



## Chesapeake Bay Program

*Science. Restoration. Partnership.*

### Forage & Fish Habitat Beyond 2025 Meeting Minutes

Monday, December 9 · 1:00pm – 2:00pm EST

Video call link: [meet.google.com/qfb-unfb-vnu](https://meet.google.com/qfb-unfb-vnu)

Or dial: (US) +1 440-482-1430 PIN: 273 687 320#

#### Meeting Minutes

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**\*Action Item:** Workgroup members continue to send Bruce and Christina input on answers for the outcome assessment template.

**\*Action Item:** Christina & Bruce to fill out the outcome & priority assessment template with feedback from Forage & Fish Habitat workgroup members and send back to the group for review and additional comments.

#### Introduction:

- **Bruce Vogt:** Lots of discussion at CBP over the last year - decision is to amend the agreement and not produce a new agreement
  - Do not decide today what the outcomes would look like - just need to decide if they are in and out
  - Parallel effort to identify outcomes versus priority assessment
  - Also decide if current outcome is really just an output

#### Big question:

**What advice do you have for the Management Board on how to consolidate, reduce, update, remove, replace, or add new outcomes?**

#### Timeline:

- Jan 30th: outcome assessment materials due
- Feb 13th: Present to the MB
- Current outcome process ends TBD (maybe end of March/mid-April)
  - Then fit it into a SMART Goal - specific, measurable, achievable, realistic, and time-bound

Template to answer Big Question:

- *Joe Grisman*: Will what you are presenting right now be available to look into more later this week to give more feedback?
- *Bruce Vogt*: Yes, Meeting minutes and notes will be shared in the template and sent out for you all to review
- *A.K Leight*: Point of clarification, so the fish habitat assessment for example, ERG said it is not a SMART objective, is there an opportunity to make a SMART objective and have it be included?
- *Bruce Vogt*: Yes, we have the option to keep an outcome and modify it. So we will consider, is it SMART? And acknowledge how we would amend it. Big picture, there are currently 10 goals and 31 outcomes under the 2021 agreement- there is interest in wanting to streamline/reduce the number of outcomes overall. One thing we could consider, is to combine forage and fish habitat somehow so that we wouldn't have two outcomes but it is more specific where it addresses the elements of the two outcomes and more specific goals on the side of that outcome.
- *Chris Moore*: I tend to think that with forage we laid a good groundwork, I think we can move forage fish so that it becomes a smart outcome. There is a need for this outcome. I think there is enough difference between the two outcomes where we would keep them separate.
- *Peter Tango*: A lot of the science was moved forward to work on the forage outcome. I agree with Chris. It would be good if we could synthesize but it would be helpful to have a good reason to keep them separate and sort them out.
- *Marek Topolski*: If they were combined it would be more focused on forage correct?
- *Bruce Vogt*: It doesn't have to be. One of the things that has been a hang up with forage is that we haven't managed to connect it to managers yet- having a management outcome would be helpful. Doesn't have to be a fisheries management objective either, but the closer we can tie it to management the more likely it would be successful.
- Forage → Continue or drop?
  - *Chris Moore*: Modified and move forward make sense - lots of stressors in the environment. Smart to make it broader than just forage fish - may be difficult to move into the management space - e.g. spot population dynamics have shifted
    - *Peter Tango (in chat)*: If we are aiming to "restore the ecosystem", it seems we have some expectations for economic viability, recreational capacities, bioenergetic needs to support commercially viable species, subsistence assistance

- *Bruce Vogt*: Would have to think about the outcome that we want to achieve - an indicator does not have to be an outcome - could report out in a different way - is this big enough for an outcome and what is the change we want to effect?
- *Peter Tango*: If we are following the vision of clean water/abundant life, I agree that we need to change what we have in there to meet the expectations/people's vision on ecosystem characters
- *Mary Fabrizio*: I am struggling to understand where we are going with forage - original outcome was vague - have to have a better sense of why we are doing what we are doing - in the context of ecosystem change - forage is going to change - but we aren't managing most of the forage species. How do we set this up in a way that is "smart"?
  - *Peter Tango (in chat)*: We have Management Plans - those point to actions we want to do, We have logic and action plans - those tell us the products our monitoring, analysis, plan developments are part of that planning effort. But forage as an end point - do we have a measure of forage targets?
  - *Edward Houde (in chat)*: We do manage some forage, e.g., menhaden. We also manage the adults of some species that showed up as important forage as juveniles.
  - *Mary Fabrizio (in chat)*: Yes, thanks, Ed. What I meant to say is that we don't manage 'forage' as a group.
- *Chris Moore*: Something that would get us to "SMART" is to determine what a healthy population is for forage species in the Chesapeake Bay. With some species we can get there. Now that we have done work to identify forage managements - take ~3 species and decide what a healthy population of those specific species
- *Bruce Vogt*: Another option would be to tie forage to a managed species - like striped bass. Identify what is important to them, track those changes, and understand how much forage is needed for a healthy population.
- *Chris Moore*: Red drum is one that is important to tackle.
  - *Edward Houde (in chat)*: Red drum is becoming an important species in the catch but there is relatively little science to link this predator to forage species in Chesapeake Bay. The science that has been supported to date on predators did not include red drum.
  - *Peter Tango (in chat)*: In the Watershed Agreement, there is zero mention of diversity of our resources. We also don't seem to have specific language on invasive species - do those two items fit into a future outcome, and do we look at them for shallow water in a future outcome?
- *Peter Tango*: As part of this - looking at CESR results - are we going to focus an outcome on shallow-water changes?
- *Joe Grisman*: Echoing Chris - striped bass is an easy grab - but we are dealing with other issues in the bay now - red drum is becoming a dominant species in the southern bay. Might be a good one to look towards as a top predator species

in the bay. With warming and other temperature issues they are not going anywhere, might be a good place to focus.

- *Jim Uphoff*: For striped bass at very low level - the same levels of forage now likely sufficient - for red drum - don't have that much information on their relative abundance - need some indicator is this research oriented or looking for something to management community - e.g. suite of indicators that are tracked every year - as far as focusing only on shallow-water first need to identify what is shallow and don't have the luxury of data to specify by area
  - *Alexandra Fries (in chat)*: But can't we develop better indicators if they are supported under Beyond 2025?
- *Bruce Vogt*: Leaning towards the latter so that any research or science is focused on getting to those - also doesn't need to be "maintain striped bass spawning habitat in 3 of the most productive tributaries" - would be way to connect outcomes to the rest of the program
- *Jim Uphoff*: In either outcome - not a command and control system - but as far as habitat - pulling in a broad array of agencies - beyond a fish management issue - the goal has been - and always ask the question - how is this going to get done - who will doing it
- *Marek Topolski*: Following up on Jim's comments - from management perspective feeds into production - especially with forage and habitat - for fish habitat keep forgetting that we need to be engaging with the healthy watersheds team - big factor
  - *Gina Hunt (in chat)*: Marek- who do you mean by watershed team? In DNR? Particular outcomes?
  - *Marek Topolski (in chat)*: Gina - I was initially thinking the CBP Healthy Watersheds Goal Implementation Team
  - *Gina Hunt (in chat)*: Ahhhhh .... they are suggesting changes to that outcome as well
- *Mary Fabrizio*: No language on invasive species or diversity - maybe we try to broaden the language to include these - need to better understand changing due to climate change, etc. - bay is not a static thing - is changing while we are measuring it
- *Jim Uphoff*: Invasives and forage - primary interest - because if you have certain species - blue catfish very dependent on gizzard shad - providing adequate forage for invasives - is a counter-intuitive management - eradicating blue cats is not a possibility - just need to manage effects - deflecting pressure onto other species.
  - *Peter Tango (in chat)*: With so many migratory species, a habitat connectivity target, reduced fragmentation to enhance accessibility and the quality of those accessible habitats seems helpful for management considerations.
- *Alexandra Fries*: Comment about the SMART goals - used for report cards - for achievable - doesn't have to be clear -

- *Peter Tango*: Beyond 2025 calls for linking to social science - have linkages to diverse populations -
- *Bruce Vogt*: If we decide these are moving forward need to expand beyond scientists - need to include commercial/recreational
- *Peter Tango*: Paper in fisheries - how some species that are not managed but are important to people
  - *Donna Bilkovic (in chat)*: Shads and herring are also highly valued cultural resources for coastal tribes.
- *Jim Uphoff*: Intersection of science and politics is managers job - provide the information to add management decisions
- *Bruce Vogt*: Groundtruth what objectives we land on with the
- *Donna Bilkovic*: Andrew shell - survey of fishers with the types of shoreline habitats that they prefer - marshes were greatest - Mattaponi tribes - had hatcheries for shad and herring - want to know possibility of profitability of catfish
  - *Donna Bilkovic (in chat)*:
    - <https://www.sciencedirect.com/science/article/pii/S0964569124001352>
- *RochelleSeitz*: With regard to get input from community - could we get comments from community - could be an iterative process
- *Bruce Vogt*: Yes - but will be a very short timeline