



Clean Water Goal Team (CWGT)

Monday, August 24th, 2026
1:00 - 4:00 PM

[Visit the meeting webpage for meeting materials and additional information.](#)

Purpose: This is the monthly meeting of the Clean Water Goal Team (CWGT). The CWGT will be asked to confirm nominees for three at-large voting member positions and approve a charge to task the WTWG to explore options for the frequency of model updates. Informational items include E3 input presentations from workgroups, a discussion on tiered implementation and an update on management strategy development.

Actions & Decisions

Action: The CWGT will hold a hybrid meeting [September 28-29](#) with in-person participation at the CBP Office in Annapolis, MD. If you plan to attend, please RSVP using the following [link](#) by Friday, September 4th. For those who need hotel accommodations, please reserve a room through the following room block [link](#) by Thursday, August 27th.

Decision: The Clean Water Goal Team confirmed Lisa Blazure, Erik Michelsen, and Kevin Du Bois as at-large voting members through December 2027.

Action: Please reach out to Kaylyn Gootman (Gootman.Kaylyn@epa.gov) if you have further considerations or requests for how to frame our continued discussion on tiered implementation. Please also explore the DRAFT [Connecting Watersheds to Tidal Water Quality tool](#) Alex Gunnerson demonstrated at the meeting and reach out to Alex (agunnerson@chesapeakebay.net) and Andy Fitch (afitch@usgs.gov) with any feedback on the tool/application.

Action: CWGT members are asked to provide any thoughts or concerns on the [E3 recommendations](#) to respective Workgroup Coordinators, CWGT Staff, and CWGT Leadership, ahead of the September meeting. In particular, please provide feedback on BMPs in need of additional discussion, such as the differing inputs for some agricultural and forestry BMPs. The CWGT will vote to approve the E3 scenarios at the September meeting.

Action: Katie Brownson and Eric Hughes will provide a side-by-side comparison of the differences in FWG and AgWG recommendations for the BMPs that differed in recommendations. This will be compiled and shared with the Clean Water Goal Team as soon as possible ahead of the September CWGT meeting.

Decision: The CWGT agreed to direct the WTWG to develop options for “when to update CAST” and to present those options to the CWGT at the November 2026 CWGT meeting.

Action: The WTWG will develop options for when to perform data updates to CAST between 2030-2040. In particular, the WTWG is asked to:

- Provide 3 options with rationale for each option and present those options at the November CWGT
- Utilize information that has been discussed widely with the Partnership
- Evaluate success/failure of previous attempts to standardize the update process

Action: Please provide your thoughts and input on the CWGT [draft management strategy](#) to Jeremy Hanson (hansonj@chesapeake.org) by Tuesday, September 8th. Please provide comments either via email directly to Jeremy or in the [Word Document version of the draft Management Strategy](#). An updated draft will be shared ahead of the Sept 28-29 meeting.

Minutes

I. Welcome and Announcements

Lead: Lee McDonnell and Greg Sandi, CWGT Co-Chairs

II. Business, Workgroup & Phase 7 Decision Updates

Lead: Jeremy Hanson, CWGT Coordinator

Jeremy Hanson, CWGT Coordinator provided the group with relevant announcements and updates, which are on the [posted slides](#) and at the bottom of the [agenda](#). In addition to Workgroup updates, the group was informed of the recent press release on the 2025 update to the Modeled Load Reductions Indicator, linked [here](#). Jeremy also noted a recent webinar on the Governance and Management Framework (GMF) and the associated slides, FAQ document, and webinar recording now accessible through the following [link](#). The group was also reminded of upcoming [CWGT office hours](#) (September 15th, from 12:30-2:00PM) to discuss the Hydrologic & Critical Period, Scenario Base Year and other topics of interest, as well as upcoming [LUWG office hours](#) (September 16th, 1:00-3:00PM) to discuss the Chesapeake Bay Land Change Model.

Materials: [Coordinator Updates Presentation](#)

Actions:

1. The CWGT will hold a hybrid meeting [September 28-29](#) with in-person participation at the CBP Office in Annapolis, MD. If you plan to attend, please RSVP using the following [link](#) by Friday, September 4th. For those who need hotel accommodations, please reserve a room through the following room block [link](#) by Thursday, August 27th.

III. Confirmation of Nominees for CWGT At-Large Voting Members

Lead: Jeremy Hanson, CWGT Coordinator

Nominees for the three open CWGT at-large voting member positions were introduced at the July CWGT meeting, and signatory and mid-term at-large voting members were asked to rank nominees via a poll by email to determine the top nominees. Jeremy shared the results from this

poll and asked the CWGT to confirm the top three nominees – Lisa Blazure, Kevin Du Bois and Erik Michelsen - as at-large voting members for terms through December 2027. The CWGT approved Lisa, Kevin, and Erik as at-large members through December 2027.

Additionally, Lee McDonnell thanked Mike LaSala for his time served as a CWGT at-large member. Thank you, Mike, for your contributions to the Goal Team, and we welcome our new members to the group!

Materials: [Call for Nominations](#), [Nominee Bios/Resumes](#)

Decisions:

1. The Clean Water Goal Team confirmed Lisa Blazure, Erik Michelsen, and Kevin Du Bois as at-large voting members through December 2027.

Discussion:

Kevin Du Bois, DoW (in chat): Thank you!

IV. Tiered Implementation Discussion

Lead: Kaylyn Gootman, EPA CBPO; Alex Gunnerson, CBPO Contractor

Kaylyn Gootman, EPA, and Alex Gunnerson, Koniag/CBPO Contractor, returned this month with the goal of refocusing the starting point for approaching tiered implementation, discussing the CWGT member-provided definitions of tiered implementation, providing an overview of a new tool on tiered implementation, and outlining the tiered implementation conversation that will be upcoming at the September CWGT meeting.

Kaylyn emphasized that we now have an opportunity to think differently about how we approach our work to accelerate progress towards meeting water quality standards and highlighted some of the more expansive data sets now available for modeling and monitoring. Kaylyn also noted similarities and differences across the member provided definitions of tiered implementation, which are explained in her [presentation](#). Discussion included initial thoughts for how to apply these definitions to accelerate progress on our goals, and additional comments were made related to how we would implement and sequence tiered implementation, communications, local level influence, and more.

Alex also walked the group through the linked [tool](#), which allows users to both select a watershed to see the tidal segments that it influences and vice versa. Examples were shown for the Upper Choptank, Upper James River, and the Susquehanna. You can test out the draft application [here](#). Members requested additional information on the data sources used in the application; asked questions related to the potential incorporation of this tool into a Spatial CAST and the difference between this tool and METRIC; and noted some concerns with assessing a segment in its totality as opposed to analyzing water quality improvements throughout. Kaylyn concluded this presentation by outlining what will be covered on tiered implementation at the September CWGT meeting. More details are available in the posted slides below.

Materials: [Presentation](#), [DRAFT Connecting Watersheds to Tidal Water Quality Tool](#)

Actions:

1. Please reach out to Kaylyn Gootman (Gootman.Kaylyn@epa.gov) if you have further considerations or requests for how to frame our continued discussion on tiered implementation. Please also explore the DRAFT [Connecting Watersheds to Tidal Water Quality tool](#) Alex Gunnerson demonstrated at the meeting and reach out to Alex (agunnerson@chesapeakebay.net) and Andy Fitch (afitch@usgs.gov) with any feedback on the tool/application.

Discussion:

- Peter Tango, USGS, clarified slide three of the presentation, noting that the figure showed estimated attainment of WQ Standards.
- Jess Blackburn, Stakeholder's Advisory Committee (in chat): FYI- The Stakeholders' Advisory Committee really appreciated the Stoplight Charts. They found them easy to understand and have been asking for them to be used again.
- Kaylyn Gootman, EPA, posed the following question to the group: How can/would you apply your definition for where we want to go, which is accelerating progress our goals (i.e., clean water, healthier habitats, WQSA?)
 - Kevin McLean, VA DEQ, noted this is something that Virginia and its partners have been talking about internally. Kevin elaborated by saying that their goal, broadly speaking for Clean Water, is to keep the central focus on what we have to accomplish under the TMDL, while recognizing that has been made too much of the central focus at times. Kevin noted an excitement towards a shift to tiered implementation and a hope that it will broaden what is considered in respect to those decisions, as well as allow us to focus on the co-benefits to Clean Water Goals. It was noted that Virginia has struggled at times with deep channel assessment structure because more southern river basins don't have much of an impact, so they don't get prioritized the same. Kevin mentioned that he likes the doors that this opens and the idea of looking at all 92 segments, shallow water habitat, etc. A wariness was shared that this might become "TMDL IP planning for 92 segments across the entire watershed". Kevin noted some good conversations on remaining focused on locally led decision making and engaging partners in smaller areas, but not creating so much information and tools that there is the adverse effect.
 - Kaylyn thanked Kevin for his comment and noted that she was glad to hear both about the excitement and caution from Virginia. Kaylyn noted that the effort of CBPO and the team working on tiered implementation is focused, with an eye on the prize of achievement across 92 segments, but it is also about looking for local opportunities to support engagement, visibility, and incremental small wins.
 - Kevin Du Bois, DoW (in chat): Did we ever decide whether 2040 was a final deadline for TMDL accomplishment or an interim goal?
 - Lee McDonnell, EPA/Co-Chair, responded in the chat: We have not, I expect further discussion on this in the future.
 - KC Filippino, HRPDC, mentioned that in her tiered implementation definition submitted prior to this meeting, she started her response saying there shouldn't be a definition, since the definition could be debated. KC further suggested that, since this is a concept, we need a conceptual framework, not just for where prioritization need to take place but how we are going to get there. She noted the potential for this to turn the current accountability framework on it's head. While she supports the idea of locally led implementation, KC expressed concerns over the fact that it could lead to BMPs not being counted if it is not something that is currently reportable.

- Kaylyn acknowledged that this idea was included in KC's definition submission. Kaylyn noted that CBPO, VIMS, NOAA, and STAC are currently exploring a potential framework and next steps to build this into the planning target process.
 - Lee McDonnell, EPA/Co-Chair, mentioned that we are now able to look at all of the dissolved oxygen criteria in all the segments, which we were previously unable to do. Lee also noted that short duration criteria might be our stepping stone into the concept of tiered implementation. So, there is more to look at now than we had in the past.
- Bobby Hughes, EPCAMR, (in chat): I'm a little confused, forgive me on not the tiered implementation, but moreso on the Tiered Monitoring Levels and rigor to meet those requirements for the US EPA and who is qualified or certified to provide the data that meets the legal definitions under each of those tiers.
 - Bobby verbally explained the above chat comment, noting confusion over the quality of the data that's being presented when it comes to tiered monitoring. Bobby elaborated noting a small grant program which focuses on how to get certified to meet specific levels/tiers to be able to remove waters from the impaired waters list, and he wondered how people would be able to contribute to that work when they aren't certified to do so.
 - Kaylyn responded noting that they are talking about two different programs. Kaylyn clarified, explaining that tiered implementation is talking about how to do targeted planning to accelerate progress towards tidal based segments more quickly. This would include using information coming from the Bay Program Partnership's monitoring programs that informs our models, which we use to plan. So, this is separate from the idea of tiered monitoring programs and different certifications.
 - Kate Bresaw, PA DEP, explained that the Tiered 3 monitoring project type under the PA 319 grant is what Bobby is referring to, and it represents the best effort to get monitoring on the ground in PA. Kate further noted that Tier 3, in that case, is in reference to the EPA certification process.
- Marel King, CBC, responded to the question initially posed to the group, noting that it will depend on the jurisdiction, and she noted that the upstream states can only influence so much in the Bay. Marel re-emphasized a point made in the presentation that there are now more tools available to help us make decisions about where to make investments and where to put our attention. Marel elaborated that it's not going to change ultimate planning targets, but it may change the sequence with which we implement the practices that are going to get us to those planning targets. With this approach, we can make better decisions about how and when those practices get put into place.
 - Kaylyn acknowledged Marel's comments and confirmed that the particular framing regarding sequencing is in line with her thinking on this approach.
 - Marel further expressed appreciation for beginning with the attainment trend, since that is the outcome this approach gets to. Marel concluded with an understanding that we will still need to get to the RENPS outcome/planning targets, but how we put those practices in place can influence attainment.
 - Kaylyn noted that, in addition to the RENPS outcome and associated target under the Clean Water Goal, there is also relevance to the WQSAM outcome and Water Quality Standards Attainment indicator. Kaylyn also noted the importance of both the sequencing of practices and the location of implementation. Kaylyn connected this to the tool which will be shown by

Alex later in the meeting and discussed again at the September CWGT meeting.

- Dave Montali, Tetra Tech, elaborated on West Virginia's submission for the tiered implementation definitions, noting both verbally and in the submission that the partnership could consider having 300 individual assessments of specific segment/designated use combinations and dates, rather than a binary pass/fail, to show water quality improvements. Dave also expressed the need to achieve open water criteria and communicate attainment in open water segments before deep channel. It was suggested that there could be buckets for 2030, 2035, 2040, etc., so that incremental progress towards attainment could be communicated along the way, as opposed to having a universal date of 2040. Dave rounded out his comments by reiterating that tiered implementation is less about targeting implementation in headwater states, since they can only affect where the water goes.
 - Kaylyn responded by noting that water quality standards attainment by segment is evaluated as pass/fail, but reminded the group of a tool developed by Qian Zhang, which allows you to look at attainment deficit by designated use. The data show that shallow waters are close. In terms of communication, Kaylyn agreed that additional nuance and context could be added to communications to get at the points shared on headwater states and their sphere of influence.
 - Dave reiterated that segments could be grouped by year (2030, 2035, 2040) by evaluating attainment deficits and analyzing where work of the Partnership is the primary driver for improvement.
 - Kaylyn agreed that it could be helpful to identify the areas that are close and are in need of a little bit more localized effort, so as to support the idea of incremental wins. This will both help to contribute to overall Bay goals as well as to help with communications, marketing, and showing the value of investments.
 - Tish Robertson, VA DEQ, (in chat): Just piggybacking on what Dave is saying...I think the Migratory Fish Spawning and Nursery criteria might be the easiest to attain. Plus it is shallow water and thus more relevant to people.
 - Joe Wood, CBF, (in chat): I do believe this has a chance to reinvigorate local efforts, improve connections between restoration and waters across the bay, and provides a chance for near term "sub-wins" which are sorely needed! look forward to discussing more...
- Alex Gunnerson, Koniag, previewed a new tool "Connecting Watersheds to Tidal Water Quality", which helps understanding the influence of a watershed on a tidal segment.
 - Kevin Du Bois, DoW, asked for clarity on the mechanism to determine why, for example, the little Choptank has an influence on the Susquehanna. Kevin further elaborated, asking if it is because pollutants that are coming down the Bay then through tidal action get moved up into those other tributaries.
 - Alex responded that he was not able to speak to that question in more detail, but that that understanding was accurate at a high level.
 - KC Filippino, HRPDC, asked if there was a link for the data sources available and requested clarity on the data sources that are used.
 - Alex responded that this is exclusively Phase 6 geographic isolation run model output, which KC clarified would mean that it is modeled data based on RIM inputs.
 - Alex responded that links are not currently present for the original data sets, but that they could be included if it would make the viewer more valuable.

- KC responded that understanding what data was used to make that will be key. She further emphasized that tiered implementation is meaningful because of its local connection, but if there's not local data backing it up, there might not be a lot of buy-in.
 - Alex agreed with the importance of local water quality monitoring data and highlighted the constellation of resources needed to tell the whole story for tiered implementation.
 - Bobby Hughes, EPCAMR, (in chat): I agree KC. Local data sets are critical to the model.
- Olivia Martin, Devereux Consulting, mentioned that this was what was originally going to be in spatial CAST. Olivia asked Alex if there is still a plan to make spatial CAST or to incorporate this information into spatial CAST. Olivia also mentioned that it might be helpful to include the monitoring stations and link each station's data, so they are looking at monitoring in addition to modeling. Olivia concluded by mentioning that Andy Fitch and Helen Smith already built a tool in CAST that shows ideal places to target BMPs based on where most already exist and where the delivered load is the highest. Olivia asked if that could be incorporated to make it a fully functional tool with all data layers.
 - Alex noted that he was aware of that tool, but that there were some discrepancies with the original data set that came from the set of model outputs, so it was not included for initial discussion on this topic. However, the hope is to refresh that, since there were some performance challenges with the size of the data. To the second question, Alex agreed that the goal is to make the tool into something bigger, but there are still the questions of what exactly it will look like and at what point does it make sense for it to become a separate tool. On the topic of a spatially explicit interface to CAST, Alex noted that's something that he and Sophie Waterman did user research on in the Spring, and suggestions and and limitations were noted on spatial CAST, though efforts have recently been focused on the Phase 7 review products.
- KC Filippino, HRPDC, asked (in chat): How is this different than the METRIC tool?
 - Lee McDonnell replied in the chat that METRIC looks at monitoring data at a non-tidal network station and compares that to implementation that has or is planned to occur and considers lag times. This is looking at what areas of the tidal bay are influenced by areas in the watershed and vice versa.
- Dave Montali, Tetra Tech, expressed that he thinks it is very important to local implementation to know what effects the basin you are trying to fix. There will be basins where upstream watershed is not the solution to attaining compliance, and in some cases they are. If someone is interested in making a water quality improvement in a particular segment, this tool allows you to see if you can really do it or if you are relying on the collective work of the Partnership. The primary use of this tool is to figure out how much work needs to be done and, to get that work done, to see if it is doable in the upstream watershed or not.
 - Alex agreed, showing additional examples on the viewer for the Pamunkey Tidal Fresh and the Severn to illustrate Dave's point.
 - Kaylyn commented in the chat: That's right, Dave. I like how you framed the Attainment Deficit as the work to do, and this tool as where to do it.
 - In response to the example showing the influence of the Severn River on the Severn Watershed, Erik Michelsen, Anne Arundel County Dept. Of Public Works, noted a gradient of water quality improvements from the headwaters

to the mouth where, oftentimes, the water at the mouth of these waterways is better than it is further away from the mouth. Erik concluded by asking the extent to which there will be an opportunity to look at and provide comments on these analyses.

- Alex expressed that Erik raised an important limitation in that this tool looks at a segment in its totality (not differentiating between different places within the segment) and that this only refers to the modeled difference between the eutrophication units and where we are actually at. So, it doesn't have to do with the other components besides that framing of water quality.
- Kaylyn verbally acknowledged and appreciated the comments made above by Dave, KC, and Erik. Kaylyn responded to KC's question, clarifying that METRIC stands for monitored and expected total reduction indicator for the Chesapeake, and it's an application that's designed to compare monitored load trend and CAST estimated load trends for non-tidal network catchments. It can be used as a way to compare Model progress towards load reductions and observe monitoring loads.
- Jeremy Hanson, CRC/CWGT Coordinator, posed the following question in the chat from Kaylyn's presentation: What would you like to discuss about tiered implementation?
 - Amanda Shaver, VA DEQ, (in chat): I think it's important to determine how incremental success can be measured, whether setting interim thresholds, prioritizing a specific tidal use, etc
 - Peter Tango, USGS/CBPO (in chat): Regarding the question on tiered implementation discussion - perhaps there can be some initial review of attainment deficit patterns and trends. For incremental success, we could consider 1) criteria specific patterns of change, 2) DU and trib system levels of patterns of change (as recently published), 3) meaningful but less often shown indicator patterns over time like Benthic IBI results, like summer hypoxia metrics, etc. Food for thought when planning for the discussion and tracking change into the future.
 - Marel King, CBC (in chat): I see tiered implementation as analogous to the "de-listing" work that is happening in Pennsylvania to focus on bringing individual stream segments into attainment. For a future discussion, would it be helpful to have the folks who are leading that work to share their process with us -- how they start with data management tools to identify potential opportunities, and then dive deeper with local partners to identify where the truly best opportunities are?

V. Break

VI. E3 Scenario - Workgroup Input Recommendations

Lead: Source-Sector Workgroup Leads

Bo Williams, EPA, provided a reminder of what the “Everything, by Everyone, Everywhere” (E3) and No Action Scenarios are, as well as an overview of the scenario base year. Bo also outlined the request of source sector workgroups, before turning it over to them to walk through their assumptions. Representatives from the Agriculture, Forestry, Urban Stormwater, Wastewater Treatment, and Oyster Workgroup, provided a brief overview of their recommendations for inputs to the E3 Scenario for the Phase 7 Model. All recommendations are viewable in the linked [slides](#), with changes from Phase 6 E3 assumptions noted in red text.

Members raised questions about the stream restoration and abandoned mine reclamation BMPs and some clarification on aspects of the wastewater scenario. Additional discussion and input from CWGT is needed on the discrepancies between AgWG and Forestry Workgroup recommendations for certain ag/forestry BMPs. Katie Brownson and Eric Hughes will outline the differences between the FWG and AgWG proposals with differing recommendations and compile a side-by-side comparison for CWGT review, ahead of the September CWGT meeting. The CWGT will vote to accept or revise the E3 Scenario recommendations in September.

Materials: [Presentation, Individual Workgroup Recommendations \(available in supporting documents\)](#)

Actions:

1. CWGT members are asked to provide any thoughts or concerns on the [E3 recommendations](#) to respective Workgroup Coordinators, CWGT Staff, and CWGT Leadership, ahead of the September meeting. In particular, please provide feedback on BMPs in need of additional discussion, such as the differing inputs for some agricultural and forestry BMPs. The CWGT will vote to approve the E3 scenarios at the September meeting.
2. Katie Brownson and Eric Hughes will provide a side-by-side comparison of the differences in FWG and AgWG recommendations for the BMPs that differed in recommendations. This will be compiled and shared with the Clean Water Goal Team as soon as possible ahead of the September CWGT meeting.

Discussion:

- Bo Williams, EPA (in chat): I should have noted that the CWGT will vote to accept or revise these recommendations in September. This meeting is for us to hear these recommendations and discuss any aspects under question (if any).
- Jeremy Hanson, CRC (in chat): Even if we don't have time to answer all of them today, we welcome your questions about any of the E3 scenarios here in the chat. That way we can capture them and work with the Chairs/Coordinators to answer them between meetings if we don't answer it live. Thanks!
- Eric Hughes, EPA, walked the group through the E3 recommendations from the Agriculture Workgroup.
- Katie Brownson, USFS, walked the group through the E3 recommendations from the Forestry Workgroup.
- David Wood, CSN, walked the group through the E3 recommendations from the Urban Stormwater Workgroup.
 - Dave Montali, Tetra Tech, asked for additional clarification on the stream restoration BMP. In particular, Dave asked whether or not “bed and bank loads” is the same as

“bed and bank sediment load”. Dave also asked where the miles came from for this BMP.

- David Wood, CSN, noted in response that they needed a way to simulate the extent when monitored bank erosion rates are the basis for this BMP and it is a pound based BMP. David clarified that, yes, the thought was to use bed and bank loads for sediment and to use nutrient enrichment factors as the basis for nutrient values.
- Dave suggested running through this proposal with Jess Rigelman to ensure this is doable in CAST.
 - David confirmed that he has been working with Jess and is not sure if the stream scenario has been run yet, though he will collaborate with Jess to ensure this works out.
- Dave asked where the mile amount listed for West Virginia comes from.
 - David clarified that that value is the number of E3 miles applied from Phase 6
 - Dave asked whether this value (71 miles) was in urban settings or in total. David confirmed this is just for urban.
- Kevin Du Bois asked in the chat if, by unprotected, do you mean unhardened?
 - Kevin Du Bois reiterated concerns over the semantics of “unprotected shoreline” listed in the recommendation for shoreline management. Kevin suggested changing the language to “unhardened” or “eroding shoreline”.
 - David noted that this was language consistent with what was used in Phase 6 for classifying shoreline extent, but mentioned that adjustment could be made to make it more clear.
- Dave Montali, Tetra Tech, noted additional concerns with Abandoned Mine Reclamation (AMR) BMP recommendation. Dave expressed a concern with the idea that, with the way it is written, it sounds like the whole watershed will get AMR on 2% of compacted pervious, and he is not sure that amount of abandoned mine lands (AML) would be available in every state. For example, Delaware would have to have a certain amount of AMR on its acres and Delaware has no AML.
 - David expressed that he wasn’t sure if geographically specific conditions could be done for this BMP and would need to double check. David agreed that since this would be applied to compacted pervious, it might lead to a funny result for those states without as much AML.
 - Dave reiterated that, though it might be small enough to matter, it is definitely not doable in all states because AMR is basically a land use conversion to forest.
 - Bobby Hughes, ECAMR, noted that a forest restoration approach doesn’t necessarily encourage more compaction of the soil. So, it is pervious. Abandoned mine reclamation work that is impervious is more on the economic development side where mine lands are converted to warehouses, industrial complexes, or data centers. So, there's a difference in that type of approach versus a reforestation approach.

- Jamie Mitchell, HRSD, walked the group through the E3 recommendations from the Wastewater Treatment Workgroup.
 - Lee McDonnell, Co-Chair, noted the slide says “use what’s in the WIP”. Lee followed up asking: how is flow determined? Is everyone doing their own thing? Are you looking at projections for each facility?
 - Jamie expressed that she didn’t know with entire certainty how the states assigned the WIPs. She assumed that they are going based on their permitted facilities and assigning that, but she will follow up as needed with more information.
 - Lee appreciated the idea of following up with more information and acknowledged that he knows it is not related to design capacity or permitting. He is interested in learning more about the specific year/how far in the future projections were made for flow.
 - Jamie asked if it was a consistent state his observations were for or if it was more broad.
 - Lee responded that it was more broad and also noted that it could have been done by jurisdiction.
 - Olivia Martin, Devereux Consulting, confirmed flow was specifically done by jurisdiction and some did the cap loads and some did expected/predicted flows.
 - Lee responded, requesting that information be put down somewhere in the recommendations/documentation outlining that. Jamie agreed and noted that would be useful for understanding during future E3 Scenario recommendation development.
 - Olivia Martin acknowledged that the information should be in each of the state’s WIPs where they documented their approach for reducing loads for each sector.
- Olivia Caretti, Oyster Recovery Partnership, walked the group through E3 recommendations for the Oyster BMPs.
 - Robert Sabo asked (in chat): does NOAA report the bushels of aquaculture oysters harvested? can it be regularly updated like done with crops?
 - Olivia Caretti expressed that she was not familiar with the agricultural process. However, she noted that states are currently reporting aquaculture harvest, so Maryland and Virginia are reporting harvest separately. Olivia noted they are still trying to understand the role NOAA can have in reporting this information, since these are managed fishery activities. The details of that is something the Oyster Fishery Action Team will be tasked with figuring out.
 - Robert Sabo noted in the chat that states probably have most up-to-date data.
- Katie Brownson, USFS, asked for additional clarity on what the process will be to reconcile the differences between the proposals/recommendations put forward by the Agriculture Workgroup and the Forestry Workgroup.
 - Lee suggested that Katie and Eric Hughes, EPA, outline a side by side comparison of the Forestry and Ag proposals, comparing percentages to percentages and acres to acres, to give people a sense of the differences between the two.

- Katie noted that they have the percentages, but they have different widths, percentages, and different suites of BMPs. So, she suggested they could outline the differences are more clearly side by side.
- Lee noted that, since the ability for workgroups to do more analysis on this is limited, this comparison can be used to help the Goal Team make a final decision at the September CWGT meeting.
- Kevin Du Bois, DoW, requested that the side by side analysis/comparison be provided in advance of the meeting. Lee agreed, noting that will be provided as soon as possible.
- Olivia Martin, Devereux Consulting, noted in the chat: The amount implemented changes depending on the base land use. Using percentages is great for communication, but tricky when applied to different base conditions or base years. Especially a problem when calculated on one base condition and ported to another base condition using acres credited.
- Jeremy Hanson, CWGT Coordinator, suggested that in the side by side analysis, we clearly acknowledge where we are in relation to the 15% cap of ag land conversion.
- Katie noted that when you map the ag forestry BMPs plus the other ag land use change BMPs, that goes above 15%. So, if the 15% applies to all the land use change BMPs, we would need to consider how the other BMPs would be shifted to be within that constraint.

VII. Frequency of Model Updates

Lead: Lee McDonnell

Lee McDonnell outlined a request for the WTWG to develop options for when to perform data updates to CAST between 2030-2040. In particular, the WTWG would be tasked with utilizing information that has been discussed widely with the Partnership and evaluating the success/failure of previous attempts to standardize the update process. Three options would be presented to CWGT, with rationale, at the November CWGT meeting. Lee also noted varying data sets and components that are on different timetables such as the transition to Phase 7, milestones, high resolution land use data, Ag Census, fertilizer data, the possible inclusion of industry data, and the potential incorporation of new BMPs. Lee called for consent to approve this directive to the WTWG, and there were no objections from the group, with a quorum of voting members present.

Materials: [Presentation](#)

Decisions:

1. The CWGT agreed to direct the WTWG to develop options for “when to update CAST” and to present those options to the CWGT at the November 2026 CWGT meeting.

Actions:

1. The WTWG will develop options for when to perform data updates to CAST between 2030-2040. In particular, the WTWG is asked to:
 - Provide 3 options with rationale for each option and present those options at the November CWGT
 - Utilize information that has been discussed widely with the Partnership
 - Evaluate success/failure of previous attempts to standardize the update process

Discussion:

- Kevin Du Bois, DoW, noted in the chat that DoW still provides CAST scenarios for two-year milestones.
- Lee McDonnell, Co-Chair, called for consent on the following decision: The CWGT agreed to direct the WTWG to develop options for “when to update CAST” for CWGT and to present those options at the November 2026 CWGT meeting
 - The CWGT approved this decision.
 - Jeremy Hanson, CWGT Coordinator, confirmed verbally and in the chat that a quorum was present for the decision.

VIII. Management Strategy Development Update

Lead: Jeremy Hanson, CWGT Coordinator

Jeremy walked the group through an initial first draft of the Management Strategy that includes all three Clean Water outcomes. Jeremy noted the current number of pages and management approaches for each outcome and highlighted anticipated additions for the next iteration of the draft. Jeremy requested that members focus on providing comments on the narratives, Management approaches, and challenges, as well as provide any comments on keeping supplemental figures from the CWGT ranking exercise. Jeremy noted that he would appreciate any feedback by September 8th, so that comments could be incorporated into a decisional draft for the September CWGT hybrid meeting.

Materials: [Draft Management Strategy \(Word Doc Format\)](#), [Draft Management Strategy \(PDF\)](#)

Actions:

1. Please provide your thoughts and input on the CWGT [draft management strategy](#) to Jeremy Hanson (hansonj@chesapeake.org) by Tuesday, September 8th. Please provide comments either via email directly to Jeremy or in the [Word Document version of the draft Management Strategy](#). An updated draft will be shared ahead of the Sept 28-29 meeting.

Discussion:

- Kevin Du Bois, DoW, asked in the chat: Are federal agencies considered to be part of the signatory delegation or are they considered to be "Other Partners"
 - Sarah Brzezinski, EPA, (in chat): Hi Kevin, federal agencies will likely be added to the signatory section (with the template header being revised accordingly). I'll ask for this proposed revision to be discussed at an upcoming GT Chairs/FOD meeting.
- Kevin Du Bois, DoW, asked if, when talking about strategies, there is value in relating them back to the challenges or things that we can affect or not affect. For example, MS 2.1.1 addresses challenges 1,6,7. Kevin suggested that might help the public better understand the things that we think the workgroup can impact.
 - Jeremy mentioned that he talked with other leadership/WGs about how that should be done. Jeremy will continue those conversations, but he is not sure if we have the space to elaborate on that in the document. Jeremy has made these linkages for himself, but if there is agreement that that would be useful, that could be done.
 - Kevin suggested that it could be done easily if they are numbered, as opposed to in a list.

- Kevin Du Bois provided an additional thought in the chat: Should Management Approach 2.1.3 reflect tiered implementation?
 - Jeremy (in chat): I have tiered implementation as its own Approach for this draft, with text to acknowledge it's connected to 2.1.3, but we can combine them if that makes more sense to the group
- Jeremy Hanson, CWGT Coordinator, thanked those involved in the drafting of the Management Strategy and reiterated the request to provide feedback via email by September 8th.

IX. Wrap-Up

Lead: Petra Baldwin, CWGT Co-Staffer

X. Adjourn

Next Meeting: Monday-Tuesday, September 28th – 29th: [Clean Water GT Meeting](#), hybrid in Annapolis, MD

Attendance

Lee McDonnell, EPA CBPO (CWGT Co-Chair)
 Greg Sandi, MDE (CWGT Co-Chair)
 Jeremy Hanson, CRC (CWGT Coordinator)
 Petra Baldwin, CRC (CWGT Co-Staffer)
 Caroline Kleis, CRC (CWGT Co-Staffer)
 Kate Bresaw, PA DEP
 Holly Walker, DNREC
 Megan Beaver, CBC
 Tracy Clarke, EPA
 Patrick Thomson, Energy Works
 Norm Goulet, NVRC
 Callie Sams, WVDEP
 Kelly Gable, EPA
 Scott Settle, WVDEP
 Jimmy Webber, USGS
 Olivia Martin, Devereux Consulting
 Eugenia Hart, Tetra Tech
 Jamie Shallenberger, SRBC
 Kevin McLean, VA DEQ
 Tish Robertson, VA DEQ
 Suzanne Trevena, EPA
 Dave Montali, Tetra Tech
 Tyler Trostle, PA DEP
 Matthew Stover, MDE
 Anthony Timpano, VA DEQ
 Amanda Shaver, VA DEQ
 Emily Dekar, USC
 Katie Brownson, USFS
 Arianna Johns, VA DEQ
 Mary Stack, ICPRB/CBPO
 Jamie Mitchell, HRSD
 Rachel Owrutsky, DNREC
 Scott Heidel, PA DEP
 Sarah Brzezinski, EPA

Ivy Ozmon, HRPDC
 Marel King, CBC
 Caitlin Grady, GWU
 Dylan Burgevin, MDE
 Jess Blackburn, ACB/SAC
 Andrea Krug, DOEE
 Kathy Stecker, MDE
 Sarah Lane, MD DNR
 Peter Tango, USGS
 Chris Hartley, USDA
 KC Filippino, HRPDC
 Megan Thyng, EPA
 Coral Howe, USGS
 Kevin Du Bois, DoW
 Maggie Woodward, CBC
 Leila Duman, MD DNR
 Robert Sabo, EPA
 Alex Gunnerson, Koniag
 Ashley Hullinger, PA DEP
 Allison Welch, CRC
 Bo Williams, EPA
 Tom Parham, MD DNR
 Clifton Bell, Brown & Caldwell
 Norah Carlos, CBC
 Gabriel Duran, CRC
 Kaylyn Gootman, EPA
 Lew Linker, EPA
 Lisa Blazure, Stroud Water Research Center
 Alisha Mulkey, MDA
 Doug Bell, EPA
 Cynthia Johnson, VA DEQ
 Bobby Hughes, EPCAMR
 John Wolf, USGS/CBPO
 Sushanth Gupta, MWCOG

Jonathan Champion, DOEE
Anne Hairston-Strang MD Forest Service
Christina Lyerly, MDE
Mark Dubin, VT Cooperative Extension
Joe Wood, CBF
David Wood, CSN
Andy Fitch, USGS/CBPO
Bel Martinez da Matta, MDE
Cecilia Lane, DOEE

Lisa Ochsenhirt, Aqua Law
Erik Michelsen, Anne Arundel County Dept. of Public Works
Eric Hughes, EPA
Clint Gill, DDA
Olivia Caretti, Oyster Recovery Partnership
Sam Merrill, NGEM
Cassie Davis, NYSDEC

Acronyms

BMP: Best Management Practice
BORG: [Bay Oxygen Research Group](#)
CAP: [Criteria Assessment Protocol](#)
CAST: [Chesapeake Assessment Scenario Tool](#)
CBLCM: Chesapeake Bay Land Change Model
CBP: Chesapeake Bay Program
CWGT: Clean Water Goal Team
DAR: Data, Analysis and Reporting
DO: Dissolved Oxygen
E3: Everything, by Everyone, Everywhere
EPA: Environmental Protection Agency

GMF: Governance and Management Framework
LUWG: [Land Use Workgroup](#)
RENPS: Reducing Excess Nitrogen, Phosphorus and Sediment Outcome
SAC: Stakeholders Advisory Committee
STAC: Scientific and Technical Advisory Committee
TEC: Toxic & Emerging Contaminants
WIP: Watershed Implementation Plan
WQ,SAM: Water Quality, Standards Attainment and Monitoring