

CHESAPEAKE BAY PROGRAM
WATER QUALITY GOAL IMPLEMENTATION TEAM
March 9, 2015 CONFERENCE CALL
MINUTES

Summary of Action and Decision Items:

ACTION: Jeni Keisman will distribute the call-in information for the ITAT meeting to the WQGIT membership.

DECISION: WQGIT members approved the recommended updates to the land segments in the Watershed Model.

Workgroup Updates:

Land Use Workgroup (LUWG)

- The Land Use Workgroup held a meeting on February 26th, where they approved of the scope of work for the Chesapeake Conservancy to produce high resolution land cover data for the Chesapeake Bay watershed (pending PSC approval of the full project).
- They also discussed Phase 6.0 land use data and mapping methodologies for DE, MD, VA, and PA, as well as a timeline of workgroup commitments through 2016.
- Their next meeting will be on March 26th.

Agriculture Workgroup (AgWG)

- The first quarterly face-to-face meeting will be held March 18-19th in Gettysburg, PA.
- At this meeting the Workgroup will be reviewing the final poultry litter report, which is now posted on the meeting webpage, from the Poultry Litter Subcommittee and the Agricultural Modeling Subcommittee.
- They will also be reviewing draft panel charges (which are also posted) for the Phase 6.0 Nutrient Management, Conservation Tillage, Cover Crops, Manure Injection/Incorporation, and Animal Waste Management Systems and Poultry Pads Expert Panels.
- The AgWG will be finalizing the Phase 6.0 agricultural land use classification at this meeting.

Urban Stormwater Workgroup (USWG)

- The Urban Stormwater Workgroup held a conference call on March 3rd.
- They discussed updates to the MS4 overlay, and assigning credit durations to Urban BMPs.
- Their next conference call will be on March 17th, where they will finalize BMP credit durations and discuss using BayFAST for developing stormwater implementation plans.

Forestry Workgroup (FWG)

- The FWG met for a face-to-face on February 4th to discuss the Urban Tree Canopy (UTC) and Riparian Forest Buffer (RFB) Management Strategies.
- Sally Claggett (FWG Coordinator) organized a conference call on February 26th to continue the discussion on the RFB Management Strategy.
- The FWG submitted drafts of the UTC and RFB Management Strategies on March 2nd for an internal review. All Management Strategy drafts will be released for public input on March 16th.

- The FWG met for a conference call on March 4th to discuss forest land use pollutant loading rates in Phase 6 of the Watershed Model.

Toxics Workgroup (TCW)

- The Toxic Contaminants Workgroup continues to develop the Policy and Prevention and Research Management Strategies. Workgroup comments were collected and are being reviewed and implemented into the documents.
- The Chesapeake Stormwater Network has begun work on a project to identify BMPs with multiple benefits in nutrient and sediment reduction as well as toxic contaminant reduction.

Watershed Technical Workgroup (WTWG)

- The WTWG was forced to postpone its March 5th meeting due to snow.
- The WTWG is continuing to discuss historic data cleanup, specifically, how federal land uses will be incorporated into NEIEN, and the issue of credit duration.
- The next meeting is scheduled for April 2nd and will likely be extended in order to cover the March agenda items as well as the April items. They will discuss updates from the Ag Modeling Subcommittee, and progress towards developing relative land use export rates and the overall schedule for developing Phase 6 land use calibration targets.

Trading and Offsets Workgroup (TOWG)

- The TOWG did not meet in February but is expected to hold their next meeting on March 18th.

Wastewater Treatment Workgroup (WWTWG)

- The WWTWG met on March 3rd to discuss biosolids data and historic data cleanup. They also heard a presentation from Maryland regarding their Rapid Infiltration project.
- WWTWG members reached agreement on the general path forward for cleaning up their historic point source data.
- One-on-one calls will be scheduled with jurisdictions in the coming weeks to discuss steps needed to collect biosolids and spray irrigation data.
- The WWTWG will have their next meeting on April 7th.

MINUTES:

Welcome/Confirm Call Participants/Workgroup Updates – Jenn Volk, Chair

- Jenn convened the call, verified call participants and reviewed the workgroup updates.
- Jeni Keisman (USGS) gave a short briefing on the integrated trends analysis team (ITAT). The goal for the team is to focus on analyses being done to explaining water quality trends. Jeni asked for WQGIT participation in the next ITAT conference call (March 17th) in order to exchange information on trend needs.
 - More information on ITAT can be found in Jeni's [summary document](#) or on their [webpage](#).

ACTION: Jeni Keisman will distribute the call-in information for the ITAT meeting to the WQGIT membership.

Water Quality Trends for Tidal Waters – Rebecca Murphy, UMCES

- Rebecca presented the new maps developed to show water quality trends in the tidal waters.
 - For more information, please see Rebecca's [presentation](#).

Discussion:

- Lewis Linker (EPA): It seems that the two places where concentrations are going down are in the D.C. tidal waters and the James River tidal waters. Those happen to be the two places where there are numeric chlorophyll a standards. Is that a priority for your studies?
 - Rebecca Murphy (UMCES): Yes, we noticed that as well. We have been following the James chlorophyll research and are hoping to link up with them to help inform our work.
- Marel King (CBC): These maps are identified as long term trends. Are there efforts to look into short term trends? Also, what are the timeframes used to define a short term trend?
 - Murphy: USGS defines their short term trends as 10 years. You could go shorter, but you would have to be careful with that because there could be other factors involved.
- John Schneider (DE DNREC): Has there been thought given to looking at these trends seasonally?
 - Murphy: That is one of the key things I am digging into now. I think seasonality is tremendously important for explaining why trends are changing, but the understanding isn't complete yet.
 - Bruce Michael (MD DNR): Seasonality is something we are very concerned with, and looking at the data we have with the Generalize Additive Models (GAMs) will be very helpful.
- Volk: What defines the bottom depths?
 - Murphy: They are computed by the states using observational data. Half a meter to a meter below the actual bottom.
- Jeremy Hanson (VT): Will these maps be up on chesapeakebay.net soon?
 - Murphy: Yes, they will be up this week in the maps library as well as on the ITAT webpage.

Land Segmentation Update – Gary Shenk (EPA)

- Gary Shenk briefed the WQGIT on recent updates to the land segments in the Watershed Model based on improved line work and precipitation data. Howard Weinberg (UMCES) has recently received approval from the Modeling Workgroup on the updates and will ask WQGIT members for their approval.
- For more information, please see Gary's [presentation](#).

Discussion:

- Sarah Diebel (DoD): Please go over the suggestion of using 2010 county boundary data and removing federal segmentation again.
 - Shenk: It is just a more accurate county delineation. The way we differentiated federal from non-federal lands in Phase 5 is they were separate land segments which meant they couldn't change over time. In Phase 6 we will have the same separation but they will have land uses instead of land segments. There will be a breakout of which agency the

land belongs to as well. This way we can change the size of the federal footprint and tell which agency owns the land.

- James Davis-Martin (VA DEQ): There were discrepancies along the edge of watershed where boundaries were not aligning with hydrologic unit lines. Is that part of this work or should it be?
 - Shenk: Howard was starting to put together the land segments with the river segments and there were some discrepancies. There was nothing significant but some sliver differences. This is separable in that we can talk about the land segments using the rainfall methods, but we will have to discuss how to deal with the hydrologic segments again with the Modeling Workgroup. It sounded like it was going to be a really big job to bring in those sliver segments so Howard wanted to ask the Modeling Workgroup whether it would be worth it.
- Davis-Martin: With this approach for federal lands for Phase 6, the models will still be able to uniquely simulate BMPs on federal versus non-federal lands and have loads for federal versus non-federal lands?
 - Shenk: That is correct.
- Volk: Are there any concerns with approving these recommendations?
 - None were raised.

DECISION: WQGIT members approved the recommended updates to the land segments in the Watershed Model.

Chesapeake Bay High Res Land Cover Data – Peter Claggett, USGS

- Peter provided an update on the effort to acquire high resolution land cover data for the Chesapeake Bay Watershed.
- Claggett: The Chesapeake Conservancy approached the Bay Program in November 2014 with a proposal to develop 1 meter land cover data for the entire watershed. USGS helped inventory all existing LiDAR data and is now working to fill in some gaps in LiDAR coverage. The Conservancy has leveraged the work of the University of Vermont to map tree canopy and land cover throughout Pennsylvania and Delaware, while the Conservancy would map the rest of the watershed except for possibly Virginia, which has its own high resolution data proposal out. The [scope of work](#) has been distributed and reviewed by the Land Use Workgroup at their [February meeting](#). Comments were received from Baltimore County, MDE/MDP, and NOAA's coastal analysis program. All comments are supportive of the proposal. The Conservancy will be better coordinating with localities to ensure they have the best available data. The Conservancy agreed to use leaf-off imagery where it exists. So far the Conservancy has mapped the Delmarva Peninsula with an automated technique only, the James River basin with automatic technique plus manual corrections, and portions of the Susquehanna River basin with a combination of LiDAR, manual editing, and automated classifications. The Principal Staff Committee (PSC) will ask for approval of the final scope of work this week.

Discussion:

- What is the period of performance on this work?
 - Claggett: If funding is initiated in April 2015, the period of performance would be April 2015 through May 2016 since we need data by the end of May 2016 for the Phase 6 model. It would be a 13 month period.

- Dianne McNally (EPA): It seems like a tight timeframe. How will it be built into the Midpoint Assessment schedule if any deadlines are missed?
 - Claggett: There is a limited number of contingency plans. To produce this product, the Conservancy needs a really detailed strategy, county-by-county, up front of what they are going to do. If we know there will be delays in getting data from localities, we can push back mapping those areas until the spring of 2016, but if there are delays on the Conservancy's end or USGS's end in terms of developing the data, I think we need a strategy where the Conservancy will have to do more manual editing. What is helpful is that there is triage with the workload because of the partnership with the University of Vermont. But there could be issues.
- McNally: So there will be a drop dead date, but there may be a point in time when data will not be put into the model?
 - Claggett: Yes, May 31 is the drop dead date. We could potentially postpone things, but then the jurisdictions would only have a week to look at it before it goes into the Phase 6 model.
- McNally: This went through the PSC and the Management Board. I am concerned about the impact on the Midpoint Assessment schedule because this proposal came in after that schedule was already set.
 - Claggett: About a year ago, before we had this proposal from the Conservancy, we had been working with Virginia on a similar project to fund new land use data, and one of their concerns was if the data would get into the Phase 6 model.
- Davis-Martin: The land classification scheme being proposed aligns with the proposed land uses we're working from?
 - Claggett: Yes, it does very nicely. It is basically all that's feasible, and it is detailed enough that it will be very helpful for Phase 6. We are already working with similar data to what the jurisdictions have and it is proving very useful to have this high resolution data.
- Davis-Martin: I want to endorse your idea of the Conservancy having a detailed, county-by-county plan up-front.
- What is the expected level of effort/input by local counties in this effort?
 - Claggett: They are trying to keep that as minimal as possible to lower the burden on localities. If a county is developing new data now that they want to inform the Conservancy's work, we need to know about it as soon as possible, and that is the main thing.
- Lee Currey (MDE): There is some work we are doing in house to support the land use using some of the more detailed local information. All of that work will be incorporated into the new land use and will be part of the input for Phase 6?
 - Claggett: That's right. I have had conversations with Stephanie Martin (MDE) and Jeff White (MDE) about this issue and as they work on developing the Phase 6 land uses in Maryland, they are aware that they need to do so in light of the new information coming online in May 2016.

- Renee updated the WQGIT on the main points from the most recent drafts of the Land Use Methods and Metrics Management Strategy, and Land Use Options Evaluation Management Strategy.

Discussion:

- Davis-Martin: This Management Strategy doesn't exactly commit the jurisdictions or Bay Program to reoccurring land use land cover assessments but it lays the groundwork that the work plans will entail that. I have concerns about the associated costs. While I agree is it important, I don't know if we are all in a place to devote that much money. Is there discussion of lower cost alternatives such as identifying those areas most susceptible to growth and re-surveying those areas?
 - Thompson: There has been a lot of talk about doing vulnerability analysis across a number of the management strategies, and I think that is a very interesting idea.

Forestry Management Strategy – Sally Claggett, USFS

- Sally updated the WQGIT on the main points from the most recent drafts of the Urban Tree Canopy Management Strategy and the Riparian Forest Buffer Management Strategy.

Forest Management Discussion:

- Diebel: Are there specific tools to identify sites that could help visually dictate where those specific priority locations would be?
 - Claggett: There are various tools, but some people don't feel like targeting is that high of a priority because the benefits are large everywhere. Often for finer scale information, it is a matter of looking for gaps in the buffers or low lying areas that would capture runoff from the farm fields. We don't get that specific here, but we could put that in the work plan if that is a need.
- Rebecca Hanmer (FWG Chair): Could you take a minute just to tell them why we have been trying to get more PSC attention on forest buffers?
 - Claggett: As I mentioned, the implementation numbers are down even though the WIPs indicate much larger plans. Unless things radically change going into the Phase III WIPs, every year we don't come close to our goals and that is making our challenge even bigger. Forest buffers are the second most important practice for getting us to the Nitrogen goals if you look across the WIPs.
- Davis-Martin: You also have to consider that most CREP practices are 10 year practices, so the practices that contributed to that high level of implementation in 2002 would be coming out of contractual life in 2012.

Urban Tree Canopy Discussion:

- Davis-Martin: I think I heard the timeframe for public comment was extended?
 - Scott Phillips (USGS): It was 30 days and they are considering bumping it up to 45 days. The decision will be made on Thursday.

Briefing on Major Changes to Scenario Builder – Matt Johnston, UMD

Matt provided a brief update on the Agriculture Modeling Subcommittee (AMS) and the changes to Scenario Builder that are being considered by the AMS during their March 13th meeting.

Discussion:

- Johnston: The AMS has a meeting on Friday, March 13 to tackle three major issues. The first is land uses. We have a list similar to the list from the [October face-to-face](#) with a few minor changes including better ways to simulate management of crops, and better ways to simulate nutrient applications on crops. We will have a vote on that list of land uses on Friday and if approved, the AgWG has a meeting March 18th and 19th to also take up the list for approval. The second issue is the loading rate effort, which will continue to go on so the Modeling Workgroup can have a discussion in April. The group has departed from the way the model currently does application of nutrients so we have been working on that testing. Gary Shenk will present the latest information to the group and we will hopefully reach a decision on Friday. The third issue is how to estimate the amount of manure generated across the watershed. A lot of work has been done and there is a report posted on the [AgWG webpage](#) that is open for comment, which provides detailed methods for how the Phase 6 model will estimate manure/litter generated from poultry. We encourage you to look it over, as we want as many partnership fingerprints as possible. The other part is estimating livestock nutrients. We will present that on Friday and hopefully get buy-in on the methods. If we have decisions on those items, we will have AgWG decisions the next week. Then we would have the three major decision parameters made and we can move to smaller decisions/adjustments.
- Davis-Martin: You say you're approving land use categories but not initial loads. But I have to assume at this point you have factored available loads data in?
 - Johnston: Yes, that is ongoing, and there has been communication between those efforts. In the end, I would not be surprised if we have multiple crop land uses and one crop loading rate but there will be specific reasons why we would need them and that will be expressed in a table.
- King: There isn't anything on the Bay Program website about the AMS meeting?
 - Johnston: The group operates very similarly to a BMP panel, and so there wouldn't be.
 - Emma Giese (CRC): There will be a substantial report-out to the AgWG on March 18th and 19th and I will make those materials available.
- King: There will be something posted by Monday or Tuesday?
 - Johnston: It depends on whether the decisions are made on Friday as to how that report looks to the AgWG.

3:30 Adjourn

Next WQGIT Conference Call:

Monday, March 23, 2015

1:00-3:00pm

List of Call Participants

Member Name	Affiliation
Jenn Volk (Chair)	U of Delaware
James Davis-Martin (Vice-Chair)	VA DEQ
Lucinda Power (Coordinator)	EPA, CBPO

David Wood (Staff)	CRC
Emma Giese (Staff)	CRC
Seung Ah Byun	Brandywine Conservancy
Marel King	CBC
Beth McGee	CBF
Sheryl Quinn	Dept of the Navy
Mary Searing	DDOE
John Schneider	DE DNREC
Ann Baldwin	DE NRCS
Bill Angstadt	DMAA
Sarah Diebel	DoD
Gary Shenk	EPA
Suzanne Trevena	EPA
Dianne McNally	EPA
Lew Linker	EPA
Jeff Sweeney	EPA
Chris Day	EPA
Jennifer Sincock	EPA
Bruce Michael	MD DNR
Lee Curry	MDE
Dinorah Dalmasy	MDE
Norm Goulet	NVRC
Andy Zemba	PA DEP
Ross Mandel	PRC
Kevin McGonigal	SRBC
Rebecca Murphy	UMCES
Matt Johnston	UMD
Mark Dubin	UMD
Sally Claggett	USFS
Jeni Keisman	USGS
Peter Claggett	USGS
Renee Thompson	USGS
Scott Phillips	USGS
Lara Kling	VA DEQ
Eric Aschenbach	VDH
Dwayne Roadcap	VDH
Lisa Ochsenhirt	V(M)AMWA
Jeremy Hanson	VT, CBPO
Teresa Koon	WV DEP
Rebecca Hanmer	
Jenny Tribo	