

**CHESAPEAKE BAY PROGRAM**  
**WATER QUALITY GOAL IMPLEMENTATION TEAM**  
August 22, 2016 CONFERENCE CALL  
**Meeting Minutes**

Summary of Action and Decision Items

DECISION: The WQGIT approved the Forestry Workgroup's proposed Governance Protocols.

ACTION: If WQGIT members are interested in participating on a group to develop the range of options for addressing climate change in the Phase III WIPs, please contact Zoe Johnson.

ACTION: WQGIT members should inform Scott Phillips of their jurisdiction's representative for the Integrated Trends Assessment Team by September 1<sup>st</sup>.

DECISION: The WQGIT agreed to incorporate the Animal Waste Management Systems Expert Panel's recommended recoverability factors into the Beta 4 version of the Phase 6 Watershed Model once they have been approved by the Agriculture Workgroup.

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

- Teresa reviewed the agenda and asked for WQGIT concurrence. Members should reserve their rooms by August 26<sup>th</sup>. A schedule of webinars to prepare for the meeting will be released soon.
- Rebecca Hanmer (FWG Chair) walked through the proposed Forestry Workgroup Governance Protocols and asked for WQGIT approval. The FWG has not yet made a decision regarding who will serve as chair for the next three years.
  - Jim George (MDE): Are at-large members part of the consensus building process?
    - Hanmer: Yes, it should be the same as the WQGIT's process.

DECISION: The WQGIT approved the Forestry Workgroup's proposed Governance Protocols.

Climate Change Assessment Methodology Briefing – Zoe Johnson, NOAA

Zoe presented a brief summary of the STAC workshop and Climate Workgroup recommendations for climate projections, sea level rise and tidal wetland loss as a primer for an October webinar. She also provided an overview of the timeline for the decision-making process with regard to climate components of the midpoint assessment. This presentation is in preparation for the October 24-25, 2016 WQGIT meeting.

ACTION: If WQGIT members are interested in participating on a group to develop the range of options for addressing climate change in the Phase III WIPs, please contact Zoe Johnson.

**Discussion:**

- Jim George (MDE): Is there a time for the September 19<sup>th</sup> meeting?
  - Johnson: We will probably discuss this issue probably between 10am-1pm, but the small group will likely meet before then.
- David Wood (CRC): An announcement on the October 18<sup>th</sup> webinar will be coming soon.
- George: In TMDL world, there are driver models, generating loads, and response models determining responses to the loads. The latter determine the Bay TMDL. Are the response models being changed to such a degree that it starts to encroach upon changing the Bay TMDL? I am really just wondering if everyone working on this is aware of that distinction.
  - Lew Linker (EPA): We have the 1991-2000 hydrology that we always have used. That will be modified by climate change as we go forward, so we can look at increased precipitation or the relative impacts on the average hydrology. The average hydrology is set up so you can turn climate change impacts on or off. That way it is completely comparable and completely separated out.
- George: I can see precipitation on/off being on the driver side, and temp on/off being on the response side so they can be separated out.
  - Linker: As we increase the depth (sea level rise), we have a more open Bay to the ocean, which improves ventilation to deep channel water. That is actually one case where climate change has decreased hypoxia. Of course that also comes with the burden of wetland loss.
- Tanya Spano: In terms of openness and making sure those distinctions are clear, the Bay TMDL was based on certain fundamentals, and I think it will be important to clearly identify, when assessing climate impacts, what is different than the assumptions used during the development of the Bay TMDL. Show the link between the climate change impacts and necessary changes to those base assumptions.
  - Linker: “Stationary” is the principle that would be changing. The hydrology ensured that no influence of climate change would seep into our decision making because precipitation would be long term and would not change.
- James Davis-Martin (VA DEQ): Has the determination been made that 1991-2000 will continue to be our average hydrologic period?
  - Linker: That is entirely up to the WQGIT.

#### Water Quality Standards Attainment Indicator Update – Scott Phillips, USGS

Scott presented the latest water quality standards attainment results.

**ACTION:** WQGIT members should inform Scott Phillips of their jurisdiction’s representative for the Integrated Trends Assessment Team by September 1<sup>st</sup>.

#### **Discussion:**

Beth McGee (CBF): We are speculating that nitrogen reductions are coming from the wastewater sector, but a paper came out recently looking at impacts from air deposition reductions from Clean Air Act regulations. A lot of early wastewater work I think was focused on addressing phosphorus.

Phillips: I think that is a good point. Wastewater Treatment Plants (WWTPs) may have provided the more rapid improvement, but we are definitely seeing benefits from the Clean Air Act, especially in the western part of the watershed. Conservation practices in agriculture have also made an impact.

Davis-Martin: When I looked at the chart showing flows and loads across the years, it looks like 2009 and 2015 had very similar rainfall years, but the 2015 load was lower than the 2009 load. Isn't that a good indicator that maybe even our recent efforts are not only keeping up with increased development pressure, but achieving additional reductions?

Phillips: That would be a great thing to be able to say for sure. There is some uncertainty around these load estimates, so I would hesitate to make that strong of a conclusion. We can take a look at the error bars and see what the exact comparisons are.

George Onyullo (DOEE): I think in one slide, you had a 3 year averaging period. What led to the decision to use a 3 year average?

Phillips: That was part of the Bay TMDL decision and standards attainment decision to help take out some of the fluctuations in river flow.

Bruce Michael (MD DNR): We've been tracking hypoxia, and this year there was a projection that it would be about average or higher than average. However, our monitoring data this summer has indicated that for the most part we have actually seen much hypoxia in the Bay. I think we will see a smaller hypoxic zone than the long term average for the course of the entire summer.

#### BMP Expert Panel Contingency Planning – James Davis-Martin, Chair

The WQGIT began to discuss which BMP expert panels are expected to be completed prior to the September 30<sup>th</sup> deadline for inputs to the Phase 6 Model, and which BMPs expert panel reports will need to be addressed during the October 24-25, face-to-face discussion on options for incorporating panel recommendations that were not approved by the deadline.

#### **Discussion:**

- Jeremy Hanson (VT): The Animal Waste Management Systems (AWMS) Panel is making progress, but they will not have a full report through the 30 day comment period by September 30<sup>th</sup>. The plan is to have a preliminary report for AgWG approval by September 7<sup>th</sup> that would have improved recoverability factors. Having those improved recoverability factors should fix the calibration issues we saw in Beta 3.
  - Davis-Martin: That is great. I was hoping to be able to see some preliminary results from that report. It sounds like new recoverability factors will potentially be able to be incorporated into the Beta 4 calibration?
    - Hanson: Yes, that is the plan.
- Davis-Martin: Once those are in Beta 4, how likely are they to change as we move to the final report?

- Hanson: The panel probably wouldn't change those values much, though I can't say for certain. There is of course always the full review and approval process they would need to make it through.
- Davis-Martin: Do folks feel comfortable with that approach? We have recoverability factors built in now, but we could use revised numbers from the panel. Which would you prefer for use in the final beta calibration? Would you rather we use the panel's best professional judgment, or use the current values?
- Matt Johnston (UMD): One of the reasons this panel is our biggest concern is that calibrating the last version of the model was very difficult, and when we tracked down the reason, those recoverability factors were the primary reason. We know the current numbers are a fatal flaw and we were hoping to move towards something more defensible for the next beta.
- Davis-Martin: Do you expect the recommendation to be that we can recover more manure off the barnyard than we previously thought?
  - Bill Angstadt (Angstadt Consulting): Twenty to thirty years ago there was inefficient removal of manure from barnyards. Today, it is a lot more efficient and less is being lost. Recoverability is part of the assumptions of Scenario Builder. Would the WQGIT have to weigh in on this decision?
  - Hanson: Bill is correct that there is the Scenario Builder assumption about the baseline, but there is also a BMP element that influences how these practices impact the baseline recoverability.
- Angstadt: The baseline recoverability is species specific?
  - Johnston: It is actually total pounds.
- Spano: My view is to accept the panel's preliminary recommendations, knowing that they might change slightly.
  - Davis-Martin: I tend to agree.
- Sarah Diebel (DoD): If we accept those preliminary recommendations from the panel, and that goes into the final beta calibration, isn't that the final number?
  - Davis-Martin: Unless we change our decision rules on September 30<sup>th</sup>, which is a decision we have to make during the October face-to-face meeting.
- Diebel: Are there dissenting views related to the BMP panel recommendations?
  - Hanson: The panel itself is generally on the same wavelength for these issues. I think the panel, while it does need to rely on best professional judgment, will definitely provide something that will be an improvement over what we currently have.
- Davis-Martin: We would get animal-type specific recoverability numbers?
  - Hanson: Correct. Do we need to come to the WQGIT for approval following the September 7<sup>th</sup> AgWG meeting?
- Davis-Martin: If the AgWG, our experts, and the panelists think those are the right values, I am inclined to trust those experts.
  - Diebel: I agree.

- Ted Tesler (PA DEP): I would defer to the panel members and the AgWG. I support including their preliminary recommendations into the Beta 4 model calibration.
- Spano: I don't disagree with the approach proposed. If the AgWG sees that it causes a calibration issue and you ground-truth it, communicate where you could see the improvements across the watershed in order to better close the loop.
- Nicki Kasi (PA DEP): This is assuming they all come to consensus?
  - Davis-Martin: Yes, I think so. I would just ask that we be careful not to unduly influence the panel's recommendation just in order to get the right answer. Let's let them make their recommendation based on the literature and their best professional judgment, without asking them to give us an answer that closes our calibration.
- Dave Montali (WV DEP): There are fatal flaw reviews available well past the Beta 4 calibration.

DECISION: The WQGIT agreed to incorporate the Animal Waste Management Systems Expert Panel's recommended recoverability factors into the Beta 4 version of the Phase 6 Model following approval by the Agriculture Workgroup.

- Diebel: On the overarching process for incorporating panel recommendations: we made decisions about when the data would be incorporated into the modeling tools. Can you remind me if that decision was from last year's WQGIT face-to-face meeting?
  - Davis-Martin: We agreed that any newly approved practices will be held in between milestone cycles. We are currently in the 2016-2017 milestone cycle. As long as these panels are approved prior to end of 2017, they will be eligible for use in September 2017. If they fail to get approved by August 30, 2017, they would be incorporated at the end of 2019.
- Spano: It would be good for the purposes of documentation that the definitions of the tiers be included in the BMP panel summary document. There also should be references to which workgroup is responsible for each report.

Adjourned

### List of Call Participants

<b>Member Name</b>	<b>Affiliation</b>
James Davis-Martin (Chair)	VA DEQ
Teresa Koon (Vice-Chair)	WV DEP
Lucinda Power (Coordinator)	EPA
David Wood (Staff)	CRC
Lindsey Gordon (Staff)	CRC
John Schneider	DE DNREC

George Onyullo	DOEE
Mary Searing	DOEE
Dinorah Dalmasy	MDE
Jim George	MDE
Bruce Michael	MD DNR
Sara Latessa	NYSDEC
Janice Vollero	PA DEP
Nicki Kasi	PA DEP
Ted Tesler	PA DEP
Russ Baxter	VA Secretary of Natural Resources Office
Dave Montali	WV DEP
Suzanne Trevena	EPA, R3
Jen Sincock	EPA, R3
Chris Day	EPA, R3
Lew Linker	EPA, CBPO
Jeff Sweeney	EPA, CBPO
Laura Free	EPA, CBPO
Bill Angstadt	Angstadt Consulting
Tanya Spano	MWCOG
Beth McGee	CBF
Chris Thompson	LCCD
Sarah Diebel	DOD
Norm Goulet	NVRC
Gary Shenk	USGS
Scott Phillips	USGS
Matt Johnston	UMD
Rebecca Hanmer	FWG Chair
Jessica Blackburn	CAC
Jeremy Hanson	VT
Zoe Johnson	NOAA
Joan Smedinghoff	CRC
Kara Skipper	CRC
Kyle Hinson	CRC
Emilie Franke	ERT
Amanda Campbell	MWCOG
Karl Berger	MWCOG