# Outcome Assessment Round One Preparation

Thursday, February 6th, 2025

10:00 AM – 12:00 PM

Meeting Materials: Link

*This meeting was recorded for internal use only to assure the accuracy of the meeting notes.*

## MINUTES

## 10:00 – 10:05 AM *Welcome, Introductions & Announcements*

**Meeting Background:**

The Executive Council's (EC) Charge for Phase 2 activities directs the Principal Staff Committee (PSC) to complete "[r]evisions to the 2014 Chesapeake Bay Watershed Agreement (Agreement) with modifications to the existing vision, principles, preamble, goals, and outcomes…", and to do so by December 1, 2025. To address this charge, the Chesapeake Bay Program (CBP) modified its Strategy Review System (SRS) process for Workgroups (WGs) and Goal Implementation Teams (GITs) to answer an overarching question ("Big Question") as means to provide advice to the Management Board (MB) on the next step to take with each Agreement Outcome. There are three MB meetings to discuss the Big Question, and the schedule for each outcome is available here. During the MB meeting, each out outcome will have three minutes to provide an elevator pitch in response to the Big Question. This will follow seven minutes for a Round Robin from the signatories and 10 minutes for Advisory Committee and MB members comments and facilitated discussion.

**Meeting Objectives:**

- Opportunity for Outcome leads to educate participants on their outcome assessment
- Opportunity for participants to familiarize themselves with major points prior to Outcome Assessment Meeting
- Discuss connections between outcomes
- This meeting is not mandatory, and no decisions will be made during it

## 10:05 – 11:25 AM *Outcome Assessment:*

*Order (jump to bookmark):*

*Description:* Each outcome will provide their three-minute elevator pitch presentation, and there will be seven minutes between outcomes to provide feedback. If discussion is completed before the seven minutes is over, we will move on to the next outcome.



***Summary:***

- Continuing the conversation around indicators versus outputs and how we communicate those distinctions to the management board.
- Ensuring that the language we use is clear, especially in terms of what it conveys to the public.
- Clarifying when and how we can introduce new outcomes or outputs—this might require additional guidance.
- The Goal Implementation Team (GIT) chairs are working to set up meetings, which could serve as a forum for some of these ongoing discussions.
- Revisiting the scope of tidal versus non-tidal fish habitat— How to make sure tidal and nontidal is captured in proposed language or captured in other outcomes, and how does that align with potential new outcomes?
- Recognizing that some outcomes, such as local leadership, need to remain broad, but their outputs can still be SMART.
- Ensuring that climate monitoring remains a priority while clarifying its role as science integration rather than an immediate requirement for every outcome to incorporate climate considerations.
- Revisiting outcome titles, such as for Fish Passage, to consider how they connect with the public.

**Oysters:** *Continually increase finfish and shellfish habitat and water quality benefits from restored oyster populations. Restore native oyster habitat and populations in 10 tributaries by 2025 and ensure their protection.*

*Bruce Vogt:* **Our recommendation to the Management Board (MB) is to *UPDATE* the Oysters Outcome**. We are on track to complete this by the end of the year, meaning we will have completed initial restoration in ten tributaries and applied success metrics to monitor performance over time. We are very pleased with this achievement.

The oyster outcome met SMART objectives and had strong partnerships, including federal and state champions who ensured proper coordination, funding, and implementation plans. There is consensus from jurisdictions and federal agencies to update this outcome moving forward. We believe there is still available habitat and a continued need for more oysters in the Chesapeake Bay to improve water quality and provide fish habitat. We do not see this as a completed effort but as one that should evolve.

Moving forward, we expect the language of this outcome to be modified. We will continue working at a large scale, prioritizing targeted geographies rather than scattered, small-scale restoration projects. The success of this outcome has come from restoring hundreds of acres in specific locations to generate a meaningful ecosystem response.

There are a few challenges we need to address. One key issue is the phrase "ensure their protection," which needs to be better defined in the next iteration of the outcome. We also want to maintain and conserve the restoration that has already been completed while simultaneously building new restoration reefs. Additionally, we are discussing how best to engage the fishery sector, as there is still active wild harvest in Maryland and Virginia. We need to determine whether incorporating the fishery into a separate outcome or better engaging the industry within this one is the best approach.

Lastly, we aim to improve communication about the benefits of restoration efforts and enhance connections with local communities where these projects occur.

***Q:*** *Kevin Du Bois:* The overall goal is for shellfish, yet the only identified shellfish is oysters. At what point do we consider broadening this goal to include other shellfish, such as ribbed mussels in tidal areas or freshwater mussels and clams in streams? There is a movement to focus on people and place-based outcomes. Those west of I-95 don't have oysters in their local streams, so this may not be relevant to them. When can we expand beyond oysters?

- ***A:*** *Kevin Schabow:* This outcome falls under sustainable fisheries, while freshwater mussels would likely fit elsewhere. If champions and resources are identified, NOAA would not object to incorporating freshwater mussels under another category, such as healthy watersheds.

- ***Comment:*** *Chris Guy:* In the discussion of Fish Passage, we are looking into freshwater shellfish and particularly mussels. The Workgroup (WG) wants to include Aquatic Organism Passage (AOP) as this would open up the chance to creating additional potential outputs around those types of shellfish. The intention is to expand fish passage to include freshwater mussels as part of the restoration conversation.

- ***Comment from Chat:*** *Kristin Saunders:* Friendly reminder that we have heard MB say they will welcome discussion about "new or novel" outcomes in March meetings. Kevin, it may be helpful to raise it during the next meeting as a parking lot item to talk about in March.
- ***Comment:*** *Gina Hunt:* Mussels are included in Fish Passage, but it's simply *passage*. There are some states working on mussels, like Maryland (MD). There is an opportunity for a pilot of new outcomes. When we are adding outcomes, we need to also consider SMART (Specific, Measurable, Achievable, Relevant, and Timebound) language and whether there are champions and the ability to affect change. So, if we want to add mussels, we need to be able to address those items.
- ***Comment from chat:*** *Kristin:* Mussels are also part of the Conowingo WIP, so the work is happening in pockets of the program so worth raising for consideration at the right time.
- ***Comment from Chat:*** *Peter Tango:* To Kevin D's point, water quality is similar – Nitrogen (N), Phosphorus (P) and Sediment (S) are a small slice of "pollutants" managers, policy makers, and the public deal with. Broadening there is a consideration too.
- ***Comment from chat:*** *Ashley Hullinger:* Susquehanna River Basin Commission (SRBC) coordinates the Chesapeake Bay Watershed Region Freshwater Mussel Partnership building on the 2020 Scientific and Technical Advisory Committee (STAC) Workshop. They are considering how to work with workgroups to push these priorities forward and would be able to assist with this discussion. SRBC Chesapeake Bay Watershed Region Freshwater Mussel Partnership.
- ***Comment from chat:*** *Joseph Wood:* For what it's worth, I do believe there are champions in all 3 states related to supporting freshwater mussels. There is a Chesapeake Bay Mussel partnership run by SRBC that has been meeting for several years and includes at least 4-5 states. The STAC report from 2020 highlighted several reasons that the pursuit of mussels is beneficial for a couple different outcomes. Kevin's point about mussels serving as a wildlife engagement tool in places remote from tidal waters is on point. Final Report Freshwater Mussels.
- ***Comment from chat:*** *Peter*: Oyster reef management Bruce, Kevin - to engage the harvest community, imagine something like special wildlife lottery harvest opportunities - they occur in the east here for Elk for example - restored small populations have a few permits a year (example, PA, Virginia) - people pay for a lottery ticket, funds go into Elk management, and a few lucky hunters get to harvest a species that is special. Lottery systems add some added interest and excitement to conservation work in engaging communities.
- ***Action item:*** Determine when and where we put forward new outcomes, making sure we have a champion, and the ability to generate change.

**Blue Crab Abundance:** *Maintain a sustainable blue crab population based on the current 2012 target of 215 million adult females. Refine population targets through 2025 based on best available science.*

*Bruce Vogt:* **Our recommendation to the MB is to *REMOVE* Blue Crab Management Outcome.** The blue crab management outcome has been completed, and after discussing with Sarah, we agreed to combine these two. The blue crab management outcome will not continue moving forward, as its elements have been incorporated into the blue crab abundance work. Components such as commercial and recreational harvest accountability have been addressed. We have conducted scientific studies to better understand recreational removals of blue crabs, which are integrated into our stock assessment and advisory reports issued annually. Each jurisdiction is working to improve the timeliness of harvest data collection. The idea of creating an allocation-based framework has been deemed unnecessary, as the current management framework focusing on conserving adult female crabs has been effective.

Our recommendation to the MB for the Blue Crab Abundance Outcome is to *UPDATE*. We intend to continue this as a SMART objective, and it has been a successful effort. Blue crab populations have remained within the established reference points. The target was initially set at 215 million adult female crabs but was modified to 196 million. The threshold is around 70 million, and we have maintained population levels within this sustainable range.

We believe the value of having a blue crab abundance outcome in the Bay Agreement is significant. It enhances visibility, increases accountability for jurisdictions, and facilitates cross-jurisdictional coordination in managing blue crab populations. This outcome has also been highly beneficial for adaptive management. With a robust annual monitoring system, we can track blue crab populations effectively, allowing managers to make informed decisions. The process is transparent and publicly accessible, reinforcing its value within the Bay Agreement.

We do not anticipate significant changes to this outcome. However, we are conducting a new benchmark blue crab stock assessment, though its findings will not be available before the new outcome language is finalized. While we may not have a specific numerical target, we will likely refer to biological reference points for female crabs. Additionally, this outcome has been instrumental in identifying and addressing key science priorities. Through partnerships with other NOAA divisions and Bay program funding, we have successfully tackled several scientific gaps related to blue crab populations.

- ***Comment from chat:*** *Keith Bollt:* Recommend considering mentioning the 2025 benchmark blue crab stock assessment underway in a bullet point, that it's the first since 2011 and that the outcome target population may change starting in 2026.

- ***Q:*** *Rachel Felver:* From a communications perspective, do you anticipate any pushback regarding the lowering of the target and threshold?

    - ***A:*** *Bruce:* Potentially. We've already done this once, working closely with stakeholders to communicate the reasoning behind the adjustment. For example, the 2014 agreement initially set the target at 215 million, which was

later lowered to 196 million based on a stock assessment update. These changes are always scientifically driven and reviewed by the Chesapeake Bay Stock Assessment Committee, composed of leading stock assessment scientists.

We never make decisions arbitrarily. The upcoming stock assessment will undergo a Center for Independent Experts (CIE) review, ensuring objectivity. The CIE panel will evaluate our methodologies and provide feedback, further bolstering the credibility of any proposed changes. Their findings may result in an increase or decrease in abundance targets, but the process will remain transparent and science driven.

**Forage:** *Continually improve the Partnership's capacity to understand the role of forage fish populations in the Chesapeake Bay. By 2016, develop a strategy for assessing the forage fish base available as food for predatory species in the Chesapeake Bay.*

*Bruce Vogt:* **The recommendation to MB for the Forage Fish Outcome is to *REMOVE*.** The forage outcome has been successful, despite not being a SMART outcome. Both the Environmental Research Group (ERG) and our team came to that conclusion. The goal was to increase our understanding of the forage base in the Chesapeake. In other words, assessing whether there is enough food available to support species like striped bass and other commercially important fisheries.

We took a scientific approach, developing various findings that enhanced our understanding of the forage base. We have now produced a report, which is available on the forage webpage (link), identifying the most important forage species. It's important to note that forage includes not just other fish but also the benthos and other invertebrates, which are critical to maintaining fish productivity within the Bay. We also identified environmental drivers affecting the abundance of these priority forage species and examined how climate change might impact their populations over time as habitat conditions evolve. As a result, we now have a strong scientific foundation outlining the current status and trends of these key forage species.

However, one gap remains—we have not yet connected these findings to management. For example, we are not currently using the data to guide striped bass management. At this point, there is no direct application of this data in management. That remains a gap we were unable to fully address under this outcome. While we still see it as important, we are suggesting its *removal* as a standalone outcome. Instead, we plan to integrate it under the fish habitat outcome.

- ***Comment from chat:*** *Kevin:* Rather than removing this Outcome, it would seem to fit nicely into the Fish habitat Outcome (which already refers to forage fish), so perhaps these two should be combined under a new unifying heading like Fish Health.

**Fish Habitat:** *Continually improve effectiveness of fish habitat conservation and restoration efforts by identifying and characterizing critical spawning, nursery and forage areas within the Bay and tributaries for important fish and shellfish, and use existing and new tools to integrate information and conduct assessments to inform restoration and conservation efforts.*

*Bruce Vogt:* **The recommendation to the MB for Fish Habitat Outcome is to *UPDATE* and *CONSOLIDATE*.** The fish habitat outcome is one we would like to continue moving forward with some modifications to its language. This outcome, like the forage outcome, was qualitative rather than quantitative, but we made significant progress. Through new scientific insights, we have a better understanding of how habitat—both in the water column and other areas—is changing in the Bay and the effects of those changes on various species. For example, we developed hardened shoreline thresholds in collaboration with the Bay Program and VIMS. We produced a map showing that when hardened shorelines reach between 10 to 30% in a given area, certain species begin to decline, and these losses are often irreversible.

We believe this finding has a strong management connection to other parts of the Bay Program. Looking ahead, we want this outcome to help bridge fisheries management with broader environmental factors. Fisheries managers within the Sustainable Fisheries Goal Team have limited control; they can regulate harvest levels, but they cannot directly address other factors impacting fish populations, such as water quality, habitat loss, and shoreline development. The value of continuing a fish habitat outcome lies in creating stronger collaboration between fisheries managers and other Bay Program initiatives. This will help us identify and prioritize the habitat-related factors that could reduce fish productivity across the Bay and work together to address them.

We anticipate modifying the language of this outcome to focus more on shallow habitats and incorporate recommendations from the Beyond 2025 Report. Additionally, the priority project proposed for developing a habitat suitability score for the 92 tidal segments would likely be a key output under this outcome. This provides an opportunity to better link water quality and habitat changes to fish health and productivity. By strengthening this connection, we can collaborate more effectively on identifying priority areas and addressing the critical environmental factors influencing sustainable fisheries within the Bay.

- ***Q from chat:*** *Nick:* Should Fish Habitat move to Habitat GIT?
    - ***Response:*** *Gina:* It was originally "shared" but we are not at the point of recommending structure.
    - ***Comment:*** *Keith:* Or be called "Tidal Fish Habitat"?
    - ***Comment:*** *Bruce:* Yes, this was a shared outcome, and Gina was instrumental in moving it forward early on. Since she left, Chris Moore from Chesapeake Bay

Foundation (CBF) has taken over as chair for the fish habitat outcome. I think we need to have a conversation about where this outcome fits best. To be successful, it really needs support from across the Bay Program. It is not directly tied to fisheries management, which primarily focuses on harvest regulations. To make progress on a fish habitat outcome, we need collaboration with water quality experts, land-use planners, and other stakeholders. We also need to engage with people promoting living shorelines and other habitat-focused initiatives. A more collaborative approach is essential for success.

- ***Comment:*** *Chris Moore:* One of the ongoing challenges is that "fish habitat" is a very broad category. In the presentation and discussions within sustainable fisheries, the focus has been primarily on tidal waters. Expanding the scope beyond that, particularly when considering habitat suitability indexes for 92 segments, could be limiting. I see this as something we need to continue working on post-2026. It is essential to refine this outcome, ensuring we define it properly with clear outputs. We need a smarter outcome with well-defined outputs to drive meaningful change. This work requires more time and collaboration. I don't think we should force it into a framework that won't allow it to develop properly. Instead, we should acknowledge its importance and dedicate the necessary time and resources to get it right beyond 2026.

- ***Comment from chat:*** *Kaylyn Gootman:* Also wanted to raise the freshwater fish aspect too.

  - ***Comment from chat:*** *Taylor Woods:* agreed - thanks Kaylyn! a lot of the collaborative efforts discussed here are also relevant for freshwater fish habitat.

  - ***Comment from chat:*** *Keith Bollt:* Agreed, the current language says, "within the Bay", which implies saltwater only. Which maybe is ok but maybe isn't.

- ***Comment from chat:*** *Greg Allen:* Habitat suitability model could overlay the toxic contaminant impairments that we map for the 92 segments.

- ***Comment from chat:*** *Kevin:* The two-pager seems only to be focused on the tidal portion of the Bay and its tributaries. Was the outcome meant to include freshwater streams in the watershed? Response #9 makes me think there is value in considering temperature as part of water quality since temp is sig impacting both freshwater (brook trout) and saltwater (striped bass) regardless of other measure related to water quality. I' glad there's interest in "cooling" BMPs and riparian buffers to provide share and mitigate some of the effects if increased water temperature.

- ***Q:*** *Peter:* I'm curious about the consolidation of the forage outcome. I understand the habitat suitability side, but it seems like we've been asked to emphasize living resources. Are we treating this as an outcome or as a set of indicators to ensure that information is retained?

    - ***A:*** *Bruce:* Yes, that's exactly the idea we discussed with the forage team. We have put significant effort into the forage outcome, but right now, aside from the report, we are not publishing regular indicators. One approach we have considered is prioritizing certain key indicators from that report for ongoing reporting. Forage is often considered a component of habitat, so our aim would be to highlight key indicators and, ideally, link them to predator food availability.

    - ***Comment:*** *Gina:* regarding the integration of forage into the fish habitat outcome, are we calling it an indicator or an output? It's important to be clear about terminology so we don't confuse the MB. For example, in other habitat outcomes, such as for Black Duck, we refer to certain components as outputs. We need consistency in how we present this. Should we clarify our position, or should we let the management board decide how to define it?

      Second, there have been many questions about the distinction between tidal and non-tidal habitat. The current documentation is heavily tidal-focused, which raises concerns. Initially, this outcome was intended to be shared with the habitat team, with NOAA leading the tidal aspects but not the non-tidal. However, that collaboration didn't fully materialize. If we are shifting to a solely tidal focus, we need to explicitly state that as an update. Otherwise, we need to clarify how we are incorporating non-tidal habitat considerations.

    - ***Response:*** *Bruce:* I understand those concerns. Based on the current makeup of our team and the fish habitat outcome, we are focusing more on tidal freshwater habitat. I haven't been closely tracking discussions within the watershed group, but that may be a more appropriate space for non-tidal habitat considerations. We have had some engagement from Pennsylvania (PA), mainly on blue catfish issues, but most of our executive committee members are focused on tidal habitat.

    - ***Response:*** *Gina:* Right, but even tidal states still have non-tidal waters. For example, Maryland has a fish habitat program, but it is focused on tidal waters. I understand the shift, but if we are making this a tidal-only outcome, we need to state that explicitly. Ideally, outcomes should be integrated across goal teams and disciplines. In a perfect world, it wouldn't matter where an outcome sits because we would have seamless collaboration. However, I'm not sure if the structure at the end of this process will allow that level of integration.

- ***Response:*** *Chris Moore:* I agree. This is a complex issue, and I don't believe the expectation was for every outcome to be fully defined by 2025. Some outcomes will require more time, and this is one of them. We need to address the tidal versus non-tidal question, but it's not something we can resolve by March 27th. This outcome requires further discussion and refinement.

- ***Response:*** *Gina:* This may be an opportunity to think more broadly about fish habitats across the watershed. If we want engagement from all partners, we need to consider fish habitats beyond tidal areas. West Virginia, for instance, has significant fish habitat. Perhaps NOAA could focus on tidal aspects while other entities take the lead on non-tidal habitat.

- ***Response:*** *Bruce:* Yes, and there are already other habitat-related outcomes, such as oysters and submerged aquatic vegetation (SAV). Those outcomes have specific focuses, with oysters centered on restoration and SAV tracking habitat change. Wetlands are also critical fish habitats. The challenge has been that we have this broad, qualitative fish habitat outcome while other, more specific fish habitat efforts exist. These aren't all integrated in a way that provides a clear, cohesive picture.

- ***Response:*** *Chris:* Exactly. This is why defining fish habitat more precisely is important. Fisheries are a function of habitat, and our challenge is determining how to categorize and measure that. Whether we call certain aspects indicators or outputs, we need a logical structure. If we assign habitat suitability as an output under water quality, we could also apply similar logic to species-specific fisheries, such as striped bass, oysters, smallmouth bass, and trout. But resolving these structural questions will take time, and I don't see this being fully addressed by March 12th. We need input from a broader range of scientists, not just fisheries managers, to get this right.

- ***Response:*** *Bruce:* Fishery managers recognize the importance of habitat for fish productivity, but those factors fall outside their direct management control. Gina mentioned that Maryland DNR has a fish habitat group, and perhaps we need to articulate this more clearly. The key point is that sustaining healthy habitat for fish productivity requires a program-wide effort. Fishery managers oversee productivity, but they do not manage the habitat or the factors that impact it. Strengthening this connection is essential.

  One example I've considered, which doesn't address the non-tidal aspect but provides a more focused approach, is maintaining or improving striped bass spawning in three of the most productive Chesapeake Bay tributaries. This would create a more specific, place-based strategy by identifying a focal species and key locations. It would also bring together partners in a more targeted way to address factors affecting striped bass spawning productivity and recruitment.

Ideally, the habitat suitability scoring matrix would guide this approach, but currently, it is not tied to a specific outcome like maintaining striped bass productivity.

- ***Response:*** *Gina:* If you choose a specific species like that, you are inherently focusing only on tidal waters. Given the depth of this discussion, I suggest adding a bullet point noting the need to address how this outcome applies across both tidal and non-tidal habitats. This is a complex issue that requires further conversation. Non-tidal habitat should be incorporated into these discussions because it connects to other outcomes, including wetlands and streams. When I chaired this effort, I used to say fish habitat was at the center of everything—and it really is. However, we need to define clear boundaries. There should be a bullet point emphasizing that this applies to both tidal and non-tidal areas, while also acknowledging the need for more discussion on how to integrate them effectively.

- ***Response:*** *Bruce:* My concern isn't necessarily about including both tidal and non-tidal aspects, but rather about keeping the scope manageable. If we broaden it too much, implementation becomes difficult, and we lose focus on what we're trying to achieve. Should there be separate tidal and non-tidal outcomes? Should the tidal component be integrated with other tidal habitats, while non-tidal elements align with the Watershed Group? These are important considerations.

  The challenge is ensuring focus. We have been spread across many areas, as you know. There were efforts to link tidal and non-tidal habitats through the habitat assessment work led by USGS and NOAA, but those efforts weren't directly connected to a management objective. They weren't specifically designed to improve productivity for a particular species or multiple species. Moving forward, we need to think practically about how to structure this outcome for success, rather than trying to include everything and risk losing clarity.

- Comment from chat: Greg: Habitat and forage fish are a critical link in the bioaccumulation of PCBs and PFAS in fish we eat. Most tidal fish consumption advisories are based on PCBs. Fisheries goals could consider human risk in addition to abundance.

- Comment from chat: Peter: Bruce - love the point which I think points to the opportunities for how we might integrate the conceptual framework of the linkages that restructures a little how we collate and present findings.

- Comment from chat: Taylor Woods: Designation into tidal vs. non-tidal is not always as clear from the science side as the tidal & non-tidal habitats are a continuum & not a hard habitat boundary. Keeping the language broader & inclusive of both tidal & non-

tidal highlights the connectivity & flux between tidal & non-tidal habitats & how they interact/change over time (e.g., increasing sea level rise & salinity intrusion affects freshwater fish habitat & inland flooding/instream stressors affect tidal habitats).

- Comment from chat: Claire Buchanan: Fish habitat is ecosystem-based. It is different in deep tidal waters, shallow tidal waters, free-flowing rivers, free-flowing streams, and lakes. Should somehow recognize that.

- Comment from chat: Peter: I think we can focus on key stressors rather than key species when speaking about fish habitat. Everything needs oxygen, Freshwater species need freshwater (not salty water in the watershed), all species benefit from lower contaminants (AMD or PCBs etc). I think there is a way to think about primary stressors that define habitat and are broad reaching in their impacts.

**Fish Passage:** *Continually increase access to habitat to support sustainable migratory fish populations in the Chesapeake Bay watershed's freshwater rivers and streams. By 2025, restore historical fish migration routes by opening an additional 132 miles every two years to fish passage. Restoration success will be indicated by the consistent presence of alewife, blueback herring, American shad, hickory shad, American eel and brook trout, to be monitored in accordance with available agency resources and collaboratively developed methods.*

*Jim Thompson:* **Our recommendation to the MB is to *UPDATE* the Fish Passage Outcome.** We are recommending an update to the Fish Passage Outcome by increasing the mileage goal from 132 to 150 miles every two years. We believe this is an achievable target.

The biggest proposed change is expanding the scope beyond just resident and migratory fish to include all aquatic-dependent organisms, such as freshwater mussels, reptiles, and amphibians. Additionally, we want to consider not only physical barriers but also thermal and chemical barriers, including acid mine drainage. This aligns closely with the work being done by the brook trout work group.

We also recognize that federal funding may be at risk, particularly some of the larger funding sources that have been available through Bipartisan Infrastructure Law (BIL). However, we see opportunities through mitigation banking, which could help us fund and implement projects. Overall, this update should not significantly impact our current efforts but will ensure a broader and more inclusive approach beyond just migratory fish and brook trout.

*Chris Guy:* this update reinforces the role of fish habitat, particularly in non-tidal areas. However, we are keeping this as a simple update rather than introducing new, specific requirements for different species. Our approach remains centered on fish passage, using our existing tools, which have been effective. In most cycles, we have exceeded our

outcome goals, so we believe we can raise the bar slightly. Expanding the scope to aquatic organism passage for multiple species aligns with this goal.

*Jim:* There was some discussion about renaming the work group to the Aquatic Organism Passage Work Group, but we felt that might be too confusing. Instead, we are keeping the name "Fish Passage" while broadening its scope to include all aquatic organisms, not just migratory fish and brook trout, which have been the primary focus in recent years.

- ***Q from chat:*** *Kevin:* Have you considered explicitly referencing "flood reduction" in the list of public benefits identified in the Vital Habitats Goal? This could allow for other or more enhanced collaborations and funding sources dedicated towards flood mitigation that meets these environmental goals/outcomes.

    - ***A:*** *Gina:* Yes, flooding is addressed in the two-pager.

    - ***Response:*** *Kevin du Bois:* In my outreach, I emphasize flooding concerns when talking to transportation departments and agencies, as that is often their primary concern rather than the ecological impact. However, addressing flooding also enhances fish passage. It's about aligning motivations and funding sources.

    - ***Response:*** *Jim:* I appreciate that point. We do reference flooding in the two-pager. The workgroup, with some funding support, developed a document on fish-friendly culvert passage. We are now looking for partners to implement these projects in the watershed as examples to build further support. Engaging with transportation departments has been challenging, but we see opportunities there, especially since many of these projects are on public land. One of our biggest challenges has been securing landowner support.

- ***Comment from chat:*** *Peter:* "Living Resource Passage" may be complementary, public friendly, instead of Aquatic Organism Passage.

    - ***Comment from chat:*** *Keith:* Agreed, Peter, and what is the proxy for what (habitat, species abundance, water quality)? Of those, what is intrinsically valuable? And where does the Bay Program have the ability to add value to the partners' work? And where are the regulatory mandates? Fish habitat, water quality, freshwater vs saltwater, intrinsically or economically valuable species like brook trout and striped bass. There's probably an elegant solution somewhere for how to set targets and organize these outcomes and the resources and work to achieve them.

    - ***Comment from chat:*** *Rachel Felver:* Peter, happy to brainstorm a bit. "Living resources" is actually not very intuitive to the public that is not engaged with Bay issues.

- ***Comment from chat:*** *Gregory Noe:* STAC perspective is often to suggest linking to what people care about and understand (not just STAC of course). I'm not an expert on fish passage, but I do doubt that most public know what "passage" means.

- ***Comment:*** *Gina:* I don't think we need to settle on a new name today, but as we move forward, it's worth considering how the language we use resonates with the public. "Fish passage" is widely understood, though many people don't fully grasp what it entails. For a long time, I assumed it only referred to fish ladders, not dam removal or culvert improvements. Different audiences interpret these terms in different ways. Thinking about how local governments and the public understand our terminology is crucial across all outcomes.

- ***Comment from chat:*** *Kristin:* I know this is a problem-solving group - but remember we don't have to have the answers yet. We do, however, have the ability to put out some really good options or considerations for our leadership to consider. Daylighting the issues is important so keep at it.

- ***Comment from chat:*** *Peter:* If Fish Passage gets linked in here because so many bay species are migratory (maybe 2/3 of them), and if we broaden Water Quality (WQ) from Nitrogen (N), Phosphorous (P), and Sediment (S) to include things like salt, AMD habitat conditions, we can integrate this more holistically.

**Local Leadership:** *Continually increase the knowledge and capacity of local officials on issues related to water resources and in the implementation of economic and policy incentives that will support local conservation actions.*

*Rick Mittler:* **Our recommendation to the MB is to *UPDATE* the Local Leadership Outcome.** Local leaders are the cornerstone of achieving our clean water and living resource goals for the Chesapeake Bay watershed. They are on the front lines of implementing policies, investing in restoration, and driving action within their communities. Over the last 10 years, the local leadership outcome has seen significant successes, largely through trusted networks that engage local officials. These relationships with local government associations and partners have fostered trust, better aligned priorities, and provided the tools and resources local governments need to act effectively.

Some key accomplishments through these trusted networks include a roundtable discussion in Lancaster, PA, where county commissioners first expressed openness to using ARPA funds for clean water projects. This discussion led to $6 million in project funding across the county in coordination with a trusted partner, the Lancaster Clean Water Partners.

In Orange County, Virginia, a county supervisor participated in one of our peer-to-peer tours for local officials and expressed interest in low-impact development. Through that connection, they worked with local technical assistance partners, including the Friends of

the Rappahannock and the Rappahannock Regional Planning Commission, to update the county's entire development ordinance.

We've also seen success with our "Protect Local Waterways" initiative, which serves as a guide for local governments on key watershed topics. This initiative demonstrates how protecting local waterways can benefit economies, public health, and safety. These resources have been widely shared to support knowledge and capacity building among local officials.

For example, the state of Delaware tailored the relevant case studies and distributed them as a monthly handbook in partnership with town managers. The Metropolitan Washington Council of Governments also uses these resources to train newly elected officials who join the Chesapeake Bay Policy Committee.

The "Protect Local Waterways" initiative itself originated from a local leadership work group meeting in Gettysburg, PA. During that meeting, a borough council member and local business owner, new to local government, highlighted the need for a handbook or guide to help newly elected officials understand watershed issues.

These examples demonstrate how responsive the work group has been in supporting the needs and priorities of local governments while delivering tangible benefits for the environment, economies, and communities. However, the work is far from done.

One clear lesson is that these efforts must be continuous. High turnover among local officials creates a constant need for knowledge and capacity-building resources. Smaller, understaffed local governments continue to require support tools to implement projects effectively. To address this, we recommend updating the local leadership outcome to ensure it remains relevant, impactful, and aligned with the needs of local governments. By sharpening the focus of partnership efforts, we can better empower local governments to implement win-win solutions for their communities and the Chesapeake Bay watershed.

Positioning this outcome to support state partners and all GITs and WGs can create a unified framework for effectively engaging local officials. Setting measurable milestones will also help track progress and demonstrate the value of these efforts. Ultimately, it's about continuing this work while innovating and evolving to meet the priorities, goals, and aspirations of local governments. By strengthening the connection between local leaders, the partnership, and broader restoration goals, we can achieve a healthy Chesapeake Bay watershed and build more resilient communities.

- ***Q:*** *Chris:* what ideas do you have for making your outcome SMART?
    - ***A:*** *Rick:* We've been thinking about those measurable outcomes. There are nearly 1,900 local governments, so it's challenging to set a target like "work with X number of local officials." Instead, we've been considering engagement

through trusted source networks, such as municipal leagues or county associations. We also host peer-to-peer tours, so setting a quantifiable target for how many officials we engage through those tours or webinars could be more realistic. We didn't identify a single broad metric that could be fully "smartified," especially given the challenges of turnover and access to local officials.

- ***Response:*** *Chris:* So those would be more outputs under the outcome, but you would apply SMART criteria to the outputs. You'd still need to ensure the outcome language remains general.

- *Rick:* Exactly. We also conduct a biennial survey of local officials to gauge progress. This survey informs the Chesapeake Progress indicator, assessing what actions officials are taking in their communities and their understanding of federal water resource regulations. However, it's more of a convenience sample, not a comprehensive survey of all local officials. The challenge is translating that data into concise outcome language that resonates with local government representatives.

- ***Response:*** *Chris:* Right. Let me challenge that approach because we've considered this issue. While we aim to retain SMART outcomes, we also recognize that a SMART outcome can be achieved through a series of SMART outputs. That's the core challenge here.

  I don't think the current reporting structure fully accommodates that, but we should advocate for it. No one is suggesting we eliminate local leadership efforts. It's clear we need local leadership engagement, but expecting consistent metrics across all 1,900 local governments is unrealistic. Outputs must support a general outcome, and the challenge lies in aligning that approach with the logic model. I think you've done a great job, Rick.

- ***Comment:*** *Keith:* Yes, my comment continues that conversation. I completely agree. Whether we call them outputs or short-term outcomes, they act as proxies for success. This creates a challenge, but it also raises an important question for the management board: how do we demonstrate the added value of this work?

  It's not just about the existence of the local leadership outcome or the number of officials engaged annually. It's about demonstrating scalability and long-term impact. Are we simply shaking hands with specific stakeholders, or are we fostering sustainable networks? Can we show that the added value extends beyond those directly participating in peer-to-peer tours, webinars, or advisory committees?

We're likely engaging a couple of hundred officials directly each year. The real question is how we demonstrate that this work scales beyond those direct interactions. We need to show that the outcome doesn't just inform a limited number of people but creates broader value for the Chesapeake Bay Program.

Rick, your specific examples were strong, especially that second bullet point. As someone familiar with this work through my role as a project officer for the stakeholder grant, I know there's much more detail behind those numbers. That detail might be less obvious to management board members who aren't as familiar with your work.

- *Rick:* Absolutely. We're trying to highlight that added value. As mentioned earlier, it's challenging to condense everything into a two-pager or a one-slide presentation. I'll continue working with Les to emphasize how this work translates into real community action and capacity building.

- *Keith:* Right, and how many people you're truly reaching through this work.

- *Rick:* Yes, we've captured some of that in the two-pager. Since 2019, we've tracked both direct and indirect engagement numbers. I can pull those figures to confirm.

- *Keith:* I'd recommend including those numbers in your presentation. Some management board members may not read the two-pager.

- ***Q:*** *Kristin:* I had a moment of reflection, thinking back to when the agreement was being drafted. At the time, we didn't have a specific way to capture the success of this effort, which is why it was written as a directional outcome. There was even some debate about whether local leadership should be included as an outcome in the agreement—hard to believe, given its importance. But it made it in. Looking at this language now, Rick, you've done a great job. We've all spent a lot of time grappling with the question: do we simply measure the number of engagements or meetings, or is the real outcome something more? Ultimately, what we hope to see is local decisions being made based on scientific information, data, and all the insights we provide as subject matter experts. Thinking beyond this language to the outcome we truly want might help shape our discussion in March. Specifically, I've been considering a few things—not problem-solving on the fly, but offering some ideas to reflect on. Some jurisdictions have expressed a desire to focus on specific geographic areas, pulling together resources across multiple disciplines, agencies, and goal teams. This also came up recently when discussing healthy watersheds and land use. Do we have the ability, based on the data available, to pinpoint areas where it's most crucial to get information to local leaders? Are there high-degradation areas, stressors, or tipping points where a small intervention could lead to significant improvement or prevent deterioration? Perhaps by taking this approach, we could set more specific, measurable targets.

I'm thinking about our community response to the land use change project. For those unfamiliar, this project took us through a series of GIS analyses, internal expert reviews, stakeholder consultations, and ground-truthing. We then engaged local leaders and decision-makers to align our findings with their priorities. Sometimes, their concerns were entirely different from ours, but eventually, we found common ground and influenced change. This impacted how leaders approached comprehensive planning, permitting decisions, and the implementation of various projects based on program input and research findings. I believe we can achieve specific, measurable, and time-bound goals, but we may need to transition from a broad approach—where we try to share everything with everyone—to a more targeted strategy. Perhaps jurisdictions can identify key areas based on past assessments, such as the Army Corps of Engineers' comprehensive plan or the ongoing shallow water modeling work with fisheries and water quality experts. There are countless ways to approach this, but framing it within this context might help us uncover more answers than we have so far.

- ***Response:*** *Rick:* We are actually working on a GIT-funded project to conduct a technical assistance inventory and gap analysis. This will help us better understand what technical assistance is currently available, what local governments need, and where those gaps exist. Hopefully, we'll have some recommendations to bring back. I know Kathy Stecker has suggested that we focus on critical watershed basins when determining which groups or local governments to engage with. By prioritizing these critical areas, we can make our efforts more effective.

- ***Q from chat:*** *Katie Ayers:* Could the number of funding applications or funding money secured as a result of engagement with local leaders be a quantifiable output to show explicit value of this outcome?

***Comment:*** *Bruce Vogt:* I wanted to note that you've already drawn a strong connection between conservation and the local economy. At NOAA, we've funded studies in the Middle Peninsula to examine how recreational fishers prioritize natural habitats over hardened shorelines. This, in turn, generates more economic returns for areas with intact natural habitats because that's where people choose to fish and spend money. That's just one example, but I think this is something we need to focus on more. We often frame it in terms of ecosystem services, but what really drives decision-making is the dollar impact. If local leaders are weighing multiple options, the financial implications will likely influence their choices the most. I appreciate you bringing this up, and I'm curious whether you've thought more about how to strengthen this connection or better quantify the economic benefits of conservation and restoration under this outcome.

- ***Response:*** *Rick:* Yeah, that's a great point. Conservation and restoration have been key topics of discussion, especially within LGAC. Land use and development are actually one of our key themes for this year's meeting because local governments are trying to balance conservation efforts with urgent housing needs. We're continuously working on ways to bridge that gap and provide resources that help communities meet both their

environmental and developmental goals. Thanks for flagging that. I also really appreciate the point about recreational fishing. I'll be sure to share that with the local leadership workgroup as we explore how to better communicate these additional values and gain broader support for conservation efforts at the local government level.

- ***Q:*** *Ruth Cassilly:* In addition to discussing conservation and land use development, will there be an emphasis—if there isn't already—on highlighting the economic burden of development on taxpayers? Beyond the benefits of conservation, will we also be addressing the financial costs of development, such as increased infrastructure expenses, school funding, and other local costs? It's important to communicate how preserving green spaces can provide direct economic advantages to existing residents.

    - ***A:*** *Rick:* Yes, when we host these meetings, we try to bring in a range of expert speakers to cover both perspectives—the pros and cons—so that decision-makers can weigh all the factors and make informed choices for their communities. I'll make a note to ensure that, in our upcoming discussions on land use and conservation, local governments are fully informed about all aspects, including the economic impacts of both development and preservation.

    - ***Comment from chat:*** *Kristin Saunders:* This related to economic values on Delmarva but applicable as general considerations. *Eastern Shore Land Conservancy 2024 Economic Report*.

    - ***Comment from chat:*** *Laura Cattell Noll:* Similar work on economic value has been in done in PA, typically called 'Return on Environment' reports: *Return on Environment* (Pennsylvania Audobon) and *Berks County ROE valued at over $2.5 billion annually* (Kittatinny Ridge).

**Climate Adaptation:** *Continually pursue, design and construct restoration and protection projects to enhance the resiliency of Bay and aquatic ecosystems from the impacts of coastal erosion, coastal flooding, more intense and more frequent storms and sea level rise.*

*Julie Reichert-Nguyen*: **Our recommendation to the MB is to *UPDATE* the Climate Adaptation Outcome.** We dedicated our December and January meetings to gathering input from our members and stakeholders on how to advance the climate adaptation outcome beyond 2020. This input informed the assessment, and our recommendation to the management board is to update the outcome. The Environmental Research Group (ERG) report highlights that it is unclear whether we are actually meeting this outcome. While there is a great deal of climate resilience work happening across jurisdictions, there is currently no way to monitor or assess progress. Additionally, the language of the outcome itself is not structured in a SMART way. The existing phrasing— "continually pursue, design, and construct restoration and protection projects to enhance the resiliency of the Bay and aquatic ecosystems"—is too broad and heavily focused on coastal impacts such as erosion, flooding, storms, and sea level rise.

There is strong interest in updating the language of this outcome to make it SMART. Currently, the WG plays a key role in facilitating collaboration, identifying climate adaptation opportunities, assessing vulnerabilities, and supporting cutting-edge science. We also heard concerns that removing this outcome could lead to a loss of engaged partners and reduce legislative support. Some partners have even used this outcome to justify legislative actions.

As a group, we recognize the need to define measurable progress. Tackling climate adaptation without clear metrics has been difficult, but we have had successes, particularly in marsh adaptation. By leveraging existing science and data, we identified specific locations to focus our efforts. This presents an opportunity to take a place-based approach to the outcome while also considering a broader, watershed-scale perspective. Stakeholders expressed interest in expanding the focus beyond just coastal areas to include inland, non-tidal, and tidal zones, as well as both aquatic and terrestrial ecosystems. This would also involve incorporating nature-based adaptation strategies and setting time-bound elements to align with future projections and available data.

To effectively measure progress, we could establish milestones at five-, ten-, and fifteen-year intervals, ensuring that adaptation efforts are implemented within specific regions. This would apply across tidal and non-tidal areas while creating a more holistic approach. Although we already conduct science synthesis—which is relatively low-cost—implementation is resource-intensive. If we expand the scope of this outcome, we will need additional capacity to make it feasible.

***Comment from chat:*** *Peter:* Maybe, like the oyster outcome, pick bite sized pieces to grow from. And geographically diverse bites.

- ***Response:*** *Julie:* Yes, exactly. Our action plan under the new outcome would use existing data and input from the partnership to establish focus areas. Climate adaptation is cross-cutting and impacts all outcomes, so it's essential to develop shared metrics to identify and prioritize focus areas. We also need to determine the appropriate scale—whether at the sub-watershed level or some other geographic framework.

- Another consideration is the interplay between coastal and inland efforts. Coastal projects must account for saltwater intrusion and sea level rise, while inland efforts, such as increasing shading, can reduce downstream water temperatures. A well-structured place-based approach would integrate these interactions. The goal would be to define a set number of focus areas where we can measure progress and collaborate with implementation partners to advance nature-based adaptation strategies. we adopted the term "holistic watershed" to better reflect our intent. We still need to define the appropriate scale—whether by acreage, sub-watershed, or another metric—to ensure that we can make tangible, measurable progress.

- ***Response:*** *Peter:* I just want to say that I follow your logic, and I appreciate the structured approach. One of the strengths of the oyster outcome is that, while it's ambitious, it remains within a clearly defined and achievable scope. The challenge is finding that balance—making meaningful progress without trying to be everything, everywhere, all at once. I appreciate that you're incorporating this structured thinking into the planning process.

***Q from chat:*** *Kevin:* Is there any consideration on how project monitoring and reporting would occur if there is a diminished federal involvement? will similar consideration be made during the establishment of SMART Outcomes?

***Q from chat:*** *Gregory:* Given the outcome "enhance the resiliency of...", could a SMART outcome add measurement of resiliency? That isn't easy, but there is a lot of science for measuring resiliency, or implementation of practices expected (modeled?) to increase resilience?

- A: Julie: Yes, our two-pager provides more details on this—I just didn't have enough time to cover everything in the presentation, and I even went a minute over. Our approach is that within these focal areas, we would not only identify adaptation options but also establish a framework for monitoring and assessing their success over time. This would include a dedicated monitoring component to help measure resiliency.

  The CRWG has partners who were recently awarded the STAC Synthesis funding opportunity to conduct synthesis work on available data, particularly with a coastal focus due to the current emphasis of the research. We hope to gain valuable insights from these university partners on how to approach this in a practical and manageable way. Personally, I believe we can develop a method to measure resilience, but it will require incorporating it into a structured plan and securing the necessary resources.

***Comment:*** *Chris:* My point is more about semantics, specifically the use of "coastal" and "inland" in your terminology. It would be more consistent to align with "tidal" and "non-tidal" or "watershed" and "Bay." While "coastal" and "inland" work well when discussing marsh migration, in a broader sense, I think we need to be precise with our language. "Coastal" and "inland" sound more like NOAA terminology, but they don't necessarily imply watershed considerations. That's just a suggestion—do with it what you will.

I also want to circle back to the discussion on scale. I completely agree that tackling climate adaptation at the sub-watershed level is incredibly challenging. Keeping it focused on larger focal areas makes more sense. My mind immediately jumps to major river basins like the Susquehanna and the Potomac. Those are the landscapes where we can have meaningful adaptation discussions. When we start getting into HUC-8 watersheds, it may become too fragmented to be effective.

- ***Response:*** *Julie:* Yes, and defining that scale is something the workgroup has discussed. One idea that came up was incorporating community stewards into the adaptation work at the local level. However, as Rick mentioned earlier, determining the right scale is going to be a complex challenge. It's not something we can fully resolve within the short time frame before April.

  The key question is: what should the scale be for defining focal areas? It may not be a one-size-fits-all approach. In some parts of the Bay, a larger focal area may be more appropriate, while in others, a more targeted, smaller-scale approach might work better. It really depends on the needs of the region and what stakeholders determine to be the most impactful. Ultimately, the goal is to make it both attainable and realistic while ensuring we can assess progress effectively.

- ***Comment from chat:*** *Keith:* Fully realizing the existing outcome's scope in tidal areas by designing and constructing projects as well as expanding the scope to nontidal.

**Climate Monitoring and Assessment:** *Continually monitor and assess the trends and likely impacts of changing climatic and sea level conditions on the Chesapeake Bay ecosystem, including the effectiveness of restoration and protection policies, programs and projects.*

*Julie Reichert-Nguyen:* **Our recommendation for the MB is to *REPLACE* the Climate Monitoring and Assessment Outcome.** Our recommendation is to replace this outcome because it is currently too broad and qualitative, making it unclear how progress should be measured. The existing language includes two key parts: monitoring and assessing trends and likely impacts of changing climatic and sea level conditions in the Chesapeake Bay ecosystem, and evaluating the effectiveness of restoration and protection policies, programs, and projects.

The WG has been working on climate change indicators, including sea level rise projections and trends in precipitation and temperature. However, we currently lack a method to assess the effectiveness of restoration and protection policies. After discussions within the group, we determined that the outcome should be more specific in defining where we can add value. The primary focus should be on integrating climate science, aligning with the Executive Council's 2021 climate change directive, which emphasizes incorporating climate considerations into all our work. There is a significant opportunity to use existing science and support future research while ensuring that climate science informs the achievability of all outcomes under changing conditions.

We debated whether this should be classified as an output or an outcome, but ultimately, the consensus was that it should remain an explicit outcome in the Watershed Agreement. Without it, there is a risk that climate resilience would receive less focus, and we wouldn't build a structured climate resiliency assessment framework into the program. This new outcome will work toward developing and implementing such a framework across all

outcomes, integrating climate science to ensure the attainability of goals in the amended agreement.

Additionally, we are shifting away from tracking climate change trends, as many federal and state partners already conduct this work, and we can utilize their data. Instead, our role will be to take that existing information and integrate it into decision-making and outcome assessments. A potential SMART metric for this outcome could be measuring how many outcomes have integrated climate science, using the SRS process as a mechanism for tracking progress.

***Comment:*** *Chris:* We've outlined what needs to be done, but we haven't yet detailed what the SMART criteria would be for this outcome. I expect the MB will have similar concerns—they may agree with the direction but still wonder where we go from here. We might need to ask for their support to ensure this doesn't get removed. Most people probably agree with the intent, but without a clear next step, there could be uncertainty about how to proceed. I don't have an immediate solution, but I believe if we put enough thought into it, we could get there. The key is ensuring this effort doesn't disappear.

- ***Response:*** *Julie:* Yes, and I think the upcoming structure and governance discussions, likely in June, will be critical in shaping this. One approach could be integrating climate resiliency assessment into the Strategic Review System (SRS) process. However, beyond just a mechanism, we need an overarching climate resilience assessment framework embedded into our governance structure. Climate science integration must be a formal part of how we operate.

  Additionally, full engagement from the broader partnership is essential. This isn't something the CRWG would handle alone, and it may not even be the lead on it. Other discussions have emerged about whether we need a dedicated climate-focused GIT or a Climate Advisory Board. There are ongoing conversations about governance and structure, and we need to align with those discussions. The CRWG has been providing scientific support, facilitating collaboration, and bringing climate science into the conversation. However, if we're integrating climate considerations across all outcomes, we will need additional capacity beyond the small group currently working on it.

  This outcome is actually built around the 2021 Climate Change Directive, which the MB has already endorsed. The issue isn't approval but rather the lack of a clear implementation pathway. This is our opportunity to define that path—both in terms of outcome language and through governance and structural changes.

***Comment:*** *Peter:* One thing I'm considering is how this aligns with other monitoring and assessment outcomes. For example, the water quality standards and attainment outcome focuses on monitoring and assessment but largely speaks to activities and outputs rather than ecosystem response. That might be a challenge here as well—measuring how many outcomes have integrated climate science feels more like an accounting metric or an output

rather than an actual outcome. This isn't to say it's not important—clearly, it is—but it's something to think about as we refine the direction.

- ***Response:*** *Julie:* We've struggled with distinguishing between outputs and outcomes in this context. Measuring SMART progress would likely fall under outputs, and we need to clarify how that fits into the broader outcome. If we move forward in this direction, we may also need to reconsider the name of this outcome. The current name—Climate Monitoring and Assessment—may not be the best fit. We weren't asked to draft new language yet, but I think a name change might be necessary to prevent confusion. The current name could be misleading, as it suggests active climate monitoring rather than science integration. What we're really focusing on is integrating climate science into other outcomes and making progress more achievable under changing climate conditions. It's more of a science-integration-based outcome rather than pure monitoring and assessment. Perhaps a "Science Assessment" outcome or something along those lines? I think renaming it would help clarify the intent and ensure it aligns with the work we're actually doing.

***Comment:*** *Gina:* I really liked what you just said at the end. Recognizing that the current title is misleading and that this outcome is really about science integration with other outcomes is a key point the MB needs to understand. You're right—this isn't the time to rewrite the name or language, but the challenge we've discussed before is the "chicken or the egg" issue. The structural discussions about how this fits into other outcomes are happening in June, but before that, the MB will set up a small team to refine the language. That small team's work happens before the governance discussions, which means we need to ensure these key points we've just discussed are incorporated into that process.

There are a lot of details in the slides, but I think we should highlight the main takeaways more clearly. The interconnectedness of these efforts reminds me of the "bowl of spaghetti" analogy we keep using—where outputs fit under different outcomes and everything is interwoven. It's difficult to rewrite the language without first recognizing this complexity. I'm also concerned about how the small team will approach this if we haven't first discussed how it integrates with other outcomes within the structure. This is a massive effort, and I worry it might be overwhelming for the MB. Given that we don't have SMART language defined yet, they may not raise specific concerns now, but those questions will undoubtedly come up when the small team starts working.

- ***Response*** *Julie:* This is a big effort, and it won't be completed all at once. I don't think the expectation is that every outcome will already have climate considerations built in when they present their language in April. The idea is that by including this in the agreement, we create a process where outcome leads work with climate experts to integrate climate science over time. In many cases, this will likely happen at the output level rather than being a direct measure of success for each outcome. But if we eventually end up with 25 outcomes integrating climate science, that's a huge lift. This brings us back to governance—how do we structure and support this work effectively?

- ***Response:*** *Keith:* Similar to what GIT 6 does—providing a service to the MB and other outcomes. It requires cross-outcome collaboration to be successful. The authority for this effort is already in place. The EC has made climate resilience a priority for the partnership, and the mandate is clear.

- ***Comment from chat:*** *Claire:* "Fish" habitat, climate resiliency, and "Healthy" watersheds all have the science integration aspect as integral to their charge. They all involve connecting disparate outputs and outcomes.

***Q:*** *Chris:* This may not be the right time to bring this up since it hasn't happened yet, but in some of our sister agencies, we're already seeing climate-related language being removed. Have you thought about how we would handle this if a future executive order (EO) mandated the removal of climate considerations?

- ***Response:*** *Keith:* we've been told to continue forward for now. If such a directive were issued, it would likely depend on how the EPA regional administrator and our regional planning leadership interact with national priorities. We're not at that point yet, but it is a concern. This also raises a broader issue, which we'll discuss later with other groups, particularly around DEI (Diversity, Equity, and Inclusion). DEI is one of our outcomes, yet we're seeing federal mandates requiring its separation from other efforts. While states don't necessarily have the same restrictions, federally, we are being asked to untangle DEI from everything we do.

  There's a possibility that climate resilience could face a similar challenge. Right now, we are working to integrate climate science, but we may eventually be required to separate it out as well. The broader principles of past administrations—on climate, DEI, and other priorities—are already interwoven into our logic models, action plans, management strategies, and outcomes. The partnership involves multiple federal, state, and local agencies, and those priorities shift over time. It hasn't happened yet, so maybe we don't need to worry about it at this moment. But if an EO comes out before the next MB meeting, we will have to address it.

- ***Comment:*** *Kevin:* Just for the group's awareness, we have been asked to remove climate-related documents from our website. We are anticipating further guidance on this issue moving forward.

***Q from chat:*** *Peter:* On the climate inclusion in all outcomes - is there an assessment of what we have seen in our outcomes thus far to compare with our new outcome structure so we can show progress we mean to see?

## 11:25 AM – 12:00 PM *Discussion*

Open discussion on connections between outcomes, how these outcome responses may influence other outcomes in their outcome assessment, how these responses influence the future structure conversations with the partnership, etc.

## 12:00 PM *Adjourn*

**Next Meeting – Based on feedback from this meeting we may restructure the agenda, so we are still waiting to finalize the times.**

- *Feb 20th* (Afternoon so to not overlap with Wetland Workgroup meeting): meeting for second group of outcome assessment (link).
- *March 7th:* meeting for third group of outcome assessment (link).

Attendees:

*Breck Sullivan (USGS), Chris Guy (USFWS), Keith Bollt (EPA), Kaylyn Gootman (EPA), Kevin Du Bois (US Department of the Navy), Allison Welch (CRC), Gabriel Duran (CRC), Julie Reichert-Nguyen (NOAA), Claire Buchanan (ICPRB), Jim Thompson (MD DNR), Bruce Vogt (NOAA), Kristin Saunders (UMCES), Amy Handen (EPA), George Doumit (DNREC), Ann Foo (UMCES), Sophie Waterman (USGS), Kevin Schabow (NOAA), Taylor Woods (USGS), John Wolf (USGS), Kayle, Alex LoCurto (Alliance for the Chesapeake Bay), Marisa Baldine (Alliance for the Chesapeake Bay), Rick Mittler (Alliance for the Chesapeake Bay), Emily Young (ICPRB), Mark Trice (MD DNR), Erin Sonnenberg (CRC), Bill Jenkins (EPA), Mike McMahon (MDE), Melissa Fagan (CRC), Jon Harcum (Tetra Tech), Trang T. Le (ODU), Julia Fucci (NOAA), Christina Garvey (CRC), Ashley Hullinger (PA DEP), Tou Matthews (CRC), Wai Yan Siu (ODU), Katie Ayers (EPA), Greg Allen (EPA), Amanda Small (MD DNR), Megan Cole (PSU), Suzanne Trevena (EPA), Joseph Wood (CBF), Dede Lawal (EPA), Amanda Shaver (VA DEQ), Katherine Brownson (USFS), Peter Tango (USGS), Kathy Stecker (MDE), Rachel Felver (Alliance for the Chesapeake Bay), Laura Cattell Noll (Alliance for the Chesapeake Bay), Tish Robertson (VA DEQ), Gina Hunt (MD DNR), Carl Friedrichs (VIMS), Nick Staten (CRC), Bryce Bailey (RES), Jeremy Hanson (CRC), Gregory Noe (USGS), Matthew Konfirst (EPA), Scott Daniel Knoche (Morgan State University), Cassandra Davis (NY DEC), Leila Duman (MD DNR), Sarah Brzezinski (EPA), Bo Williams (EPA), Ruth Cassilly (University of Maryland Cooperative Extension), Caroline Kleis (CRC), KC Filippino (HRPDC).*