

Status and Trends Workgroup (STWG) Meeting

Monday, January 29, 2024

1:30 PM – 3:00 PM

Meeting Materials: [Link](#)

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

ACTION ITEMS

- Doug Bell and Katheryn Barnhart will follow up STAR leads about how STWG can support the Beyond 2025 effort in 2024.
- Alex Gunnerson will follow up with GIT Coordinators and Staffers who could not attend the meeting to share the presentations from the meeting, making note of the lessons learned from the Oyster Outcome's approach to developing a draft outcome for beyond 2025.

Meeting Minutes

1:30 Welcome and Introduction - Doug Bell (EPA) and Katheryn Barnhart (EPA), STWG Co-Coordinators

Summary

Doug and Katheryn shared that under the new meeting structure, STWG meetings will occur on a quarterly basis while smaller indicator development teams meet more frequently. The last STWG was in August 2023. Doug and Katheryn will reach out to schedule the next quarterly meeting for some time in spring 2024.

1:35 [Forage Status and Trends Report](#) - Bailey Robertory (CRC)

The Forage Action Team has recently finished a Status and Trends report which has synthesized all research findings and projects taken on since 2014. Bailey presented this highly relevant information to share with other Status and Trend practitioners.

Goal: *Share key findings from the Forage Status and Trends Report.*

Summary

Bailey began with some contextual information on the Forage Status and Trends report. Bailey then walked through the three tiers of indicators identified in the report for key forage species ([slides 5-24](#)):

1. Tier 1: Abundance or biomass time series for each taxa.
2. Tier 2: Relationship between forage abundance and environmental/habitat factors (used to track and predict forage availability).
3. Tier 3: Changes of predator consumption of forage over time.

Bailey concluded with key summary points ([slide 25](#)) and next steps for the Forage Action Team based on this status and trends report ([slide 26](#)).

Discussion

Kristin asked two questions:

1. Currently, there is a lot of interest in the management of menhaden and menhaden catch. Kristin asked if the information on menhaden in this report is informing management at the state level in Maryland and Virginia, and at the Atlantic States Marine Fisheries Commission (ASMFC). Kristin asked if NOAA feels a similar level of concern for menhaden compared to the messaging shared by advocacy organizations.
 - a. Bruce Vogt said he believes this report has been shared with ASMFC, but he can follow up to make sure they have seen it. It appears menhaden has been increasing in predator diets, but further research may indicate other developments happening that we do not currently understand. One of the key findings was that menhaden may be a more nutritious prey, but it seems predators have shifted to other prey species and those species are just as important as menhaden, based on available diet studies. VIMS and the Virginia legislature are working on a menhaden research agenda. There may be more of a role for the Forage Action Team or CBP in supporting this research agenda once it is completed. The Forage Action Team has not been solely focused on menhaden because the consensus is that the other prey are just as important as menhaden, based on available diet studies.
 - b. Bruce said there is work being funded at VIMS to do a Chesapeake Bay specific striped bass population study. Following the study, NOAA Chesapeake Bay Office (NCBO) hopes to look at consumption rates by striped bass over time to see if there are signals that pop out for key forage species, including menhaden. This is dependent on backfilling the position that Mandy Bromilow once held.
 - c. Kristin thanked Bruce for this insight. Kristin continually sees the alarm raised by advocates about the loss of menhaden and it does not seem to align with this report (hence my question).
2. Kristin asked if there are any key findings from this report that the STWG membership should amplify in the Beyond 2025 small group discussions. Kristin recognized the Fisheries Goal Implementation Team (GIT) has been very involved in the shallow water small group, but suggested other small groups may benefit from distilled lessons from this report.
 - a. Bruce said a major focus of the Forage Action Team going forward is filling in the blanks on Tier 3 Indicators. The report contains a lot of information on how various prey have changed or not over time, but there is not much information linking managed species, like striped bass, with prey species. Fisheries managers are interested in if there is enough prey present for these managed species, so we are working to fill the gap for Tier 3 Indicators to help address this question.
 - b. Bruce said water column habitat is important for several species, like Bay anchovy and juvenile spot, so continued efforts to improve water quality are important.
 - c. Other species are sensitive to the hardening of shorelines, as we have seen a direct impact. This likely includes avian species as well. When thinking about forage species as well, there is a strong argument for protect living shorelines and converting from hardened shorelines to other options when possible.

- d. Bruce said there is also a perennial need for zooplankton monitoring, especially how zooplankton assemblages have changed over time since the monitoring network was lost ten years ago. A few ideas have been put forward to use the available data to create snapshots of zooplankton over time and space in the Bay. One hypothesis for the low levels of juvenile striped bass over the last few years is a mismatch in striped bass spawning and plankton blooms. There is also a lot of uncertainty regarding mysids in the Bay.

Doug said Tier 1 indicators seem to use existing monitoring programs. Is some of this information improving which species or areas to focus on? Are there any brief, research project-based monitoring programs which should be extended? With the research outcome, Doug is curious what approach the Forage Action Team will be taking: doing more research, communicating the research, or a mix of both. Bruce said it will be a mix of both.

Bruce said for monitoring, shallow water remains the critical gap as many of these indicators are based on one-time studies, for example predator diets. Without a new study, we cannot lean on previously collected data for understanding. The Forage Action Team need to decide on a few of the studies that they want to reproduce over time. The abundance-based indicators might need to prioritize one or two species or use an aggregate of all species. It will be difficult to temporally replicate studies that estimated species abundance using water column modeling.

Bruce said the Forage Action Team will reconsider the meaningfulness of these indicators, in reference to management targets. There will need to be more conversations with management to understand what those objectives and thresholds are for each species. This includes predation diets and how shifting prey availability affects juveniles, since most of the forage species are not managed directly. Ideally, it would be helpful to know how these changes in diet might be affecting fish condition. The team has also raised the question of exploring how menhaden influence marine mammal consumers and bird reproductive success, but the team may not have the resources to conduct this work.

2:05 [Envisioning/developing the 'Beyond 2025' Oyster Goal](#) - Stephanie Westby (NOAA)

Stephanie presented how the Maryland and Virginia Oyster Restoration Workgroups are envisioning their outcome for post 2025. Time was set aside for discussion following the presentation.

Goal: *Communicate how the Oyster Outcome is envisioning their goal for post 2025.*

Summary

Stephanie began with explaining why there is a need for a next generation/post-2025 Oyster outcome ([slide 2](#)). Stephanie then outlined the operating principles for goal setting and the restoration and implementation process ([slide 3](#)). Stephanie discussed how regardless of the metric selected for the goal, whether it be quantified by number of tributaries restored or number of gallons of water filtered annually, these metrics are interrelated. The key is translating the metric into a meaningful indicator for each audience one is communicating with ([slide 4](#)). Stephanie concluded with a review of the draft Oyster outcome and, in a separate category, listed the additional benefits oyster restoration can provide. These “Co-Goals” can be addressed in a piece-wise approach for specific tributaries since there is not capacity to focus on all of these synergies

simultaneously ([slide 5](#)).

Discussion

Kristin said it was great that Stephanie could distill the key ingredients of success for the Maryland and Virginia Oyster Restoration Workgroups in creating a process to revise to a new, draft goal.

Kristin said it is interesting to note that the original negotiations for the 2014 agreement started with 20 restored tributaries for the Oyster outcome and was cut down to 10 because of the worry about funding 20 at a large scale.

Kristin asked when Stephanie says 15, she means 15 tributaries in addition to the 10 completed by 2025, correct? Stephanie said yes, that is the case. Under this draft, tentative Oyster goal there will be 15 new tributaries restored, but the workgroups are not in final agreement that the target will be 15. The ten restored under the original 2014 agreement outcome will be covered by the draft, tentative Oyster stewardship goal.

Doug asked what the process and time requirements were to organize the groups involved in this drafting of a new Oyster goal. Stephanie said about two years ago, the Maryland and Virginia Oyster Restoration Workgroups started having these tentative discussions but were still focused on achieving the current Oyster goal. In the first year, one of the partners, the Pew Charitable Trust, worked with The Nature Conservancy to have conversations with individual Bay partners and then put together a report summarizing the findings. In the second year, the Maryland and Virginia Oyster Restoration Workgroups and the Fisheries GIT discussed the report and made Stephanie the champion of the process to develop a specific Oyster outcome. Stephanie worked intensively over the last year in close collaboration with many partners to draft the text presented to the Fisheries GIT last year and the text presented here today.

Katheryn said there are concerns about setting goals we cannot meet, especially when it comes to cross-outcome collaboration. Katheryn asked if there are any plans to have closer alignment on management strategies across outcomes, since this could be an ideal checkpoint to collaborate with other outcome teams. Stephanie said in similar terms, the Maryland and Virginia Oyster Restoration Workgroups are trying to wrestle with this need to collaborate for additional benefits while having a clean outcome. Stephanie said it is likely the cross-outcome component will need to be a broader CBP conversation about how to coordinate these types of initiatives. Katheryn said this might look like incorporating other work groups' feedback during a prioritization or decision-making exercise to explore how to get the most benefit from each action.

Katheryn asked if other outcome representatives think what Stephanie presented is a viable template for revising their goals post-2025. Kristin said with Beyond 2025 small groups, it seems this topic will be discussed more extensively in Phase II since there is hesitancy to discuss this now. Kristin said if the Beyond 2025 conversation was not taking place, workgroups/outcome teams could propose their new goal/outcome during the SRS process and then work it up to the PSC for approval. Kristin said this approach could be very useful to emulate in Phase II of the Beyond 2025 or other venues where goal setting conversations are taking place, given the intentional focus on how to align and benefit other outcomes, which is reflective of an evolution in thinking and learning. Breck agreed with Kristin's comment and said STWG could be a great venue to have some of those conversations if it fit within the time available. Stephanie agreed and said that part of the reasoning for the new Oyster outcome is to ensure momentum is maintained through these conversations about the future beyond 2025. Doug provided some context on how Beyond 2025 is addressing these points, specifically shaping the small groups so that they

incorporate synergies between outcomes. This could be interpreted as the top-down approach. Doug said the goal translator Stephanie presented could be a helpful way to investigate these topics, perhaps in the context of Status and Trends.

Katie Brownson said she really likes how Stephanie split the goal into a restoration goal and a stewardship goal - the stewardship piece seems like it often gets overlooked. Katie also appreciated how the Maryland and Virginia Oyster Restoration Workgroups are just going for it with the collective goal setting. Katie said it seems like a lot of the workgroups are in more of a "wait and see" stance. Katheryn agreed.

Breck said she likes the idea Stephanie presented on [slide 5](#) "with a side of," but asked how would the CBP ensure this cross-outcome work actually happens. Components of this approach are already woven into the SRS planning documents, but sometimes they are not completed because a lack of capacity. Breck suggested outcomes may be better formatted as bullet points or is parsed out, so each component is explicitly described. Doug said perhaps a matrix approach to representing connections with outcomes could be beneficial. Kaylyn said she would also like to propose linking oysters with water quality. Katie Brownson said The DEIJ and Climate directives also instructed us to better incorporate DEIJ/Climate considerations into our management strategies, but CBP has not provided any guidance about how/when we should do that. Breck said this is something we could make provide as a recommendation in the climate small group.

2:35 [Status and Trends Plans for 2024](#) - Doug Bell (EPA) and Katheryn Barnhart (EPA)

Doug and Katheryn presented on Status and Trends Workgroup plans for 2024. This included sharing the timeline for indicator development projects, [resources on the STWG webpage](#), and how STWG could convene in 2024 to support the outcomes and Beyond 2025 efforts.

Goal: *Discuss the focus of STWG in 2024 and share considerations for indicator development and coordination.*

Summary

Doug began with a review of the role of STWG. Katheryn added this is simplified language from the workgroup's charter.

Katheryn said in 2023, STWG updated 18 outcomes on ChesapeakeProgress and outlined plans from the STWG and Accountability and Budget Team to support outcomes as they update their indicators with new data in 2024.

Katheryn shared STWG leadership is considering an annual survey to collect workgroups' feedback on their indicator, to gauge if an outcome team feels their outcome progress would be more accurately represented in a different way. This would include considerations of monitoring or other needs associated with improving an indicator to be more reflective of an outcome.

Doug concluded with a few thoughts and questions for how STWG will convene in 2024.

Discussion

Breck said she sees STWG having a key role in supporting Phase II of Beyond 2025 conversations. Katheryn asked when will Phase II begin. Doug said this will be after the EC approves the recommendations in October or December 2024, which necessitates beginning to plan ahead of time so the partnership can hit the ground running. Doug said the Beyond 2025 Symposium in February should provide more clarity on how this process

is playing out. Breck said another role for STWG could be helping with recommendations after the February symposium. Doug replied that he sent specific guidance on the proposed integrated recommendation process to all the small group leads, which outlines plans for turning the recommendations into action. Breck said she will read the email and shared that Ken Hyer sees STAR as a facilitator during the between phase period to help synthesize information. Perhaps STWG could help lead a part of that synthesis. Doug said he sees this as a bi-directional discussion.

Katheryn said indicator development teams will continue to meet in between this STWG meeting and the next quarterly meeting.

3:00 Adjourn

Participants: Alex Gunnerson, Amy Williams, Angie Wei, Ann Foo, August Goldfischer, Auston Smith, Bailey Robertory, Breck Sullivan, Bruce Vogt, Catherine Krikstan, Doug Bell, Gina Hunt, Greg Allen, Joe Schell, Katheryn Barnhart, Katie Brownson, Kaylyn Gootman, Ken Hyer, Kim Van Meter, Kristin Saunders, Meg Cole, Sam Austin, Stephanie Westby, Susanna Pretzer, Tyler Trostle, Holly Walker, Wuill Urvina.