year, so over the course of the whole year, the net effect is zero. For canopy over pervious, we calculate total uptake, and that nutrient cycling process is really important for retaining and processing nutrients.
 - Davis-Martin: So the street sweeping panel concluded they didn't have enough information about leaf litter to reach a conclusion?
 - Goulet: That is correct. They didn't have enough information to determine if leaf litter was a source or sink for nutrients. That information is just not prevalent enough right now to draw any conclusions.
- Dinorah Dalmasy (MDE): Before we finalize this, I was waiting to see if someone brought up the lack of nutrient data used to derive the loading rates. MDE staff reviewed the methodology and we agree with the modeling and methods to derive the loading rates, but we are all aware that there was no nutrient data available. MDE requests that a future data collection requirement be included as part of final panel recommendations, similar to what was done for urban nutrient management, so improvements can be included in future versions of the model.
 - Davis-Martin: What type of data are you asking for and who would be collecting such data?
 - Dalmasy: I don't know who would collect it. It would be data applicable to conditions within the Bay watershed.
 - Davis-Martin: So this would be included in the section of the report about additional research, in that additional research is needed to look specifically at the nutrient fluxes associated with tree canopy.
 - Dalmasy: Correct.
 - Hynicka: I think in our updated methods, it is clear where the parameter values were taken, and we did take them with a regional value in mind. It did come up in my discussions with MDE. It is a tough case where we don't have nutrient concentration data, but there is compelling information to show N and P are accumulating in soils and biomass.
 - Jeremy Hanson (VT, CBPO): This is the kind of recommendation that the expert panel would certainly be willing to make. I will follow up with you to get specific language that we can put in the panel's report.
 - Dalmasy: That sounds good. Thank you.

- Davis-Martin: To add to that, one of the concerns I had about this proposal was that we used an “average tree” for the calculations. I know there is an average, but it is hard to picture what that is because there is so much variability. I think as we collect this data, it would begin to break it down by deciduous and evergreen and then maybe break it down even further. I would like to throw that out as an additional research request, as well.
 - Hanson: If we want to make that distinction, I would think we would want to broaden that beyond just the urban acres. It would be applied to forest as well.
 - Davis-Martin: I agree. It would be useful in future iterations of the model.
- Davis-Martin: I think the leaf litter discussion will continue to be problematic for the partnership in both the tree canopy and the urban stormwater arenas. I suggest Justin, the Urban Stormwater Workgroup and the Forestry Workgroup collaborate to put together a STAC workshop proposal to discuss topic, or a GIT funding proposal to try to answer some of the outstanding questions.
 - Rebecca Hanmer (FWG Chair): We will get together on that.
- Davis-Martin: Are there any objections to approving the recommended tree canopy relative land use loading rates?
 - None were raised.

DECISION: The WQGIT approved the proposed Phase 6 Model relative land use loading rates for the tree canopy over pervious land use, and the tree canopy over impervious land use. The approval is conditional upon a future research requirement being included in the Tree Canopy Expert Panel report to more directly assess nutrient fluxes associated with tree canopy. Additional research on the impacts of tree species and leaf litter on nutrient reduction efficiencies were also requested.

Overview of GIT 3 Workplans – Greg Allen, EPA, Julie Mawhorter, USFS, Renee Thompson, USGS, and Peter Claggett, USGS

Final versions of the Chesapeake Bay Agreement Management Strategy Workplans are due to the Management Board on March 25th. Greg Allen provided overviews of the Toxic Contaminants Policy and Prevention Workplan and Research Workplan; Julie Mawhorter provided overviews of the Riparian Forest Buffer Workplan and the Tree Canopy Workplan; and Peter Claggett and Renee Thompson provided overviews of the Land Use Methods and Metrics Workplan and the Land Use Options and Evaluations Workplan.

Discussion:

- Sally Claggett (USFS): When we are responding to the comments we received on the workplans, and the comments involve specific entities stepping up, how do we address those comments?
 - Lucinda Power (EPA): I would follow up directly with the affected entity and send them those comments. I think we need clarity as to whether a formal response is necessary.

- Davis-Martin: An alternative would be to use the workgroup to brainstorm any potential contributors who could help drive towards the ultimate goal. The workgroups and GITs can help facilitate those collaborations as necessary.

Water Quality Workplan Funding Information Needs – Lucinda Power, EPA

In January 2016, the Management Board decided to exclude funding information from the Management Strategy Workplans. However, in order to comply with CBARA, funding information will be needed by September 2016. Lucinda will lead a discussion of options for obtaining the required level of funding information.

Discussion:

- Power: This discussion doesn't pertain to the workplans. There won't be a requirement to include funding information with these workplans, subject to a final decision by the Management Board and PSC. This is related to CBARA, which requires a financial report, due at the end of September every year that includes expenditures and a detailed accounting of restoration activities for federal agencies, and to the extent available, state agencies. This is something that we encourage the states to submit. It is a burden. I would like to get feedback from states in terms of what barriers/challenges you would face in collecting budgeting information for some of these restoration activities.
- Russ Baxter (VA Secretary of Natural Resources Office): Nearly all of our programs are statewide, so for every permit VA DEQ issues and every BMP put in the ground, it can be hard to determine the state resources put towards the program that result in those actions, without making a leap in terms of how many permits we issue are actually in the Bay watershed. If we did this scrupulously, it would take more resources than we have time for. Information would probably be in broad terms with assumptions about the amount of time spent on efforts in the Bay watershed.
 - Power: The budget and finance workgroup will be looking at this issue and the PSC will discuss it this week as well. This group certainly isn't the only one responsible for this. We just wanted your perspective.
- Davis-Martin: The challenge is that we want to send the right messages about funding spent on implementation, or at least programs driving implementation, but the language is general enough that we could include all kinds of finances that are very loosely tied to restoration. I think we need to more clearly specify what restoration dollars are.
- Bruce Michael (MD DNR): We have had to do similar exercises in the past. Another concern is how each state reports this information. We have a number of monitoring programs, and making sure each jurisdiction is reporting the same, or similar, information on their programs would be difficult.
 - Baxter: I would agree. I don't think it is worth the time to get it down to the penny. I think the effort is really just to show the investment we're making.
- Dave Montali (WV DEP): Wastewater Treatment Plant upgrade costs would be included I assume, but I don't know. Through what channel would this request come to the states?
 - Power: Through this budget and finance workgroup, which will work with the states and see what is realistic. As I mentioned, we know it is a burden, and it is

not required for the states. I would imagine the budget and finance workgroup would have recommendations for how to address this.

- Teresa Koon (Vice-Chair): I was looking at the CBARA legislation. Do they not specify that they are looking at restoration activities with some level of cost minimum?
 - Baxter: Yes, but there are still questions about what to include that fall into the rather broad list.
- Spano: Is there a clear understanding amongst the states about a standard set of assumptions? If you wanted an apples to apples comparison, there should be some rules to set a standard baseline.
 - Power: I agree, and hopefully the budget and finance workgroup would make a similar recommendation.
- Davis-Martin: I also heard some conversation that EPA is not the lead for this, but OMB. So to some extent we are at the mercy of OMB to initiate the process.
 - Power: Some requests have been sent to OMB to ask for clarifications, but I haven't seen anything yet.

Adjourned

List of Call Participants

Member Name	Affiliation
James Davis-Martin (Chair)	VA DEQ
Teresa Koon (Vice-Chair)	WV DEP
Lucinda Power (Coordinator)	EPA
David Wood (Staff)	CRC
Chris Brosch	DDA
Dinorah Dalmasy	MDE
Bruce Michael	MD DNR
Justin Hynicka	MD DNR
Ben Sears	NYSDEC
Nicki Kasi	PA DEP
Kristen Wolf	PA DEP
Ted Tesler	PA DEP
Russ Baxter	VA Secretary of Natural Resources Office
Dave Montali	WV DEP
Matt Monroe	WVA
Marel King	CBC
Ann Jennings	CBC
Katherine Antos	EPA, CBPO
Lew Linker	EPA, CBPO
Greg Allen	EPA, CBPO
Jen Sincock	EPA, R3
Suzanne Trevena	EPA, R3

Chris Day	EPA, R3
Jenn Volk	U of Delaware
Beth McGee	CBF
Bill Angstadt	Angstadt Consulting
Tanya Spano	MWCOG
Chris Thompson	LCCD
Mary Gattis	LGAC
Jessica Blackburn	CAC
Norm Goulet	NVRC
Mark Dubin	UMD, CBPO
Matt Johnston	UMD, CBPO
Scott Phillips	USGS
Gary Shenk	USGS
Peter Claggett	USGS
Renee Thompson	USGS
Jeremy Hanson	VT, CBPO
Sheryl Quinn	Dept. of Navy
Neely Law	CWP
Lindsay Thompson	DMAA
Rebecca Hanmer	FWG
Sally Claggett	USFS
Julie Mawhorter	USFS
Olivia Devereux	DEC