# CHESAPEAKE BAY PROGRAM WATER OUALITY GOAL IMPLEMENTATION TEAM

October 13, 2015 CONFERENCE CALL

Minutes

# Summary of Action and Decision Items

ACTION: State partners who need travel fund assistance to our December face-to-face meeting should contact Rich Batiuk (<u>Batiuk.Richard@epa.gov</u>) and Lucinda Power (<u>Power.Lucinda@epa.gov</u>) prior to November 1.

ACTION: Volunteers to serve on a small planning committee to assist with organizing topics for the December 14-15 WQGIT Face-to-Face meeting at NCTC in Shepherdstown, WV should contact Jenn Volk (jennvolk@udel.edu), and James Davis-Martin (James.Davis-Martin@deq.virginia.gov).

ACTION: WQGIT members should submit feedback on the Water Quality Management Strategy workplan, as requested via an email from Lucinda Power (10/7/15), by October 19.

ACTION: WQGIT members should submit feedback on the Animal Waste Management Systems (AWMS) BMP expert panel charge and membership, as requested via email from Jeremy Hanson (10/9/15), by October 26.

DECISION: The WQGIT approved the Agriculture Workgroup's membership definition.

ACTION: Mark Dubin will work with the Watershed Technical Workgroup (WTWG) and the WTWG representative to the BMP expert panels to ensure that regular updates are provided on the status of the panels and the impacts of their anticipated recommendations on tracking and reporting of the practices.

# Welcome/Confirm Call Participants/Workgroup Updates - Jenn Volk, Chair

- Jenn welcomed at-large members and thanked signatory members for their nominations.
- Jenn asked for volunteers to serve on a small planning committee to assist with organizing topics for the December 14-15 WQGIT Face-to-Face meeting at NCTC in Shepherdstown, WV. Rooms will be available to official members first, and at the November WQGIT meeting, we will announce if additional rooms are still available.
  - Rich Batiuk (EPA, CBPO): If state partners have travel fund restrictions, EPA might be able to assist by covering costs for a limited number of staff.

ACTION: State partners who need travel fund assistance, should contact Rich Batiuk (Batiuk.Richard@epa.gov) and Lucinda Power (Power.Lucinda@epa.gov).

• Volk: James Davis-Martin (WQGIT Vice-Chair) will head up a small subcommittee to help plan the face-to-face in terms of setting the topics and agenda.

ACTION: Volunteers to serve on a small planning committee to assist with organizing topics for the December 14-15 WQGIT Face-to-Face meeting at NCTC in Shepherdstown, WV should contact Jenn Volk (jennvolk@udel.edu), and James Davis-Martin (James.Davis-Martin@deq.virginia.gov).

- Jenn reviewed the WQGIT-related Management Board decisions from September 30.
  - o <u>Decision</u>: The MB agreed to implement the "Consensus Continuum" as presented.
  - o Decision: The MB approved the WQGIT's definition of membership.
  - O Decision: The MB agreed that the Tier I nitrogen and phosphorus efficiencies and the Tier II and Tier III nitrogen efficiencies stand. They additionally approved the Tier II efficiencies for phosphorus and agreed that acres being credited for Tier II phosphorus are conditional on the pending Nutrient Management Taskforce's cross-walk and on the states providing adequate compliance documentation for Tier II phosphorus.
  - O Decision: For the purposes of simulating nutrient and sediment loads and reductions for abandoned mine reclamation in the 2015 Progress run, MD, PA, VA and NY agreed to use the methodology described in "option 3" of the "Memo to the Water Quality GIT re: Erosion and Sediment Control on Extractive...".
    WV agreed to continue its use of "option 2."
- Jenn reminded the WQGIT that the draft 2016/17 Water Quality Milestone schedule is posted on calendar page.
- Dianne McNally (EPA, R3): I will be filling in for Suzanne Trevena (EPA R3) as the lead for the Milestones Workgroup related items while she is out on maternity leave. Any questions can be sent to me.

ACTION: WQGIT members should submit feedback on the Water Quality Management Strategy workplan, as requested via an email from Lucinda Power (10/7/15), by October 19.

ACTION: WQGIT members should submit feedback on the Animal Waste Management Systems (AWMS) BMP expert panel charge and membership, as requested via email from Jeremy Hanson (10/9/15), by October 26.

• Jeremy Hanson (VT): The focus of this review is on the membership list. The scope and charge for the AWMS panel were actually approved several months ago, but formation of the panel was delayed, so the timeline will need to be adjusted.

<u>Agriculture Workgroup (AgWG) Membership Definition</u> – John Rhoderick and Kristen Saacke-Blunk, AgWG Co-Chairs

**Decision Requested:** The WQGIT was asked to approve the Agriculture Workgroup's proposed membership definition. The membership definition was developed per the recently finalized Governance Protocol for the WQGIT and its Workgroups.

### **Discussion:**

- Ann Jennings (CBC): Under the criteria for prioritizing at-large membership, there is a statement that an at-large member should be from an organization that has a role in agricultural water quality improvement. How would that apply in the NGO community?
  - Saacke Blunk: I think that was meant to get at the fact that some NGOs have very specific missions that may or may not include water quality issues specifically related to agriculture, even though we are a group specifically targeted towards agriculture.
- Bill Angstadt (DMAA): In the decision making paragraph, what do you mean when you ask for polling the non-consensus individuals. Could you be more specific about what kind of form this non-consensus polling would be in?
  - Saacke Blunk: We need to understand why it is we are not reaching consensus.
     We want to make sure we can communicate what the dissenting opinion was, and explain why we were not able to reach consensus.
- Angstadt: I would like to include more specific language that the rationale behind the dissenting opinion must be provided, and that the group worked to reach consensus prior to conducting a poll.
  - o Saacke Blunk: I'd be happy to clarify that in the language.
  - Volk: In the WQGIT Governance, we stipulate that if there is a dissenting opinion, they must provide an alternate proposal.
    - Saacke Blunk: I agree with that, and assumed that we would have already gone through that process before getting to the decision point here.
- Volk: We are really just looking for a membership definition approval here and you could go back and tweak the language.
- Tanya Spano (MWCOG): It would be good to understand the wishes of the WQGIT as a whole, as other workgroups develop this. Is it okay to convey as illustrative, certain steps in the process?
  - Volk: We didn't want to be too prescriptive with the governance. We really just ask that the workgroups follow the consensus-based approach to decision making. We don't need to write down each and every step.
- Dave Montali (WV DEP): I think the AgWG governance is fine as it is.
- Angstadt: I'd be comfortable with the WQGIT having a decision on the membership
  definition and giving the AgWG the opportunity to tweak the section on the consensusbuilding process.
- Volk: Are all members of the WQGIT comfortable with approving the membership definition and allowing the AgWG to tweak the language in the section on their decision-making approach?
  - o No dissenting comments were raised.

DECISION: The WQGIT approved the Agriculture Workgroup's membership definition.

# Analysis of Trends in Criteria Attainment - Mindy Ehrich, UMCES

Mindy described water quality <u>attainment patterns</u> and trends within each Chesapeake Bay segment and broken down by designated use.

## **Discussion:**

- Beth McGee (CBF): What is the shortest time window you would feel comfortable performing statistical analysis on to find trends?
  - o Ehrich: Ten years is pretty typical.
  - Spano: I think that is a good point. Those kind of things will be very critical for folks to understand. If that is a limitation, it will need to be part of the communication of these results.
- McGee: From my perspective, that seemed pretty depressing because a lot of trends seem
  to be going in the wrong direction. But if more recent trends are positive, it would be
  good to know.
  - Jeni Keisman (USGS): We do have 3-year rolling periods, so one bad year could affect several trends. For trends in criteria attainment, we might need to look at a slightly longer time period. Rebecca will get into that a little more.
- Spano: I really like the way some of the assumptions are laid out up-front to provide context before you jump right into the actual data. The methodology was helpful.
- James Davis-Martin (VA DEQ): I really like that you are expanding our ability to quantify these attainment results beyond a pass/fail approach. On some, you still create boundaries though, for instance, until you see one of these shallow water trends growing above 80% to attainment, it will always show up as red on the map. Thinking about how to display these to show incremental steps is important. That is, I guess, what the trends work is going to do. I'm not quite sure how else to present it besides having the actual numbers through time.
- Spano: Another point is that in telling the story, showing trends without providing the context of nutrient loads and sources or the hydrology and explaining trends is not the full picture.
  - Ehrich: Some of that context will be covered by what Rebecca will discuss related to the Generalized Additive Models (GAMs).
- Scott Phillips (USGS): When we communicate, we might want to say "improving" or "degrading" when referring to trends rather than "increasing" or "decreasing."
  - Ehrich: Yes, we would certainly work with the communication team when messaging these results.

## GAMs Development Briefing – Rebecca Murphy, UMCES

Rebecca provided a <u>status update</u> on the General Additive Models (GAMs) method for detecting and describing trends in estuarine waters.

### **Discussion:**

- McGee: Can this approach be used in non-tidal areas as well?
  - Murphy: We will talk a little about non-tidal. The WRTDS model that Joel and Doug will discuss has a lot of the same functionality, which is the tool they used for non-tidal trends.
    - McGee: Explaining some of the differences between the two tools might be useful from a communications perspective.
- Spano: The geographic features and physical features of the tributaries themselves is important. If I'm looking at this story and trying to explain trends, trying to figure out what comes over the fall lines would be useful. I think there has to be some explanation that the story for each tributary might be different. The Potomac, for instance, has a section of its own deep water and we might not expect to see improvements in that section because of its unique features. The other is the contributing watershed. Digging into the tributaries we'd need to understand the land to water ratios as well. I didn't see those components.
  - Murphy: Those are good components. As we start to pull out stories in different places, we would definitely want to be able to pull out those pieces of information. That is the type of information we want to incorporate for explaining trends.
  - Spano: I would also say that not everything I suggested is more modeling work, but the information piece that would be important to capture in future presentations.
  - O Davis-Martin: I think some of those geophysical limitations may reveal themselves with the analysis of seasonality, flow, nutrient loads etc. It could explain why you are seeing trends, or areas that are resistant to change.
- Davis-Martin: How do you expect these data to be presented/shared/distributed? The maps are an easy interface. Can we click on trends and drill into additional data?
  - Murphy: We are hoping to get feedback from you all to find out what you find useful. I personally really like the idea of clicking on a map and being able to pull up the graphs. It depends on the audience.
  - Keisman: That is the feedback we want. The CBP has a good communications team and GIS team and they are open to communicating this information in the way you all would like to see it.
- Lee Currey (MDE): This is great work. I think flow is really important and to normalize flow will help better explain trends. I know it is even more complicated in estuarine waters to figure out what other variables to normalize. Are there hints in terms of what other variables you'll be looking into?
  - Murphy: Flow normalization is a natural next step and is something we are working on. Wind, salinity, those types of research oriented applications might be down the road.
  - o Keisman: The experts you hear from today will have a back and forth flow of information with researchers to figure out those processes that influence trends.

That is definitely complicated and figuring out how to integrate those insights is the challenge.

# <u>Trends in Loads from WRTDS</u> – Joel Blomquist and Doug Moyer, USGS

Joel and Doug provided an <u>introduction</u> to the upcoming release of trends in nutrient and sediment loads. This update serves as a primer for the full results that USGS will present at the December WQGIT meeting.

## **Discussion:**

- Spano: It is important that the graphics include that the load trends are over a 10 year period.
  - o Blomquist: I completely agree.
- Marel King (CBC): If this is based on an area, does it mean that as you go downstream, the changes are cumulative?
  - o Blomquist: Not necessarily. If we had done it in simply load, you would see that. If you did it that way the smaller monitoring sites would not show up.
- Spano: I understand why there is a Bay-wide snapshot, but maybe there is a need to focus in on some major tributaries. Break out the larger tributaries from the smaller ones.
  - o Blomquist: That is our intent. We want to make sure both of those messages come out.
- Davis-Martin: It seems to me the notations of the station abbreviations are not consistent with what we are used to seeing in Model outputs. Maybe it isn't possible to put it on a Model segment framework, but I'm just not sure what these all mean for Virginia.
  - o Moyer: We would certainly put a key on there for that information.

# Water Quality Criteria Addendum and STAC Review - Peter Tango, USGS

Peter <u>reviewed</u> the revised version of the addendum and the process and schedule for the STAC review.

# **Discussion:**

- Spano: When do you expect this to be issued?
  - Tango: The original goal was by the end of the year. Pending the timing of STAC review, which usually takes 6-8 weeks, it might be a challenge to get it done by December 31. The early part of 2016 sounds most likely.

# Provisional Ag BMP Panel Updates - Mark Dubin, UMD

Mark presented provisional expert <u>panel updates</u> for the Phase 6 Model agricultural BMP expert panels. The update was intended to inform WQGIT members of the current direction of the Panels as they work towards developing their final reports, which are due in the Spring of 2016.

### **Discussion:**

- Spano: I didn't see a biosolids expert on the nutrient management panel even though that is part of their charge. Is that correct?
  - O Dubin: Even though we don't have a panel member working specifically with biosolids, some members do have biosolids experience. They also have the option of bringing in other experts as guests to address that. I don't think we have complete information from the Wastewater Workgroup yet on biosolids.
- Spano: There is the actual data, and how that information is portrayed in the Model. There are continued concerns about biosolids and how it should not be portrayed the same way as manure. We have an obligation to provide the data, but want to be very careful about what the assumptions are in the Model.
  - Dubin: I think the panel just wants to make sure it is inclusive, but the focus thus far has been on livestock manure. We will loop in your workgroup when the focus shifts to biosolids.
- Davis-Martin: On the nutrient management panel, they are saying that the Phase 6 Model will somehow assume that all lands are receiving a core level of nutrient management and should it somehow be shown that an area is not, then the Model will somehow apply a negative efficiency? Where is that data coming from? Are we now reporting non-BMP implementation?
  - O Dubin: States now report acres that are part of a nutrient management program. That doesn't change as we move forward. If you are implementing programs and tracking acres, that would be what you would look at, and any of those acres under plans would cover the core nutrient management practices. If you go beyond the core elements with additional elements, you would receive additional reduction credit. Implementing core elements would basically be a neutral crediting. If operators aren't engaged with a nutrient management program, there might be an opportunity to bring those acres in because acres that states have not been reporting as being under a nutrient management program, those would not be meeting the core standards, and they would be getting the negative credit. It is basically how we do it now, because lands not under nutrient management plans have a higher loading rate.
- Davis-Martin: So we report them at different tiers, but get no benefit? The acres that we don't report as having nutrient management plans would have increased loads?
  - Dubin: These items are things they are thinking about as ways of providing additional credit beyond the baseline. States could say they utilize these practices on any acres.
- Davis-Martin: So now we have gone from nutrient management planned acres to 3 tiers of nutrient management plans, to 15 components of nutrient management plans?
  - O Dubin: You would look on the menu and report the elements that your state standards provide. If you want to go beyond the basic nutrient management credit and report three types of activities, you would have that opportunity. This is more 2-tiered, because there is a baseline, then a menu list for value added.

- Davis-Martin: But any acres without even a core plan will see negative efficiencies.
  - O Dubin: Yes, just like now, any time they didn't have nutrient management plans reported, those acres have higher loads. Acres implementing higher value BMPs have lower loads.
- Davis-Martin: It feels like we are putting a lot of emphasis on our ability to accurately determine the nutrient availability, at the county scale, of all the different agriculture land uses. I don't have that level of confidence in the fertilizer piece, or how the manure is being handled. It seems like we're saying we feel more confident about all of those estimates than we are in the farms we've actually been on and verified, which to me seems like much more reliable data.
  - o Dubin: As with the Phase 5.3.2 report, we are looking at the management of nutrient applications. The plan is bigger than that, which is captured by other BMPs as well.
    - Davis-Martin: Can you make sure the Watershed Technical Workgroup (WTWG) representative shares information back with the entirety of the WTWG? I think it will be important to be able to consider that level of reporting before the panel moves too far in that direction. You might want to put this presentation on their agenda.
      - Dubin: Good suggestion, we will work with Matt and Ted on that.

ACTION: Mark Dubin will work with the Watershed Technical Workgroup (WTWG) and the WTWG representative to the BMP expert panels to ensure that regular updates are provided on the status of the panels and the impacts of their anticipated recommendations on tracking and reporting of the practices.

# <u>Adjourn</u>

## List of Call Participants

Member Name	Affiliation
Jenn Volk (Chair)	U of Delaware
James Davis-Martin (Vice-Chair)	VA DEQ
David Wood (Staff)	CRC
Lindsey Gordon (Staff)	CRC
Kristen Saacke Blunk	AgWG Co-Chair
Karl Blankenship	Bay Journal
Marel King	CBC
Ann Jennings	CBC
Beth McGee	CBF
John Schneider	DE DNREC
Bill Angstadt	DMAA
Lindsay Dodd	DMAA
Sarah Diebel	DOD

Rich Batiuk EPA, CBPO Jeff Sweeney EPA, CBPO Dianne McNally EPA, R3 Kelly Gable EPA, R3 Ann Carkhuff EPA, R3 **HRPDC** Jenny Tribo Jamie Mitchell HRSD Chris Thompson LCCD Bruce Michael MD DNR Dinorah Dalmasy MDE Lee Currey MDE Karl Berger MWCOG MWCOG Tanya Spano Norm Goulet **NVRC Ben Sears** NY DEC PA DEP Andy Zemba **Ted Tesler** PA DEP Mindy Ehrich **UMCES** Rebecca Murphy **UMCES** Richard Tian **UMCES** Mark Dubin UMD, CBPO

Peter Tango USGS
Jeni Keisman USGS
Scott Phillips USGS
Gary Shenk USGS
Doug Moyer USGS
Joel Blomquist USGS

Dana York Verification Review Panel Chair

Russ Baxter VA Secretary of Natural Resources Office

Jeremy Hanson VT, CBPO
Dave Montali WV DEP