CHESAPEAKE BAY PROGRAM WATER QUALITY GOAL IMPLEMENTATION TEAM

December 14-15, 2015 Face-to-Face Meeting National Conservation Training Center, Shepherdstown, WV

Minutes

December 14:

Clarifying Decision Roles: Who, What & When?

Presenters: James Davis-Martin (VA DEQ)

Materials: Key 2016 MPA Decisions & Deadlines: Briefing Paper

Major decision-makers

• The Modeling Workgroup and WQGIT, principally, but with some decisions being elevated to the Management Board and Principals' Staff Committee.

Sees three major grouping of actions and decisions for the coming year:

- Host of reviews and decisions related to the suite of the CBP partnership's models and other decision support tools.
- Over a dozen BMP expert panels coming to the workgroups and then the WQGIT for review and approval over the coming year.
- Decisions related to the Phase III WIPs, such as 2025 forecasted conditions and WIP expectations.

ACTION: WQGIT members to mark-up the list of decision points over the course of the meeting and be sure that this listing fully reflects how we are proceeding forward as a partnership over the coming weeks and months. This list of decision points will continue to be updated over time and Lucinda Power will distribute the updates to the WQGIT accordingly.

Mary Searing (DOEE): What is the schedule and approach for sharing the material supporting decisions?

James Davis-Martin: Once a document is presented to the lead workgroup, the partners have 30 days in which to review and provide input to that lead workgroup to inform their decisions. At that point, any documents/requests for decisions will go to the WQGIT.

Jeremy Hanson (VT): The 30 day comment period is particularly important because of the tight timelines next year. The more comments received during that period, the more effectively we will get through the process.

Rich Batiuk (EPA): Offered up to the WQGIT members the opportunity to schedule an ongoing series of webinars to address forthcoming BMP expert panels.

Lee Currey (MDE): Recommend we include in the webinar series a set of webinars directed toward the Phase 6 suite of models the partnership is developing so that our stakeholders can better understand how each of these models work and the role they play in the larger Midpoint Assessment process.

Tanya Spano (MWCOG): There is a need for the Midpoint Assessment communications strategy to involve a much larger array of stakeholders over the next two years, leading up to the jurisdictions' development of the Phase III WIPs.

Ann Swanson (CBC): There is a need for written materials directed towards elected officials to compliment the webinar series. I recommend teaming up with the Bay Journal to help with the drafting and distribution of these written communication materials.

Tom Wenz (EPA): We need to ensure we have a consistent set of messages as a partnership. We will be discussing communication priorities for the entire partnership in January, so please make sure the WQGIT's needs come to me so I can raise them at that point in time.

James Davis-Martin: Do we have the capacity internally within the CBP partnership to develop these messages? There are organizations which are set up professionally to carry out this work on behalf of the partnership.

Mary Gattis (LGAC): Need to ground truth those communication messages with actual local elected officials. I encourage the use of the Local Government Advisory Committee (LGAC) to help with that process.

James Davis-Martin: I'd like to challenge LGAC to proactively develop their own set of messages and share them with the rest of the CBP partnership.

Mary Gattis: LGAC is in the process of developing a Midpoint Assessment fact sheet as the beginning of its efforts to help with the forthcoming communication challenges. If we could get more resources through the Management Board or CBP Communications Office, it would be very useful for doing this effectively.

Tanya Spano: We have the opportunity to not only use the communication resources of the CBP partnership but also the communication capabilities of the individual partners and other organizations like Metropolitan Washington Council of Governments.

Phase 6 Modeling Tools - 2016 Review

Presenters: Lee Currey (MDE) and Dave Montali (WV DEP)

Materials: 2016 Phase 6 Modeling Review Period: Briefing Paper; P6 Modeling Tools 2016 Review Period: Presentation

Lee Currey:

Recognized the members of the CBPO Modeling Team as well as the work of the WQGIT's
technical workgroups and all their contributions to the development of the suite of the
partnership's modeling tools.

• WQGIT feedback, STAC workshop and STAC-sponsored model independent peer reviews are three primary sources of review comments on the partnership's suite of models expected over the coming year.

John Rhoderick (AgWG Co-Chair): Expressed concern that the partnership only has 60 days for review of the final draft version of the Phase 6 Watershed Model, recognizing we will be factoring in new data and information all the way up to the fall of 2016.

Lee Currey: We will be making incremental changes to the full suite of models throughout 2016 and we will be testing, calibrating and reviewing the outputs of all the models.

John Rhoderick: One specific area of concern is the Airshed Model. If it isn't in the first Phase 6 Beta, the Manure Incorporation expert panel can't develop their recommendations.

James Davis-Martin: I agree with John Rhoderick that we may need to re-think our schedule in the coming months. We need to understand what has changed with each of the revised versions of the models—Beta 1, Beta 2 and Beta 3 and find some way to concisely outline the review process while highlighting the anticipated major changes.

Dave Montali (WV DEP): Following each Modeling Quarterly Review, the Modeling Workgroup and then the WQGIT will be in a position to understand what has been the effect of making the agreed to changes in the prior quarter, reach agreement on the next set of changes needed, and look forward to the next quarterly review to understand the outcome of those next set of changes.

Tanya Spano: At the Modeling Workgroup, you know where and how you are improving the accuracy of the model. So when you, Modeling Workgroup, present the results of the calibration of the next Beta version, please walk the rest of us through: here's the changes that we made, here's how the models responded, and here's what we are anticipating as we run our core set of scenarios.

Dianne McNally (EPA): What will the jurisdictions and other partners/stakeholders actually review with each new Beta version of the models? Can we make policy decisions earlier in 2016, versus waiting until 2017 and facing a whole lot of policy decisions that need to be made? And should the jurisdictions be sending more staff to participate in the Modeling Workgroup's monthly conference calls and quarterly reviews?

Lee Currey: All of the Bay watershed jurisdictions have representatives on the Modeling Workgroup who are directly involved in the review and decision making responsibilities of the Modeling Workgroup. So jurisdictions don't need to send more representatives to the workgroup.

Lee Currey: Maryland, recognizing the role of this modeling tool in the Conowingo Dam re-licensing process, will conduct a separate peer review process of the Exelon-funded Conowingo Dam and reservoir system model.

Ruth Izraeli (EPA): Is the bottom-line of all the modeling work focused on Conowingo Dam to improve our estimation of nutrient and sediment loads as they move through the reservoir and dam system?

Lee Currey: It's that and more, with a focus on better understanding the fate and transport of nutrients and their various species, and sediment that works its way through the lower Susquehanna River series of dams and reservoirs and then gets delivered through the dam into the Bay's tidal waters.

Beth McGee (CBF): How does the ongoing monitoring and research studies factor into the work by the Modeling Workgroup on modeling the Conowingo Dam and Reservoir system?

Lee Currey: The Modeling Workgroup is looking to leverage the advantage of having several sets of models, research findings, and other monitoring-based information to work from and factor the relevant findings, rates, processes and insights from all of these models, research studies and monitoring programs into the Phase 6 Watershed Model.

ACTION: WQGIT members should let the Modeling Workgroup know the scale at which they would like to see the model input data and scenario output data. Please direct your requested scale, type of model data, inputs and outputs to Lewis Linker, CBP Modeling Coordinator.

ACTION: The Modeling Workgroup co-chairs will work directly with the CBPO Modeling Team to draft and present, to the WQGIT in January 2016, a comprehensive list of the model outputs (inputs, rates, calibration results, initial scenario results, etc.) the partners can expect to have direct access to with the delivery of each new Beta version of the partnership's Phase 6 Chesapeake Bay Watershed Model and decision support tools.

Bill Angstadt (DMAA): The Agriculture Workgroup is going to ask for the input data and the underlying assumptions, rates, etc. Will each WQGIT workgroup have specifically defined roles and responsibilities for reviewing components of the Phase 6 Beta version of the Watershed Model?

Bill Angstadt: Start with the big chart that outlines all the components of the Phase 6 Watershed Model and circle those components being assigned to each respective WQGIT workgroup for their review and comment.

Gary Shenk (USGS): Within the Phase 6 Watershed Model documentation, let's make it explicit which workgroups have responsibility for review and comment on each component of the model.

Tanya Spano: Need to get each of the workgroup's chair and coordinator set up with a clear understanding of exactly how they need to carry out their review of their assigned components of the Watershed Model (and other models) as well as who to direct their comments and their recommended priorities to.

Lee Currey: Need clear charges back to the workgroup and include a request for 'fatal flaw' comments as well as prioritization of their other comments.

ACTION: The Modeling Workgroup co-chairs and coordinator will work with the WQGIT Chair, Vice Chair and coordinator to lay out a more detailed schedule and process for carrying out the reviews of the partnership's suite of models, with a focus on providing clear direction to the WQGIT's workgroups on their roles and responsibilities in this review process. This proposed, more detailed model review schedule and process will be presented to the WQGIT in January 2016. The Modeling Workgroup will work with each of the WQGIT's workgroups on explaining any significant changes the Modeling

Workgroup has observed and where each workgroup should focus their own reviews. Roles and decision responsibilities will be clearly identified in the Phase 6 Model documentation.

Bill Angstadt: How do the results of the STAC peer reviews fit into what we are asking the workgroups to carry out in terms of their assigned review of model components?

Gary Shenk: The partnership drafts up the STAC peer review questions working with an ad-hoc STAC peer review team. Some of those review questions will be open-ended to enable the reviewers to provide the partnership with feedback for consideration down the road.

James Davis-Martin: Want to build in 30-60 days for final review and approval of the final calibrated Phase 6 Watershed Model and other models. This may take us into the February/March 2017 timeframe until the partnership is in a position to start running the management scenarios.

Ann Swanson: As we discuss these issues and topics at the WQGIT level, we need to determine what we need to raise up to the Management Board and Principals' Staff Committee. We should set aside time on each forthcoming agenda for the scheduled Management Board and Principals' Staff Committee meetings to raise specific Midpoint Assessment policy-related topics, findings, and implications.

John Rhoderick: We need to factor in the time and process for allowing each of the assigned workgroups to conduct their reviews as well as communicate their comments to the Modeling Workgroup and the WQGIT.

Lee Currey: Recommend that the workgroups send their comments directly to the Modeling Workgroup and give the Modeling Workgroup the time needed to evaluate the comments and present the Modeling Workgroup's recommended priorities, as well as estimated time needed to make the changes and implications of making the changes to the WQGIT.

Tanya Spano: We can start to frame out the policy questions and the technical information earlier on, and feed that information over time to the partnership's policy makers to set the stage for final decisions.

DECISION: The WQGIT agreed with the Modeling Workgroup's presented recommended approach, schedule, and process for undertaking the year-long review of the partnership's suite of modeling and supporting tools under the Midpoint Assessment, factoring in the agreed to follow-up actions and discussions by the WQGIT.

Land Use 6.0

Presenters: Karl Berger (MWCOG) and Peter Claggett (USGS)

Materials: Land Use Phase 6.0: Presentation

Lee Currey: Is there a point in time where, thinking about the review period towards the end, maybe 80% of the land use is complete? Or is there a place where if the Modeling Workgroup received a draft earlier than September that we could begin to use that information to inform the final version of Phase 6?

Peter Claggett: It would be difficult. We perhaps could give you a couple states by April. However, unless you wanted to do a run on a subset of the Bay watershed, I don't see how we could get you something that would be representative until the August/September timeframe.

Rich Batiuk: Peter and I are also working with the Conservancy folks to get them to help out with this project over the summer. And I agree with Karl, we don't want to start slicing away at the local government review period.

James Davis-Martin recommended we consider adding in partial updated land use data into Beta version 2 and Beta version 3 of the Watershed Model.

Gary Shenk: We would need to think through the implications of taking the approach recommended by James in terms of saving time and effort. We are still dependent on a final overall land use data set to establish land use loading rates via application of the USGS SPARROW Model.

ACTION: CBPO Modeling Team and CBPO Land Use Data Team will work together to determine the feasibility and benefits for incorporation of Phase 6 land use data, as it is finalized, into the forthcoming Beta 2 and Beta 3 versions of the Phase 6 Chesapeake Bay Watershed Model.

James Davis-Martin asked if we could bring more staff resources to the table to help the Chesapeake Bay Program Office's Land Data Team in the processing of the land cover and land data into the Phase 6 land use dataset.

ACTION: WQGIT members will determine if they can provide in-house GIS staff resources to help in the processing of the high resolution land cover and the local land use data into the Phase 6 land use data set. If so, WQGIT members should work directly with Peter Claggett, CBP Land Use Workgroup coordinator, to make the necessary arrangements to provide that staff support.

Dianne McNally: Are the contractors prioritizing which counties they're doing first? And do we know which entities would be more interested in reviewing their data, and are those the ones the contractors are working on first?

Peter Claggett: So we know which counties are coming in when, and the production schedules are based on the coming availability of certain data sets. A county may say they've got LiDAR data coming in February, so they will wait to do that county until February. So that's the kind of information that the contractors are juggling when they create this schedule.

DECISION: The WQGIT agreed with the Land Use Workgroup's presented recommended approach, schedule, and process for the development and review of the Phase 6 land use data, factoring in the agreed to follow-up actions and discussions by the WQGIT.

Inclusion of New BMPs & Scenario Builder Data Elements

Presenters: Curt Dell (USDA-ARS) and Matt Johnston (UMD)

Materials: Inclusion of New BMPs and Scenario Builder Data: Presentation

Beth McGee: What were the decision rules that the Agriculture Modeling Subcommittee used for the application of manure versus fertilizer?

Matt Johnston (UMD): We are trying to simulate application based on how farmers actually operate, so we have pulled in ancillary fertilizer data. Every crop gets application of manure and fertilizer, but based on the amount of manure available in each county, and in a particular sequence of applications by the list of crops and then to hay.

ACTION: By March 1st, WQGIT members and WQGIT workgroups need to tell Curt Dell, Agriculture Modeling Subcommittee (AMS) chair, if they have specific issues/topics for discussion and resolution by the AMS that must be addressed prior to the April 1, 2016 deadline to provide the AMS' Beta 2 version Phase 6 Watershed Model recommendations to the Agriculture Workgroup for their decisions.

ACTION: WQGIT members were asked to identify a staff member in each state and the District to take the lead for their jurisdiction in reviewing the Scenario Builder outputs and documentation starting in early January 2016.

Matt Johnston: Biosolids data, urban nutrient management data, and animal input data will have large impacts on Scenario Builder and we really need these by April. Additionally, I counted a total of 19 BMP expert panels scheduled to report out their recommendations to the source sector workgroups and eventually the WQGIT for review and approval. I took the 19 panels and organized them into three categories based on their potential impact on the Phase 6 Watershed Model development as well as the states' historical BMP data cleanup. If we hit those three dates provided, then the CBPO Modeling Team can deliver on incorporating each of the BMPs into the Phase 6 Watershed Model calibration. If these dates are not achieved, particularly for the Tier III BMPs, we are unlikely to be able to get those BMPs into the Phase 6 Watershed Model calibration.

Dave Montali: Is there a plan for developing a different pathway for application of biosolids on agricultural lands?

Matt Johnston: Not now, but it is up to the Wastewater Treatment Workgroup to come forward with a recommended pathway for incorporation into Scenario Builder. There are still a lot of gaps in the biosolids data and it could impact some counties for the calibration.

Tanya Spano: The Wastewater Treatment Workgroup is already discussing biosolids and how to address their application in Scenario Builder.

Bill Angstadt: Asked for more specifics on how the Agriculture Modeling Subcommittee will be carrying out their review of the details of the Beta 1 Version of Scenario Builder and how their feedback will be reported up to the Agriculture Workgroup.

Curt Dell: Wants the Agriculture Modeling Subcommittee to have the opportunity to work through its own review first and then report its comments and recommendations up to the Agriculture Workgroup. After April 2016, the Subcommittee will have completed its work related to the development of Scenario Builder and will be available for additional assignments from the partnership.

Jeremy Hanson: Walked through the listed Tier I and Tier II BMPs being developed through the Virginia Tech cooperative agreement and the anticipated dates for when each of the panels will be reporting out their recommendations. Manure Treatment Technologies and Impervious Disconnections should not be a problem. The Animal Waste Storage panel has not even convened yet. They will start

soon, but even with an aggressive deadline I don't see the report being released before the end of June. The Urban Tree Canopy Land Use recommendations should be released by April, but the BMP report will come later. The Wetlands panel is more resource constrained and both the land use recommendations and the BMP report will be released by April at the earliest.

Matt Johnston: The WQGIT needs to understand if a panel does not report out by the dates in the Agriculture Modeling Subcommittee's briefing, it's likely that those BMPs will be factored into the final calibration of the Phase 6 Watershed Model in the January 2017 timeframe, and not in an earlier Beta version of the model.

Sarah Diebel (DoD): Is there a way to clearly understand what assumptions and data will be used in Phase 6 if a panel is unable to complete its work by the deadline?

Matt Johnston: Each of the sponsoring source sector workgroups make those backstop determinations and documents them.

Norm Goulet (NVRC): Street sweeping BMP is the only Urban Stormwater Workgroup BMP panel which will have significant impacts on the Phase 6 Watershed Model calibration given the thousands of acres submitted by the jurisdictions. The other BMP panels will be reporting out on practices with very low total levels of implementation basinwide and should not affect the model calibration.

ACTION: CBPO staff will develop a list of the BMP expert panels that are organized based on the significance of their impact on the development of the Phase 6 modeling tools. Separately, they will develop a realistic schedule for the delivery of the panels' final reports to ensure that the dates are aligned with the 2016 decision points schedule. These products will be presented to the WQGIT in January 2016 to inform a discussion of resource availability and prioritization of work.

James Davis-Martin: Let's keep the classification of the remaining BMP expert panels by the three tiers, building in more realistic/optimistic schedules, to continue to inform WQGIT decisions on needed changes to our collective schedule for the Midpoint Assessment.

DECISION: The WQGIT agreed with the Agriculture Modeling Subcommittee's presented recommended approach, schedule, and process for carrying out its assigned responsibilities under the Midpoint Assessment, factoring in the above agreed to actions and discussions, with a recognition of what the AMS is and is not planning to review.

Historical BMP Data Cleanup

Presenters: Jeff Sweeney (EPA)

Materials: Historical BMP Data Cleanup: Presentation

ACTION: WQGIT members are strongly encouraged to start the process now of reviewing the wealth of information on state-specific historical BMP data, as well as Scenario Builder input data rather than waiting until the release of the Beta 1 version of the Phase 6 Watershed Model at the end of December 2015. These data were posted on each of the states' password protected modeling web pages in November 2015. Please contact Jeff Sweeney if you need access to these web pages.

Tom Schueler (CSN): How will the jurisdictions who have cleaned up their urban stormwater historical data know how they ended up in terms of how many BMPs were lost, how many BMPs were gained?

Jeff Sweeney (EPA): Recommend the jurisdictions start with the big picture summaries of submitted versus credited data, which is now available to the jurisdictions, and then work down deeper into the data posted on-line in each of the states' password protected modeling web pages.

James Davis-Martin: How should Virginia proceed with factoring in the NRCS cost share data given Virginia still can't access the point data and use it to eliminate any double counting of co-cost shared practices?

Rich Batiuk: Virginia should proceed forward with factoring in the aggregated NRCS cost share data without attempting to remove the potential duplicate practice data given that the resolution of the NRCS data sharing agreement issue is not on the immediate horizon. EPA will put this into writing given the concerns about conflicts with the CBP partnership's BMP verification protocols.

ACTION: EPA will send Virginia Department of Environmental Quality an email asking Virginia to proceed forward with factoring the NRCS cost share data into their historical BMP data record, recognizing that Virginia still can't access the point data and use it to eliminate any double counting of co-cost shared practices. EPA will recognize that taking this action goes against the partnership's agreed to basinwide BMP verification principles and protocols. When Virginia is able to sign a 1619 data sharing agreement with USDA, Virginia will take the necessary steps to resolve any double counting situations.

John Schneider (DE DNREC): Should the jurisdictions continue to report through NEIEN those BMPs that are listed as Tier III?

Jeff Sweeney: Yes, all the jurisdictions should continue to report all implemented practices through NEIEN. Once the partnership works through the full suite of BMP expert panel recommendations, then it's just a matter of moving those practices from interim to CBP-approved practices and start providing credit for those NEIEN reported practices.

Greg Allen (EPA): For federal lands, do we need to have historical data reported using the federal agency codes?

Jeff Sweeney: Yes. Right now we are looking at a big picture review, but we will eventually be looking at that data as well.

Jenn Volk (U of Delaware): Need to set up briefings for the source sector workgroups on where the jurisdictions stand with their historical BMP data clean-ups and talk about the experiences with extrapolating that history back to 1985.

Norm Goulet: The source sector workgroups need to be briefed on the status of the historical BMP data clean-up efforts by the jurisdictions so the workgroups can be in a position to better understand and explain what is happening in each of the Beta versions of the Bay Watershed Model.

ACTION: Starting in January 2016, the Watershed Technical Workgroup will schedule briefings for each of the source sector and habitat workgroups—Agriculture, Forestry, Streams, Urban Stormwater,

Wastewater and Wetlands—to walk them through the current status of the jurisdictions' historical BMP data clean ups.

James Davis-Martin: Have we applied life spans to the cleaned up historical data sets?

Jeff Sweeney: Yes, we have applied the life spans to those data sets.

James Davis-Martin: How are we dealing with past BMPs which were credited as a land use change as part of our historical data set?

Jeff Sweeney: The protocol is the same as it has been. We report the implementation that occurred, so while it shows up in the BMP count, it will be trumped by the land cover data.

DECISION: The WQGIT agreed with the Watershed Technical Workgroup's presented recommended approach, schedule, and process for continuing to work with each of the jurisdictions' on their ongoing historical BMP data cleanups, factoring in the agreed to follow-up actions and discussions by the WQGIT.

<u>Climate Change – Wetland Loss, Sea Level Rise and Temperature Rise</u>

Presenters: Lew Linker (EPA)

Materials: Climate Change: Presentation

Rebecca Hanmer (Forestry WG Chair): Increases in temperature alone has an impact on ecological systems directly, beyond its impact on dissolved oxygen conditions. Who is looking at these other potential ecosystem impacts beyond water quality?

Lewis Linker (EPA): Under the Midpoint Assessment, the Modeling Workgroup is strictly focused on the impact of temperature changes on water quality conditions. Within the larger Chesapeake Bay Program partnership, the Climate Change Workgroup and other Goal Implementation Teams are focused on all the other possible ecosystem impacts.

Tanya Spano: Need to be very careful about the messages coming out of the CBP partnership and providing a more complete set of messages on climate change, not just the focus on water quality impacts.

Zoe Johnson (NOAA): Under the partnership's Climate Change management strategy, we are focused on a wider array of impacts of climate change, including but well beyond just water quality.

Gary Shenk: Referred to a recent study by the Rand Corporation and EPA's Office of Research and Development which provided some insights into ecosystem impacts beyond water quality.

James Davis-Martin: Is the fact that it appears we have about half as much effort needed to reach the Bay TMDL loading level likely due to countering the effects of climate change? Is there a linear relationship that could be applied to 2025? Are we double counting for the effects of climate change by factoring in the effects of climate change to date in the Watershed Model and Bay water quality model calibrations? If we are going to factor in the effects of climate change and Conowingo, James River, and other new data and understandings, when are we going to factor in attainability into our decisions?

Lew Linker: It is not linear in almost any of the literature. We have more work to do to firm up our estimates of the impacts from existing and projected climate change and factor them into our collective Midpoint Assessment decision making process.

Jenn Volk: Do we factor in the upland migration of our tidal wetlands?

Lew Linker: We know that about a third of our shorelines are already hardened so upland migration will not be feasible along these shorelines. Otherwise, we don't have the specific basis built into our estuarine model for the upland migration of tidal wetlands.

Marel King (CBC): What model conditions were the 2050 factors applied to?

Lew Linker: They were compared to a base calibration of the 1991-2010 land use including the BMPs on the ground in those years. Then we alter only the temperature, or only the sea level.

ACTION: Zoe Johnson, CBP Climate Change Coordinator, and Lewis Linker, CBP Modeling Coordinator, will work with the Climate Change and Modeling Workgroups on developing a more detailed schedule for undertaking the necessary climate change analyses leading up to the decisions by the partnership on how to factor in the impacts of climate change and factor this schedule into the WQGIT's overarching Midpoint Assessment decision points schedule.

Wrap Up Phase 6 Discussion

Presenters: Jenn Volk (University of Delaware)

Materials: None

Bill Angstadt: It sounds like the WQGIT is asking the AGWG to come back with revised completion dates for each of the BMP panels and a plan for if we can't get historical data.

Lucinda Power (EPA): Those tiers were developed based on the complexity of the BMPs and the effort to get them into the tools. It is not really a matter of changing the workgroups' priorities. We need to know what might have to come off the list in order to give the modelers time to address a panel like nutrient management in the right time frame.

James Davis-Martin: I want to re-state the need to uncouple the tiers and the timeline in order to make sure the highest priority practices are done in time for the calibration. If that means diverting resources from one panel to the next, we need to be prepared to do that.

Rich Batiuk: I'd also like to highlight where we are recommending the shifting of resources or letting things fall off.

Matt Johnston: It also helps the modelers to know if it is an entirely a new structural process being proposed by a panel. We need to know the direction they are going prior to the summer.

Dianne McNally: It doesn't sound like we are prepared to agree to some of the tier 1 BMPs falling off the schedule.

ACTION: In early 2016, the Agriculture Modeling Subcommittee will provide more information to the WQGIT on how the various nutrient sources, such as nitrogen residuals and mineralization, are factored into the nutrient availability to crops in the Phase 6 Watershed Model.

Nutrient Management 5.3.2 Task Force: Review and Approval of Cross Walk

Presenters: Kristen Saacke-Blunk (Headwaters, LLC)

Materials: Nutrient Management Task Force Crosswalk Report; Nutrient Management Task Force:

Presentation

James Davis-Martin: Is a non-compliant tier 2 plan potentially a compliant tier 1 plan?

Kristen Saacke-Blunk (Headwaters, LLC): I think the answer here is yes.

Mark Dubin (UMD): We're still working with the states on this – these numbers are not set in stone, and we will be receiving revised information from West Virginia and potentially Delaware.

James Davis-Martin: How should states report their acres?

Jeff Sweeney: Reporting the number of acres that are compliant in each of those tiers is probably the easiest way to do it.

Beth McGee: Will there be an opportunity for the public to see the reported acres? There's a lot of discussion about Tier 2 P, and The Chesapeake Bay Foundation's contention is that you should only get Tier 2 P credit if you've applied the P index, and have lowered the application rate based on those results.

Jenn Volk: An updated version of the table that includes the reported acres could be presented, but it may not be ready until February.

James Davis-Martin: We should think about a process for developing 2015 milestones that will be evaluated using 2015 progress. We're back to the conundrum of not measuring ourselves with the same stick we've started with.

Kristen Saacke-Blunk: The Nutrient Management Task Force was established ahead of the Management Board meeting, in response to the AgWG's suggestion and prior to the Tier 2 P recommendations approved by the Management Board. When we developed the crosswalk, it was designed to be a tool for the states to clarify how they met the definitions of the Tiers, and also so that the partnership at large could see how the states are defining it.

Jim Edward (EPA): EPA has made adjustments in the past to Nutrient Management. Maryland has done it the past few years when we felt they didn't have adequate documentation. The goal here is to be more transparent, and to share our methodology.

James Davis-Martin: Asked the WQGIT to submit a request to the Management Board not to pursue the revised efficiencies in the model.

Jenn Volk: There isn't necessarily anything here for the WQGIT to decide upon – it seems to be an issue of interpretation.

Dave Montali: Using compliance rate information to discount Tier 1 Nutrient Management has never been done in my state until now. If ever in a position to say whether I support that, I could only say no. This has morphed into whether or not the states can document compliance – and now it's not just Tier 2 P that's in jeopardy, but everything is.

Lee Currey: Maryland has been reporting compliance rates for years, and we've been receiving discounts for that. We should not stop doing that, but rather encourage all other states to bring their reporting up to that level so we're all treated fairly.

James Davis-Martin: Asked whether this was a data collection effort or if the Nutrient Management Task Force was assessing compliance documentation.

Kristen Saacke-Blunk: The Task Force followed-up with the states with clarification questions, but all information is self-reported by the states.

Kelly Shenk (EPA): Our hope is that through our on-going discussions, the states can provide sufficient information to back up their compliance levels, and look up other lines of evidence if we don't have a high confidence level. If there's still insufficient data, then we hope the state will adjust the credit they're asking for. If that doesn't happen, EPA will have to figure out what to do with it. We've been asking for compliance information every year as part of the QAPPs, but we haven't been doing that consistently across states, and states haven't been consistently submitting it. We're trying to use a more consistent approach and show more transparency.

ACTION: The Nutrient Management Task Force will provide the WQGIT with an updated cross-walk table that includes the acres submitted under each tier of Nutrient Management, once that data is available.

ACTION: The WQGIT will take the results of the Nutrient Management Task Force crosswalk to the Management Board in January 2016. They will summarize that there is discomfort with the potential ways in which the results of the crosswalk will be used but will not make a formal recommendation.

Post-Meeting Update:

During their December 17th meeting, the AGWG all agreed to stay the course and finish the work it has started. Their decision will be recorded in the meeting summary, and next steps are listed below:

- 1. December: States submit final crosswalks to the Task Force both narrative submissions and acres. Task Force finalizes crosswalk report. TF is focused on:
 - a. WV documentation to support its reported acres. We think WV has the supporting information, they just need to be willing to share it.
 - b. DE resubmission of its crosswalk. DE is working on other "lines of evidence" for a resubmission of the crosswalk. We remain concerned about whether DE will have sufficient information to back up its reported acres. Secretary Kee linked into the meeting via phone but remained silent. Chris Brosch, DDA, said he said the main problem is that the TF doesn't understand DE's programs and asked to give a presentation to the AGWG instead of providing more information in the crosswalk. The AgWG Chairs said they need the crosswalk, but also welcome state program presentations throughout this coming year.

- c. PA and NY we'll want more information to justify the high compliance levels reported.
- d. Tier 2 P justification the Task Force needs to spend some more time evaluating state documentation on compliance levels.
- 2. January: Make any necessary adjustments to the state-reported acres.
 - EPA will finalize and implement a methodology for adjusting any state-reported acres, if states are unable to provide sufficient documentation or adjust state-reported acres downward.
 - b. EPA will continue to work with the Ag Workgroup as it develops and implements its methodology.
- 3. February: States will work with CBPO modelers to finalize NEIEN data submissions to ensure consistency with crosswalks. Reported acres should be equivalent to the compliance acres.
- 4. Post-February: CBPO modelers will conduct the 2015 progress run.

Showcasing Successes:

Presenters: Sarah Diebel (DoD)

Materials: Showcase of Successes: DoD Presentation

Sarah Diebel: If the WQGIT or its workgroups have specific needs from DoD, please communicate those and I can help to facilitate that information gathering from our installations.

Tanya Spano: Do you have challenges in terms of resource availability?

Sarah Diebel: The source of funding is generally the question. With BMPs, the funding comes from facility sustainment dollars, which are not as easily available.

Tom Wenz: I recommend you touch base with the public affairs offices, because they tend to have a direct line to the installations.

Greg Allen: There has been a lot of leadership from DoD and other federal agencies through the Federal Facilities Workgroup. Heading into the WIP III development process, we need to be keeping these federal agencies in mind.

Dianne McNally: Recommended a standing WQGIT agenda item to share post-TMDL implementation success stories.

Adjourn Day 1

December 15:

Measuring and Explaining Trends in Water Quality

Presenters: Doug Moyer (USGS), Joel Blomquist (USGS) and Jeni Keisman (USGS)

Materials: Measuring and Explaining Trends in Water Quality: Presentation; WQ Trends Maps: Handout; STAR Measure and Explain Trends in WQ: Briefing Paper

Doug Moyer

Three questions for WQGIT:

- What are the target conditions (i.e. loads) and how are they allocated (e.g. major basin, NTN station, county...)?
- What time period for trends is most beneficial for assessing progress?
- How can we best integrate our results into GIT processes?

Ruth Izraeli: Will USGS also factor in relative effectiveness into the estimates of yields to add even more information on the relative importance of each watershed's yield?

Gary Shenk: We can plan to factor in relative effectiveness into the estimates of yields once we have updated relative effectiveness numbers for the Phase 6 Chesapeake Bay Watershed Model and Chesapeake Bay Water Quality/Sediment Transport Model.

Karl Berger (MWCOG): Recommend we use pounds per acre versus tons per square mile as the units on all future plots of yield data.

James Davis-Martin: Can we put these yields in the context of each of the jurisdictions' Bay TMDL allocation loads?

Lee Currey: We need to be careful in making direct comparisons between the Bay TMDL allocation loads and the estimated loads and yields, given the Bay TMDL allocations are based on 10-year averaged conditions and the monitoring-based yield are estimated through WRTDS, a statistical model.

Gary Shenk: Recommend we consider using percent change as the means for directly comparing monitoring-based estimates of loads and yields with the Bay TMDL load allocations given both are model-derived estimates, but with different levels of uncertainty.

Matt Johnston: Given the positive trends in total phosphorus compared with the mix-bag of trends in sediment, have you separated out the dissolved fraction of phosphorus and evaluated trends in this fraction?

Doug Moyer (USGS): We are starting to analyze the dissolved phosphorus and particulate fractions to better understand why we are seeing those differences in phosphorus and sediment trends.

Tanya Spano: What are included in the point and urban source sector categories in the SPARROW analysis source contributions? Need to more clearly define what are you are considering as the dominant sources.

Joel Blomquist (USGS): Point source is strictly wastewater treatment facility loads and urban is lands classified as urban developed lands in the USGS SPARROW model.

Beth McGee: Why are you changing from presentation of flow normalized concentrations to flow normalized loads and yields?

Doug Moyer: USGS will continue to present results for flow normalized concentrations for use in interpreting low flow conditions. The transition to presenting the results in terms of loads and yields

was made to enable the partners to make a direct comparison with their Bay TMDL load allocations and make a connection with loads delivered to the tidal waters.

Lee Currey: Commended the USGS team for their work on getting the monitoring data and observed trends into a form that can be directed towards to the public. When we talk with the public, they are always asking about the monitoring results.

Joel Blomquist

Tanya Spano: We need some communications experts on the group of managers working with USGS so there is an early focus on communicating these complex monitoring trend response stories.

John Schneider: Suggest overlaying the ground water graphic on your groundwater lag time map to bring both sets of information into a form that can be communicated with the public.

ACTION: USGS will work directly with the WQGIT on the roll-out of their small watershed studies report in 2016, with a focus on getting agreement on the key messages coming out of the detailed analyses.

Joel Blomquist presented three additional questions for follow up discussion with the WQGIT-convened group of managers, technical staff and communicators:

- As results are coming forward, how can we best disseminate new findings?
- How can we get feedback on approaches that are being implemented?
- How can we engage jurisdictions into the process of explaining patterns at individual sites?

John Rhoderick: The word 'yield' means something else to farmers—need to find another word when we are communicating with the agricultural community. Also, we cannot just focus on the Greensboro station on the Choptank River to characterize trends on the entire Delmarva—we have a number of other stations on the Eastern Shore now with sufficient data records so we can show trends for these other stations as well. The Greensboro station should only be used to characterize the mid-Shore region. Finally, how did you select the confidence level you did to determine the trends? How would it change the results if the confidence level was increased?

Doug Moyer: Bob Hirsch has published work on measuring uncertainty in the WRTDS analyses of trends. This level of confidence suggests that the trend is "likely".

Gary Shenk: Each station has an estimated level of certainty in the observed trend, either increasing, decreasing, or no change. The USGS team, strictly from a presentation perspective to not make the graphics too difficult to understand, made a decision to illustrate the type of trend based on a 67% level of certainty. We can provide the level of certainty associated with each station's trend results.

John Rhoderick: Information on uncertainty would be another useful thing to include in a communications plan.

Jeni Keisman

Jeni Keisman presented three additional questions for further discussion:

- What time period is most useful for reporting trends in water quality?
- Are there questions that you have about trends in water quality that are not represented in our plans?
- Within our organization, who are the key people with whom we should directly work to align our questions with our work?

Matt Johnston: Going back to the nitrogen horizontal bar chart graphic, we need to also illustrate the same graphic in total loads from each of the 81 monitored watersheds so we can let our audience know the actual loads from each of these watersheds in addition to the yields.

Jeni Keisman: We have those graphics, we just did not show them given the limited presentation time.

Kevin McGonigal (SRBC): Is Estimator still being used as a tool for calculating flow normalized concentration? Can we start to compare the estimated loads at each of the monitoring stations with the appropriate Bay TMDL load allocation?

Doug Moyer: USGS is no longer using the Estimator tool, but is generating flow normalized concentration trends using WRTDS. USGS will be publishing a report within the next several months which documents the reasons why USGS has transitioned to only using WRTDS and not Estimator.

Ann Swanson: Is it possible to conduct a cluster analysis of yield and total load of the various watersheds so we can focus in on those watersheds which have both high yields and high loads? Some of the graphics illustrate the BMPs are working yet some watersheds are showing increasing load trends—there's a need to reconcile these two sets of messages.

Jeni Keisman: Asked for help from the WQGIT in finding the sweet spot between getting more of the story worked out in advance before presenting it to the WQGIT versus continuing to share the early building blocks without working out all the details on the underlying story.

Ann Swanson: Continue to present early results, but couple those presentations with a series of questions about how the rest of us can help in understanding and then communicating those results. We also need to weave in the monitoring story into all our future messaging under the Midpoint Assessment.

Jeremy Hanson: The three showcase watersheds might have information and insights that could be useful for work underway in our expert panels currently working on loading rates and BMP efficiencies. What is the timeframe for publishing that report?

Joel Blomquist: The report should be out before April 2016, but we could begin to work on figuring out the most important summaries to pull together before then.

Bill Angstadt: You were basing loading rates on application rates within your SPARROW analyses going back to the 1980s. Is it time to update these rates based on the wealth of data and science generated over the past decade?

Joel Blomquist: Yes, it is time to update these rates.

Lee Currey: We need to first focus on the trends themselves so that we start communicating the expanded sets of trends without having to wait for the full explanation of the trends, which will continue to be developed over the coming year. I also think the timeframe is important, and that it is useful to see the 30 year trend, as well as the short term trend. Be careful with the focus on estuarine water quality trends given the complexity those estuarine habitats and all the factors which could be influencing those trends.

Lee Currey: Need a group of managers to lay out the bigger picture storyline and then work with the technical group working with the USGS team to help frame out the work on explaining trends before we get too deep into the technical details and lose the connection to the bigger picture.

Rebecca Hanmer: The more you talk about decreasing trends in loads, the more people are going to ask about what is the response of the ecosystem, the living resources themselves in the streams and rivers and the estuary. But we have not pulled together the same set of trend storylines from the monitoring programs which focus on the living resources. Nor have we fully integrated watershed-wide monitoring networks focused on these resources to the degree we have for water quality.

ACTION: USGS will work with the WQGIT to set up a group of technical staff drawn from the WQGIT agencies and organizations to work directly with the Explaining Trends team to work out more detailed responses to the three sets of questions (and others) posed to the WQGIT.

ACTION: Convene a group of managers to work to develop the bigger picture trends and explanation storylines and how we need to communicate what over what timeframe in terms of trends and their explanations and charge this group to then work directly with the WQGIT's identified technical group and the Explaining Trends team.

ACTION: USGS will work with the WQGIT to convene a group of managers to develop the bigger picture trends and explanation storylines and how we need to communicate what over what timeframe in terms of trends and their explanations. Charge this group to then work directly with the WQGIT's identified technical group and the Explaining Trends team.

ACTION: USGS will work with the WQGIT chair, vice chair, and coordinator to schedule a series of webinars over the coming year to present the increasing level of information and understanding coming forward from the work underway within the Integrated Trend Analysis Team's work on explaining trends up in the watershed, in the Bay's tidal waters and the connections between both.

ACTION: The WQGIT will determine how to best work with the Explaining Trends team to further flesh out the more watershed and stations specific explanation of trends—do we organize and work at a state by state scale, specific watersheds (e.g., Susquehanna), specific regions (e.g., Delmarva), or all three as we go deeper into the explanation of the observed trends.

Phase III WIP Stakeholder Assessment Final Report and Action Plan

Presenters: Frank Dukes (UVA IEN) and Lucinda Power (EPA)

Materials: Phase III WIP Stakeholder Assessment and Action Plan: Presentation; Phase III WIP Stakeholder Assessment Final Report; Phase III WIP Stakeholder Assessment Action Plan; Appendix I of Phase III WIP Stakeholder Assessment Action Plan

DECISION: The WQGIT accepted the final Phase III WIP Stakeholder Assessment Report on behalf of the larger CBP partnership.

Evelyn MacKnight (EPA): It would be useful to provide information on the tools for addressing water quality impairments to the locals along with more support. We need to focus more on local water impairments and solutions.

Bill Angstadt: Are you expecting the workgroups to take on the sector specific communication strategies or are we thinking in terms of cross-sector strategies?

Kristen Saacke-Blunk: Our local communities live in multi-sector communities, not single sectors. We need to think in terms of cross sectors. I also think we need numeric local targets or the locals will not have the information they'll need in order to know what they have to do.

Marel King: Need to think about local implementation and not just focused on local governments, because more implementation is being done by nongovernmental organizations.

James Davis-Martin: Concerned that the Action Plan has focused only on a fraction of the findings in the report and not on the 9 major findings. Would like to see the Action Plan covering the full array of findings.

Mary Gattis: Seconded James' comment. She recognized the Action Team's conference calls to date have been focused entirely on the need for local area targets.

Bill Angstadt: We need a policy decision on the need for local area targets in order to move forward with our local engagement work.

Bill Angstadt: Suggest creating a cross sector task force that would be charged with developing a policy recommendation for the Management Board and Principals' Staff Committee on the need for developing local area targets for Phase III WIPs.

Ann Swanson: The Principals' Staff Committee needs to talk through the federal, state and local needs.

Dianne McNally: I don't believe we ever stated that the local area targets needed to be numeric targets, but that other options such as programmatic or BMP implementation targets at a local scale could be considered.

Ann Swanson/James Davis-Martin/Tanya Spano: The WQGIT need to develop a recommendation on local area targets, including pros and cons of options, for consideration by the Management Board and Principals' Staff Committee.

James Davis-Martin: It should be the WQGIT's role to discuss this topic. But such a task force could be used to formulate options.

Tom Wenz: Would like to caution that the communications planning needs to begin now. While the details will change based on the task force, beginning to talk about the need for local implementation early would be a good idea.

ACTION: Lucinda Power will work with WQGIT members on drafting up a proposed charge and schedule for convening an ad-hoc Task Force with cross-sector representation that will frame out the options for a WQGIT recommendation regarding the development of local area targets for the Phase III WIPs. That charge and timeline will be presented to the WQGIT in January 2016.

ACTION: WQGIT members should send comments on the draft Stakeholder Assessment Action Plan to Lucinda Power by January 21, 2016. In response, Lucinda will work with the Action Team to respond to any comments received, as well as to address the concerns expressed during the WQGIT meeting on the need for the Action Plan to speak to all 9 findings from the Stakeholder Assessment Report.

Mary Gattis: We need to involve local governments in the partnership decision on the need to establish local area targets.

Norm Goulet: Need to move forward with the task force, get a partnership decision on the need to establish local area targets, and then engage the local partners on a jurisdiction by jurisdiction basis to discuss exactly what form those local area targets will take.

Phase III Planning Target Methodology

Presenters: Gary Shenk (USGS)

Materials: Methodology for Phase III Planning Targets: Presentation; Methodology for Phase III Planning Targets: Briefing Paper

John Rhoderick: Our information for setting the basis for our E3 scenario has changed with the introduction of a host of new BMPs so we will need to go back and update the definition of our existing E3 scenario.

Dave Montali: Was the wastewater treatment line based on significant facilities, or does it also include non-significant facilities? The 8 mg/L to 3 mg/L line makes sense with a focus on significant facilities.

Gary Shenk: It is based on all wastewater treatment facilities. There were a lot of non-significant facilities that were not in the original model that were added during the WIP development period.

James Davis-Martin: Is it wise to make the decision on the allocation methodology in June before we fully understand the sensitivity of the tools?

Gary Shenk: We established the principles behind the Bay TMDL allocation methodology well before we applied the methodology to the model scenario outputs, but we made adjustments in the application of the methodology to reflect feedback and concerns voiced by individual partners along the way. We could continue to follow a similar approach.

Lee Currey: Need to agree on how we are going to proceed forward on this topic while aligning it with the rest of the Midpoint Assessment process. Moving forward with our agreed-to principles and then working through other issues with the methodology and testing the effect. For example, we could update our E3 scenario and test it within the methodology.

Dave Montali: I'm fine with the principles, but we need to work through what all these changes in the modeling tools will mean for level of effort for all the jurisdictional partners.

Ann Swanson: We need to make a base set of decisions now, recognizing we might need to go back and make any needed refinements as we build in new information. We should work incrementally through the process, introducing another set of new information and clearly illustrating the influence of that new information on the outcome of the methodology for the WQGIT.

Dave Montali: When we will have a good sense of changes to relative effectiveness with the new suite of partnership models?

Gary Shenk: Depending on the WQGIT's sense of priority, we could generate an updated set of relative effectiveness estimates shortly after the release of the Beta 1 version of the Phase 6 Watershed Model in January.

DECISION: WQGIT agreed to proceed with the current principles for setting planning targets as a framework and to, over the course of 2016, work towards an incremental understanding of how the forthcoming new models and inputs will affect the existing allocation methodology.

ACTION: The WQGIT identified changes to the No Action and E3 scenarios to reflect new information, past assumptions and new BMPs, and the effects of Conowingo Dam, climate change, and James River chlorophyll a criteria re-evaluation as areas where more information will be needed in order to determine whether or not changes to the three principles and the underlying methodology are needed.

ACTION: The WQGIT will target June 2016 to make a recommendation to the Management Board and Principals' Staff Committee, with that date subject to change.

Options for Partnership Policy on Updating Information in Two-Year Milestones

Presenters: Jeff Sweeney (EPA)

Materials: Options for Updating Information in Milestones: Briefing Paper; Options for Updating Information in Milestones: Presentation

John Rhoderick: We should continue to assess progress towards the 2017 interim targets using the same set of information and data as we had when we started this process.

James Davis-Martin: Where we are proposing to hold the data as static, would we not include the updated land use data for each progress run? Real construction acres?

Matt Johnston: We need to make this overall decision and then work through these technical details.

James Davis-Martin: We need to be very clear about what we are holding static and what exceptions we are agreeing to.

Jeff Sweeney: We do land use projections at the beginning of the milestone period that projects the annual changes in land uses. We would not redo the projections or add in any new data, but the actual land use acres would change each year based on those projections.

Lee Currey: Would like to have us hold all our assumptions constant over the two year milestone period. This is because we want to have a fair process on which we judge progress on the same assumptions as we set our original milestones.

Jeff Sweeney: During the mid-year of the two year milestone period, EPA will not be undertaking an evaluation of the each jurisdiction's progress. The CBP partnership will run a progress run, but EPA won't be evaluating progress on a jurisdiction by jurisdiction basis and providing a written evaluation. EPA will focus on developing written evaluations at the end of each 2-year period.

James Davis Martin: When re-running past progress scenarios, will we go back and account for past reporting of BMPs?

Matt Johnston: Yes, we will go back and account for past reporting of the new BMPs in our past progress scenarios.

Mark Dubin: The concerns that could be expressed by our BMP expert panels and our industry partners about not being able to apply the partnership-approved BMPs or incorporate new industry data until the start of a new milestone will be countered by the partnership's commitment to update the past history of progress runs accounting for the new BMPs and the new industry data.

DECISION: The WQGIT agreed, starting with the jurisdictions' development of their 2017 milestones, that the partnership will hold the assumptions set at the beginning of the milestone period constant over the two year period. Land uses will be projected at the beginning of the milestone period, and those projections will not be changed, though the land uses will change annually based upon those projections. At the end of the milestone period, the partners will factor in the new information, BMP efficiencies, and data previously approved by the partnership into the present and past history of progress runs, back through 2009. With the introduction of new BMPs, the jurisdictions can go back and update their past reporting for those new BMPs over the course of past history of progress runs conducted after the end of the Phase 6 Watershed Model calibration period.

ACTION: The WQGIT chair will take the WQGIT decision on a partnership policy for updating new information to the Management Board in January 2016 for their information and to seek their concurrence that they are comfortable with this policy moving forward into the 2017 milestone development process.

Nutrient Management 5.3.2 Task Force: Review and Approval of Cross Walk

Presenters: Jenn Volk (University of Delaware)

Materials: None

Jenn Volk: Given the decision we just made about incorporating new information, do we not take credit for the new efficiencies just adopted from the Nutrient Management panel, but instead set 2017 milestones with that information and wait to receive credit until 2016?

James Davis-Martin: Recommend no discounting of acres be applied until 2018, in order to line-up with the BMP verification schedule.

Jim Edward: I'm hoping there is no need to discount any acres, but I can't make a statement either way until we have had an opportunity for a thorough review of the data submitted.

2025 Forecasted Conditions in Phase III WIPs

Presenters: Peter Claggett (USGS) and Matt Johnston (UMD)

Materials: 2025 Forecasted Conditions: Briefing Paper; 2025 Forecasted Conditions: Presentation

James Davis-Martin: Why wouldn't we set the Phase III WIP planning targets on a 2025 land use condition?

Rich Batiuk: Because using a 2010 land use would be basing the planning target on an existing land use condition as opposed to basing it on actual observed land use data.

Beth McGee: One con from CBF's perspective is that the growth from development of Ag lands gets off the hook because in the model, agriculture has higher loading rates.

Rich Batiuk: I disagree. While that has been the case in the past, I do not think that ignoring growth now will help address that problem.

Lee Currey: I think all jurisdictions have demonstrated their growth and offset plans. I am not convinced we should set our allocations based on 2025 because I think it takes the impetus off of the jurisdictions to manage their growth through 2025.

Rich Batiuk: This is more about providing the information to help with the WIP development and planning processes.

Tanya Spano: Planning on 2025 helps you understand where you are heading. It informs you, which is different than accepting the projections as reality when you plan.

Mark Bryer (TNC): There are at least seven other outcomes in the 2014 Chesapeake Bay Watershed Agreement that depend on the 2025 forecast conditions. There has been work underway by the Habitat GIT, Healthy Watersheds GIT, and the Stewardship GIT for the past four years on the related uses of a 2025 forecasted condition including and beyond water quality. I recommend a joint effort between the WQGIT with these other three GITs on the how to operationalize these recommendations.

James Davis-Martin: It will be useful for the partners to have an understanding of the projected 2025 future conditions. And we will have the benefit of thinking through how we might use this information in the development of the Phase III WIPs.

Ann Swanson: This is an important conversation, and I will offer CBC's support in this effort.

Mark Dubin: Wanted to address Beth McGee's statement that development of farmland results in lower loads in the partnership's models—we clearly need to address this issue once and for all.

Tanya Spano: Which workgroup has the lead for this work?

Peter Claggett: The Land use Workgroup has the overall lead, working directly with the appropriate source sector and habitat workgroups on the details of the projection methodologies.

Mark Bryer: How we might credit the avoidance of future growth in load is a discussion we need to have within the partnership. I would like to see cross GIT discussion.

Jenn Volk: Mark Bryer is asking for WQGIT representation on a cross-GIT group including all four GITs to further discuss how to proceed forward with factoring in crediting the avoidance of future growth in loads.

Mark Bryer: Start from the Land Use Workgroup membership and then add in specific representatives from all four GITs. This cross-GIT group will be charged with furthering these discussions and developing recommendations.

Peter Claggett: There are really two 'how's' that we need to address. The first 'how' is how do we go about projecting growth through 2025. The second 'how' is how we do go about crediting conservation for avoiding future growth in loads.

ACTION: The WQGIT agreed to participate in a cross-GIT group, led by Peter Claggett and Mark Bryer and building from the Land Use Workgroup membership, and representatives from Water Quality, Habitat, Healthy Watershed, and Stewardship GITs. The charge of this cross-GIT group is to develop recommendations on how the partnership could proceed forward with crediting conservation as a means of avoiding future growth in loads.

DECISION: The WQGIT agreed to the Land Use Workgroup proceeding with the recommended approach of reviewing and approving the forecasting methodology in order to provide the GIT with the information needed to make a decision regarding whether or not to plan Phase III WIPs on 2025 forecasted conditions in the May 2016 timeframe.

Wrap Up

DECISION: The WQGIT confirmed James Davis-Martin (VA DEQ) as their new chair and Teresa Koon (WV DEP) as their new vice-chair. The WQGIT's confirmation of the new chair will be submitted to the Management Board for their approval in January 2016.

List of Meeting 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
Lindsey Gordon (Staff)	CRC
Karl Blankenship	Bay Journal
Heidi Bonnaffon	CBC

Ann Swanson CBC
Marel King CBC
Beth McGee CBF
Kyle Hinson CRC
Tom Schueler CSN
Chris Brosch DDA

John Schneider DE DNREC DMAA Bill Angstadt DMAA **Lindsay Thompson** Sarah Diebel DoD Mary Searing DOEE George Onyullo DOEE EPA Kelly Shenk Greg Allen **EPA**

Tom Wenz EPA, CBPO Rich Batiuk EPA, CBPO Jim Edward EPA, CBPO Jeff Sweeney EPA, CBPO Lew Linker EPA, CBPO Ruth Izraeli EPA, R2 Evelyn McKnight EPA, R3 Pat Gleason EPA, R3 Ann Carkhuff EPA, R3 Dianne McNally EPA, R3 Chris Day EPA, R3 Kelly Gable EPA, R3 Jen Sincock EPA, R3 Rebecca Hanmer FWG

Kristen Saacke Blunk Headwaters, LLC

Jenny Tribo **HRPDC** Whitney Katchmark **HRPDC** Ross Mandel **ICPRB LCCD** Chris Thompson Mary Gattis LGAC MDA Alisha Mulkey **Rachel Rhodes** MDA Jason Keppler MDA **Dinorah Dalmasy** MDE MDE Lee Currey Marya Levelev MDE Tanya Spano **MWCOG** Lana Sindler **MWCOG** Karl Berger **MWCOG** Zoe Johnson NOAA **Marian Norris** NPS

NVRC Norm Goulet Ben Sears NYSDEC Mukhtar Ibrahim NYSDEC Kristen Wolf PA DEP **Ted Tesler** PA DEP Kevin McGonigal SRBC **Kristin Saunders UMCES** Mindy Ehrich **UMCES** Rebecca Murphy **UMCES** Ping Wang **UMCES** Matt Johnson UMD, CBPO Mark Dubin UMD, CBPO Curt Dell USDA, ARS Sally Claggett USFS

Doug Moyer USGS Joel Blomquist USGS Jeni Keisman USGS Gary Shenk USGS Scott Phillips USGS John Wolf USGS Peter Tango USGS Mike Langland USGS

Peter Claggett USGS, CBPO Frank Dukes **UVA IEN** Jeremy Hanson VT Ning Zhou VT Teresa Koon WV DEP Dave Montali WV DEP WV DEP Alana Hartman Matt Monroe WVDA

Sarah Gregory