

# **CHESAPEAKE BAY PROGRAM WATER QUALITY GOAL IMPLEMENTATION TEAM**

April 11, 2016 CONFERENCE CALL

## **Minutes**

### Summary of Action and Decision Items

**ACTION:** Lucinda will revise the document that outlines proposed changes to the Midpoint Assessment and Phase III WIP schedule in order to reflect the feedback and recommendations raised during the April 11<sup>th</sup> call. The revised schedule document will be distributed to the WQGIT for review on Wednesday, April 13<sup>th</sup>, and the WQGIT will be asked to provide feedback and discuss any additional recommendations during their April 25<sup>th</sup> conference call. Final WQGIT recommendations will be sent to the Management Board and the PSC for discussion during their May meetings.

**ACTION:** Dinorah Dalmasy will consult with MDE staff and will send Maryland's recommendation regarding the proposed method for handling extractive lands in Phase 6 to David Wood. Maryland's recommendation will be distributed to the WQGIT in advance of the April 25<sup>th</sup> call.

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

Revised MPA and Phase III WIP Schedule – Lucinda Power, WQGIT Coordinator

The WQGIT was briefed on proposed revisions to the midpoint assessment schedule, particularly as it relates to the finalization of the Phase 6 modeling tools and the development of the Phase III WIPs.

### **Discussion:**

- Mary Gattis (LGAC): When will the local review of the land uses take place under this schedule? Given the changes with processing the Phase 6 land use dataset, how does that impact the local review period?
  - Power: My understanding is that the local review period will take place from early summer of 2016 through about mid-fall of 2016. Peter Claggett (USGS) is working with the Land Use Workgroup (LUWG) to have that schedule specifically laid out.
- Gattis: So we are still allowing roughly three months, on a rolling basis, for local review?
  - Power: Correct. One of the reasons for this schedule shift is to preserve that review of the local data.
- Davis-Martin: On the one month fatal flaw review: recognizing it assumes an incremental and sequential review of the Model through these 2016 beta versions, hopefully the only thing changing between the October 2016 beta and the calibration of the final model is the arrival of the local land use data. However, I think we recognize that the land use data is a very large piece of the puzzle. How likely is it that changes to the land use conditions

from the beta 4 to the final Phase 6 Watershed Model will affect more than just the land uses? Will it uncover bigger issues?

- Dave Montali (WV DEP): I am not real clear on all the factors it could impact. In the big picture we are really asking if changes in land uses shift the loads between sectors. If it causes a major shift, you go back to the start of the target process, but my sense is it won't make a huge impact.
  - Gary Shenk (USGS): Since we have nutrient and fertilizer spreads set according to the land uses, a change in land uses will impact the loads. It is possible that some things may pop up, but I think we will see most issues and get them taken care of by that last beta version. It is impossible to know for sure, but hopefully if we have done a good job in the review this year, it will lessen those bigger impacts.
- Davis-Martin: My concern is that while the schedule says we have one month for fatal flaw review of the final version of the Watershed Model, we really have April through June to find issues and resolve them. It just makes me uncomfortable because it is such a big piece of the puzzle. I just wanted to put it out there as a concern.
- Montali: If the only thing that changes is the land use, we could compare beta 4 to the final Model in an expedient way and see the fatal flaws relatively easily if there are any.
  - Davis-Martin: There is definitely some value in doing that. But schedules being what they are, we will continue to hold ourselves to a fairly aggressive schedule. I think there are concerns about there being just a one month fatal flaw review. If we need to hold the June date solid, I think we should think about using April through June as a tiered review, where we look at the biggest issues in April, and work collaboratively to make that a review and resolution period.
- Power: If we were to do that, would we be looking at a July or August release of the final Watershed Model?
  - Shenk: Yes, it would push the release of the final Watershed Model out that far.
  - Montali: It all depends on what potential issues come up.
- Davis-Martin: The concern is really the tail end of the schedule where the partnership is agreeing upon the tool that will be used to evaluate our progress through 2025. The other thing is, if we are intending to make this model review accessible and transparent, there are a lot of other folks in the watershed who may be interested in reviewing the Phase 6 modeling tools and providing feedback. I don't think this schedule provides time for them to conduct their review.
  - Montali: Well, the interim reviews are available to everyone as well. If they have an interest in reviewing the Watershed Model, they should be invested throughout this year as well. If something big comes along during the fatal flaw review, the partnership can make the decision to delay the schedule at that point in time.
- Power: I understand the concerns that are being expressed today. James, are you recommending that we allow more time for fatal flaw comments, or are you okay with this current revised schedule? If you are alright with the current proposed schedule, we can always discuss delays in the future if a major issue arises during the fatal flaw review.

- Davis-Martin: The schedule builds in three months to do the calibration. Is all of that time needed?
  - Shenk: The short answer is yes. When we are finalizing the Watershed Model, there are all kinds of checks and internal reviews to go through that the betas aren't subject to.
- Davis-Martin: How much is calibration time and how much is review and double-checking?
  - Shenk: Calibration takes almost exactly one month, but the first month is to get the data as well as check and recheck the data before it gets to the calibration stage.
- Davis-Martin: Maybe we could slide the partnership fatal flaw review period to be concurrent with the internal review, which would buy an extra month. Then we could open the window for continued review and identification of issues throughout May. That would potentially allow us to hold the June date for final model release and would give three months for continuous review.
  - Shenk: I am concerned about compressing that three month period. Certainly we can release the Watershed Model as soon as possible, even with the caveats that we haven't fully checked it. But from experience, the date when everything is due is a mad rush to get everything in, so I don't want to get compressed from both sides. We will try our best to stay on schedule, but I don't want to promise anything at this point.
  - Montali: Releasing the Watershed Model for partnership review before it has been thoroughly checked internally scares me a little. I would rather the modeling team do their internal checks first. If we need three months, we need three months.
    - Lew Linker (EPA): I agree. We will be looking at decisions like Conowingo as a partnership that give us early looks in the fall. We will have ongoing discussions among decision-makers, but those three months to check the data and run the calibration are necessary. We will be sharing as much as we can as early as possible, but we can't shorten up those three months for the modeling work.
- Power: So the other option is to have April, May and June for review and releasing the final Model in July 2017.
  - Davis-Martin: I think that is acceptable. Could you elaborate on your sense of what that one month delay in final model delivery would mean in terms of target development and the Phase III WIPs?
- Power: If we went for a final Model delivered in July 2017, it would push back the draft targets release to August, which would compress the time from when draft targets are released and when final targets are released. That has us sticking to the same schedule for everything else. I would like feedback from the WQGIT on the proposal to keep the Phase III WIP schedules as close to the original schedule as possible.
- Montali: I have questions about the draft targets and final targets. I think we need to keep a good chunk of time between draft and final targets. We'll be looking at how our level of effort in the Phase II WIPS stacks up against the new modeling tools. In order to have

that review, we need to understand how allocations of these targets will happen. Will everything stay the same, will we redefine E3, or talk about the hockey stick, etc.? When will all of that happen?

- Shenk: During the December face-to-face, we decided to leave the rules for the allocation methodology alone. As far as what the hockey stick would look like, we don't have all the information yet, but we do have the new delivery factors. So I thought we would talk about that during the April 25<sup>th</sup> call.
  - Davis-Martin: My sense was we agreed to use a similar methodology and approach towards allocations, but recognized both axis were likely to change and that we would have an opportunity to look at the defining characteristics of that slope to at least consider the variables in it.
  - Montali: The headwater states got special consideration in Phase II. I don't know if those loads in EPA's pocket will still be in their pocket, or if they will go away. All those decisions will be needed before EPA can issue draft targets. What will go into the draft targets released in July 2017?
    - Power: My understanding is the E3, no action, and WIP scenarios will begin to be run this year.
    - Linker: To elaborate, I would say that we have the precedent of what was done before, and we have all the tools we need in terms of development of the hockey stick. So there are some remaining questions in my mind that haven't been resolved like whether or not we still like the relative differences between point and nonpoint, etc. If those variables get reopened, we can work with whatever the partnership decides. Definitively, by the time we get to draft Phase III planning targets, all of that should be worked out, including the decision regarding the headwaters. I think we can say discussions will begin this fall and will continue up until we get to draft Phase III WIP planning targets. We don't have specific dates, but we have an understanding of our capabilities. Somewhere between July and October 2016 we should be able to start generating preliminary drafts of what the hockey stick could look like.
    - Power: If those decisions are happening along the way, an August 2017 release of draft targets could still happen. It sounds like there is concern about compressing time between draft and final planning targets.
      - Montali: I agree. It should not be shortened.
- Power: If we release draft targets in August 2017, how long do we need before the final targets are released? Is December 2017 still alright?
  - Davis-Martin: That is a really challenging question because we don't know what it is going to look like. What happens in the window between draft and final will determine how long we need.

- Montali: I am not sure. I think we kind of agree if we can keep in the general time frame of 6 months between draft and final, we can deal with it.
- Davis-Martin: I think it is hard to set timelines when you don't understand the scope of the work that you need to do within that timeframe.
- Linker: I would like to point out that we have the opportunity for discussion in the months between draft and final targets. With the draft targets we will have values and allocations, but the understanding of the implications won't be there yet. Think of the six months as a period of discussion that we can use to reach understanding.
- Power: I am hearing a recommendation to allow 6 months between the draft and final targets. I know there was a desire to have a year between release of the draft targets and when the draft Phase III WIPs are due, as well as a year between release of the final targets and when the final WIPs are due. I could shift the schedule to allow a 6 month review of the draft targets and maintain that one year between draft and final.
- Montali: So the final Phase III WIPs would be released sometime in early 2019?
  - Power: Yes.
- Davis-Martin: Are we getting ahead of ourselves by setting a timeline? As I expressed with draft to final targets, I see the same issue with the timing between the release of the targets and when the Phase III WIPs are due. If we are constrained on time and resources, it really limits us as far as what we can do in the WIP planning process and I don't know if that is in the best interest of the partnership. Wouldn't we be better off leaving the schedule open-ended? When we understand what the targets and resources are, we can further develop the schedule. If the goal is effective engagement of local stakeholders to make sure implementation occurs, we should take the time we need to make sure it is done right.
- Gattis: I had made a number of comments on the proposed schedule adjustment document and would like to take it back to LGAC for comment.
- Nicki Kasi (PA DEP): Why are we agonizing over deadlines that are a year and a half away? Get the Watershed Model finished and when we know what we need to do, we can plan a schedule. Who knows what we will need to deal with a year from now. Let's take these dates off the schedule and deal with the Watershed Model.
- Montali: Alternatively, could we just say the deadline for submitting final Phase III WIPs is one year after the release of the final targets? Or do others think they need more time?
  - Davis-Martin: I think it depends on the expectations.
    - Kasi: I agree.
- Gattis: We know enough to move forward with local engagement without waiting for the expectations. We know we need to do a better job of engaging locals. I don't know why that would need to be put off.
  - Kasi: I agree, but until we know exactly what the expectations are, we can't lay out the schedule of who needs to do what by when. I can start getting an idea of what I would like to do, but that is all until the expectations are released.
- Jen Sincock (EPA): I understand the concerns being raised, but if we don't have deadlines, we will never get done what we need to get done. I am concerned about not having deadlines and I think we need to build in the local work.

- Linker: That is a good point. We do have our process for decision making. The 2017 Midpoint Assessment is the point where we move from draft to final targets and start implementation to get to 2025. There is a lot to be said for sticking to reasonable deadlines and adhering to the schedule we already have.
- Gattis: I want to clarify that I am not proposing that we eliminate deadlines.
  - Davis-Martin: I was not advocating for that either. I want to modify the deadlines. Instead of setting a timeline for WIP development that will govern the scope, we should instead build the scope, define that in the expectations, and then set a plan for how and when it will be carried out. Instead of a deadline for the WIPs, it would be a deadline for a plan, a schedule and an outline for how you will engage local governments or meet the other expectation as outlined.
    - Sarah Diebel (DOD): I want to highlight the point you made as far as the targets. During the process of setting federal facility targets, having a set process in place was helpful. It is confusing when the targets change, so it is important to have processes in place for how to communicate what we're doing.
- Montali: We are worried about the uncertainty of how local area targets will be handled, so my suggestion is that the schedule say WIPs will be due one year after final planning targets are released. Then we add a caveat that says there could be a 3-6 month additional period if determined necessary, depending on the scale of the targets.
- Power: I would like to take everyone's concerns and recommendations, revise the document and send it out for additional review. We will come back on April 25<sup>th</sup> to refine those recommendations, which we will take to the Management Board and PSC for their consideration.
- Davis-Martin: So we will seek to reach agreement on the schedule on the 25<sup>th</sup>?
  - Power: That would be ideal. I have heard basically three sets of recommendations, so I will lay those out in the revised document. I don't think we will be in full agreement on one set of recommendations, but I want to make sure I have captured everyone's feedback in the document so that the Management Board and PSC can consider them. I will get a revised draft out for a two week review by Wednesday at the latest.

**ACTION:** Lucinda will revise the document that outlines proposed changes to the Midpoint Assessment and Phase III WIP schedule in order to reflect the feedback and recommendations raised during the April 11<sup>th</sup> call. The revised schedule document will be distributed to the WGQIT for review on Wednesday, April 13<sup>th</sup>, and the WQGIT will be asked to provide feedback and discuss any additional recommendations during their April 25<sup>th</sup> conference call. Final WQGIT recommendations will be sent to the Management Board and the PSC for discussion during their May meetings.

#### Extractive Land Use in Phase 6 – Matt Johnston, UMD

In August 2015, the Watershed Technical Workgroup provided their [recommendations](#) regarding whether or not to include extractive lands in the Phase 6 Model. In addition, the Land Use

Workgroup has developed a method to address land use classes, such as extractive, that are not included in the Phase 6 Model, but which do not fit cleanly within the existing land use classes. Matt provided an overview of these recommendations.

### **Discussion:**

- Peter Claggett (USGS): There was concern about being constrained by the set number of land uses we have and the way they load, so the Land Use Workgroup wondered if there was a way to capture unique land uses, like extractive that function more like a combination of two different land uses, and could be simulated like two land uses in the Model. That is a possibility. We aggregate land uses up to 10m resolution, so every pixel is a fraction of different lands. This means you can take a pixel of extractive land and say they are, for example, 50% mixed open and 50% impervious. It is possible to do that, and those fractions are being decided upon now. Having fractional land uses allows extractive lands to be simulated the way the partnership wants.
- Johnston: This is a hybrid approach, compared to either lumping all extractive lands into mixed open or having an extractive land use.
- Davis-Martin: Would this fractional approach be consistently defined across the watershed?
  - Claggett: It's dependent upon what the states have. For states that have extractive land, they could define those fractional percentages. For those that don't submit the extractive acres, it would be simulated as mixed open.
- Montali: In West Virginia, I do not think we would go through the effort to get fractional acres of extractive, but I am ok with this approach. As long as we are talking about Maryland dividing up their open space to account for extractive, but the other states don't have to, I am fine with that.
  - Diebel: So you will not be able to provide the acres of extractive lands, but you want credit for the conversion of them?
    - Montali: I don't want either. We are fine with whatever is called extractive to be in open space.
- Diebel: It seems that if we are going to pursue a specific credit for something, we should have the accurate data.
  - Johnston: We can still have the abandoned mine reclamation BMPs, but it would basically be tree planting on barren land.
- Claggett: When we have mixed open land, we just see that as herbaceous vegetation in the land use imagery. When we need acres, that herbaceous universe is where we put agriculture. The more information we have for extractive, the better information we have to narrow down where the agricultural lands are.
- Beth McGee (CBF): Where does Marcellus drilling and pipeline get handled in the Model?
  - Claggett: We have, for Pennsylvania, ancillary data from aerial imagery with pipelines from 2011-2012 that we can incorporate as mixed open.
    - McGee: Even though there is impervious surface associated with the pipelines and drilling facilities?

- Claggett: If the high resolution land cover data picks it up as impervious, we wouldn't change it, but if it is picked up as barren, we would call it mixed open.
- Marel King: If mixed open is reforested, is that not a land use change?
  - Johnston: Yes, it would be. We have many BMPs that allow for tree planting on different land uses.
- Davis-Martin: What is Maryland's opinion of the proposal?
  - Dinorah Dalmasy (MDE): I can't speak to the extractive land use options. I can get feedback from our staff who have participated in this effort and we can get back to you.
    - Davis-Martin: Please try to get something back to Lucinda and David so they can distribute it in advance of the next meeting.

**ACTION:** Dinorah Dalmasy will consult with MDE staff and will send Maryland's recommendation regarding the proposed method for handling extractive lands in Phase 6 to David Wood. Maryland's recommendation will be distributed to the WQGIT in advance of the April 25<sup>th</sup> call.

- Ted Tesler (PA DEP): Generally, we would be in favor of the approach laid out, but we agree with Dave Montali, that Pennsylvania will likely not go through the effort of defining the fractional land use. It was my understanding that the land uses had been previously developed and the high resolution work was defining the open spaces. This would seem to be a strange step backward that would potential delay us. If we are going to develop a special category for Maryland, it should be based on science.
  - Montali: If they can accommodate differentiation of that land use in Maryland, I'm not against them doing that. But it shouldn't have to be done in all jurisdictions.

### Technical Synthesis 3 Briefing – Lee Karrh, MD DNR

Lee Karrh provided an overview of the key findings and implications from the draft Technical Synthesis 3 document, with a focus on findings related to water clarity requirements of SAV and the climate change impacts on SAV.

### **Discussion:**

- Linker: This will be very welcome information. On slide 20, there is statement on the heavily populated areas. I think for communications, there needs to be reconciliation with the record SAV numbers in a few areas around the Bay. Maybe it is something that has to do with the scale of the study.
  - Karrh: That is a good point. We did not study the main stem segments specifically because the watersheds coming into it were so huge. We were using much smaller watersheds.
- Davis-Martin: When talking about habitat requirements, they historically have been more water quality focused. Now it sounds like you are starting to branch out to incorporate some other things. I'm surprised bottom conditions weren't considered.



- Karrh: Bottom conditions isn't something we are synthesizing, but those data are known and we could tie that back in. We have that information, and it was addressed a little in the last technical synthesis.
- Davis-Martin: Bottom conditions in the Bay are changing through time correct?
  - Karrh: Yes.
- Davis-Martin: It seems like bottom condition would be a major driver in our restoration efforts.
  - Karrh: In relation to shoreline armoring, that is true. The sediments change, especially the input of sand, which influences SAV distribution. That is a good point.
- Zoe Johnson (NOAA): How will the report be synthesized in the end? Is there going to be a way of sorting through the different chapters easily because there are so many linkages?
  - Karrh: That is a good question and we don't have a firm answer yet. Getting the story synthesized so each chapter can stand alone without duplicating efforts is a challenge going forward. We are working on solutions.
- Johnson: From a climate change perspective, we want to be able to tell a full story and be able to pull the climate change pieces from perhaps multiple chapters.
  - Karrh: The executive summary will probably be the part that ties these chapters together. Then each chapter will go to scientific journals for publishing. That is the current thinking.

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
Tyler Monteith	DE DNREC
George Onyullo	DOEE
Mary Searing	DOEE
Jason Keppler	MDA
Rachel Rhodes	MDA
Dinorah Dalmasy	MDE
Ben Sears	NYSDEC
Kristen Wolf	PA DEP
Nicki Kasi	PA DEP
Ted Tesler	PA DEP
Dave Montali	WV DEP

Marel King	CBC
Ann Jennings	CBC
Lew Linker	EPA, CBPO
Jeff Sweeney	EPA, CBPO
Jen Sincock	EPA, R3
Suzanne Trevena	EPA, R3
Chris Day	EPA, R3
Ann Carkhuff	EPA, R3
Jenn Volk	U of Delaware
Beth McGee	CBF
Bill Angstadt	Angstadt Consulting
Tanya Spano	MWCOG
Sarah Diebel	DOD
Mary Gattis	LGAC
Jessica Blackburn	CAC
Natalie Gardner	STAC
Norm Goulet	NVRC
Mark Dubin	UMD, CBPO
Matt Johnston	UMD, CBPO
Peter Claggett	USGS
Jeremy Hanson	VT, CBPO
Sally Claggett	USFS
Jenny Tribo	HRPDC
Kevin McGonigal	SRBC
Zoe Johnson	NOAA
Jamie Mitchell	HRSD
Angela Redwine	VDH
Lisa Ochsenhirt	V/MAMAWA
Karl Blankenship	Bay Journal
Ross Mandel	ICPRB
Sheryl Quinn	Dept. of Navy
Gary Shenk	USGS
Lee Karrh	MD DNR