Status and Trends Workgroup (STWG) Meeting

Monday, December 5, 2022

Meeting Materials: Link

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

ACTION ITEMS

- **Core STWG members should read and consider the questions Katheryn Barnhart included in the email she sent on December 16th about preparing for the January 9th, 2023, STWG meeting.**
- **Julie Mawhorter and the Tree Canopy indicator team will reach out to the U.S. Census Bureau to ask if they have any recommendations on which boundaries to use.**
- **Kristin Saunders, Doreen Vetter, and Renee Thompson will talk offline, as needed, about the protected lands data release.**
- **Outcome representatives should respond to Katheryn Barnhart's email from November 8th with the influencing factors they would like listed on ChesapeakeProgress for their outcome. Anyone with questions should contact Katheryn at (barnhart.katheryn@epa.gov).**

Meeting Minutes

1:00   Opening and Roll Call, Announcements – Katheryn Barnhart (EPA), STWG Coordinator

Katheryn reminded outcome representatives to respond to her email from November 8th about identifying the influencing factors they would like listed on ChesapeakeProgress for their outcome. Katheryn said this will be done on a rolling basis as indicators are developed and updated.

Jamileh Soueidan asked if the endpoint of influencing factor identification includes the development of new indicators that are solely explaining influencing factors or just linking Chesapeake Bay Program (CBP) indicators to current Climate Resiliency Workgroup indicators. Katheryn replied it is specifically identifying any top 1-2 indicators that the CBP is already tracking that are important influences toward progress on your outcome.

Breck asked if Katheryn is looking for the factors that are most influential for your indicator or how they connect to other outcomes on CheaspeakeProgress. Breck said in the case of the Water Quality Standards Attainment and Monitoring (WQSAM) Outcome, the most influencing factors are pollution load and flow, but they are already on the same ChesapeakeProgress page. Doreen replied that is a special circumstance and the goal is to draw connections between different indicators and outcomes. Part of the underlying motivation is to represent the adaptive management component of the indicator's framework, which requires showing which factors are influencing the success of an outcome. Doreen said they want to reflect factors that we have information about and are particularly important on the influencing factors page. An example would be using population change as an influencing factor for land cover/land use change. Doreen

emphasized the goal is not to create more work for outcome representatives, but instead to consider what information is currently available that would be useful for communicating the outcome's progress. Doreen told Breck to send her and Katheryn what she has and is thinking on this topic.

1:05 [Tree Canopy Indicator Proposal Dry Run](#) **– Julie Mawhorter (USFS)**

A presentation on the proposed tree canopy indicators (which have had some adjustments since they were last brought to STWG in April 2022) for STWG approval. This presentation also served as a dry run before going to the Forestry Workgroup and Water Quality GIT, so STWG members were highly encouraged to provide feedback.

Summary

Julie gave a quick review of the Tree Canopy outcome elements to set the stage for the indicator before walking through the evolution of the proposed methodology for the indicator. Julie presented the final proposal for the indicator, which includes two options. Julie concluded with next steps for the indicator in development.

Discussion

Kristin Saunders said it might be helpful to make a very clear statement to differentiate what this is and isn't (something to the effect of "there is other tree loss outside of urban areas, and that information will be reflected in x place") so people don't conflate the information. Katheryn said she is working with Peter Claggett to update the Land Use Methods and Metrics Outcome page on ChesapeakeProgress, which can communicate additional but complimentary information to the Tree Canopy. Kristin said she was initially confused at the response the Tree Canopy indicator received from the WQGIT when it first presented, but after hearing that conversation, Kristin suggested including a disclaimer about what information it is communicating and how other information is being communicated elsewhere. Julie said the issues with counting transition to development outside of census places is that it overwhelms the scale and creates a moving target. Julie said there is not a perfect answer because development is happening outside of our defined communities, but the proposed method is the best approach.

Katheryn asked about the two proposals on [slide 10](#), specifically which urban areas are being used as a baseline. Katheryn asked why Urban Areas from 2010 are being used in option 2. Julie said they are only using Urbanized Areas from 2010 because they are waiting on the 2020 Urbanized Areas to be released. If option 2 is selected, the numbers reported on slide 10 will change as the 2020 Urbanized Areas will be used to calculate the metrics.

Renee Thompson said census boundaries are problematic and asked if overlap between the census designated places and urban areas is causing errors of commission. Renee said the shifting baseline problem of census areas is also a reason to consider a different unit of measurement. Renee suggested working with Peter Claggett to create a mask of the entire potential area that you would like to use and then utilize ancillary information

related to road or population density to define the final boundary. Renee also shared that the census plans on releasing their urban area boundaries for downloading in February 2023. Julie said the Tree Canopy indicator team will use the 2020 urban areas when they come out and agreed with the points Renee made. Julie emphasized the need to balance the area being measured since the team does not want to overcomplicate the boundaries and it is alright if some of the fringe areas are measured since those are important changes to note. Julie said she would be open to meeting with Renee and Peter Claggett to speak about this further. Renee suggested reaching out to someone at the Census Bureau to talk with them about the Tree Canopy indicator and what they are trying to capture, since the Census Bureau might have a recommendation on which boundary or combination to use. Julie said reaching out to the Census Bureau is a great suggestion and said she is concerned that the census places boundaries would be too narrow. Julie likes using the urban areas because she feels it captures more of the landscape that might become urban in the future. Julie emphasized the need to measure what is most tied to the outcome. Renee agreed and said that perhaps it would be best to cast a wider net from the beginning so future tree canopy is included and the baseline is consistent.

Katie Brownson said It might be helpful to have a slide that outlines the pros/cons of Options 1 and 2 (including this issue about the 2010 urban areas). Katheryn agreed and suggested explicitly tying the language of the outcome to the indicator, noting which parts of the indicator are measuring which parts of the outcome. This includes considering the spirit behind when the indicator was written.

Katie Brownson said that Option 1 seems like the most conservative approach we could feasibly use to estimate loss. Kristin agreed, saying the benefit of higher resolution is to see what was happening on the ground, to address the problem.

Jeremy Hanson asked if the boundaries being used for the indicator are changing from one period to the next or if they are staying the same. Julie replied they would stay the same, and the 2020 footprints would be used for the periods in the previous decade and the decade to come.

Jeremy commented the indicator is showing that despite BMP implementation, we are moving farther away from our Tree Canopy goal because the loss of trees is greater than plantings, notwithstanding the time it takes for planted trees to appear in the imagery. Julie said this is true and is why there will need to be two different tables: one for implementation (what has been planted) and one for the actual tree canopy as detected by the imagery. Both options show net tree canopy loss for the table of actual tree canopy, but the scale increases sizable when including the urban areas footprint.

Julie asked if when presenting the Tree Canopy options to the WQGIT, they leave off the tree canopy estimates for the jurisdictions so as to not distract from the decision being sought, which is the methodology. Julie expressed that the numbers produced by each option might derail the decision making for each option away from the merits of each method. Katheryn suggested not including the tree canopy numbers and instead providing as much detail as possible about the two different options and how truthful they are in tracking and being reflective of reality. Katheryn emphasized the WQGIT is not

being asked to approve these numbers right now, but instead are being asked to approve the indicator methodology, so the presentation should just focus on the methodology differences between the two options. Julie said she wants to balance potential pushback to the options because of the numbers with the need to show the alarming trends in tree canopy at the Strategic Review System Quarterly Progress meeting with the Management Board in February. Julie said it will be important to share this information in some fashion to show what the data are telling us about the state of the Tree Canopy Outcome. Kristin commented that the truth is hard. Doreen said if it were her, she would speak to the methodology and put the focus on the rationale behind the two options. After that conversation, the implications can be discussed, and a potential strategy could be to indicate the magnitude of the difference between the two options in the implications section. Doreen emphasized anything in the implications should not impact the decision because the methodology and how well it represents the outcome should be the deciding factors on which option to approve. Doreen emphasized the truth is the truth and ChesapeakeProgress exists to report progress on the outcomes.

Jeremy asked if the current numbers for option 2 will change once the 2020 urban areas are released. Julie said yes, they will change because the 2010 urban areas have a different geographic footprint. Jeremy said if they do decide to give the presentation with the tree canopy numbers by jurisdiction, they can give the disclaimer that the numbers are still in draft form.

Julie asked which groups need to approve the indicator methodology and after that which groups need to approve the indicator numbers before being posted to ChesapeakeProgress. Doreen said after the WQGIT approves the indicator methodology, it comes back to the STWG to discuss presentation, but the numbers each cycle do not need to be approved by the WQGIT. For updating the documents and numbers it is a straightforward process with review from Katheryn and Doreen and going through the Forestry Workgroup.

Jeremy suggested having Forestry Workgroup members speak with their partner Water Quality Goal Implementation Team (WQGIT) members in advance since the reality of this goal is disturbing and it will be a hard pill to swallow. This can also help the WQGIT members understand the importance of this indicator and the methodology. Kristin replied that is a great idea to do legwork with advance conversations, especially with the chairs and state representatives. Katheryn said one of the advanced conversations can include ensuring the consensus approval for the indicator is focused specifically on the methodology and objections related to the numbers are compartmentalized so the methodology conversation is not sidetracked.

Jeremy said this outcome is under Vital Habitats, but the Forestry Workgroup is under the WQGIT, so he asked if the Tree Canopy indicator methodology needs approval from Habitat Goal Implementation Team. Julie said the precedence has been seeking approval from the WQGIT because of where the workgroup falls in the CBP structure. Renee said the same question of approval has been raised with Land Use Methods and Metrics indicator. Renee said they plan to have a joint meeting the Land Use Workgroup and the

Healthy Watersheds Goal Implementation Team in December 2022 to discuss the indicator so that everyone is in the room. Renee said there is not always a clear distinction on where approval needs to be sought. Julie agreed and said she plans to continue with approval from the WQGIT unless otherwise directed.

1:45   **[Revisiting STWG Structure and Workplan for 2023](#) – Katheryn Barnhart**

A [review of topics covered in 2022](#) and how the new structure of the workgroup, as implemented in February of 2022, has fed into how these topics have been addressed. Katheryn reviewed which elements of the workplan have moved forward and began the discussion around 1) proposed changes to the workplan for 2023 and 2) how/if the workgroup's structure needs to adjust to accommodate these changes. The discussion will continue in January 2023, at which point the STWG will seek consensus for how to proceed for this next calendar year.

Summary

In the [2022 end of year review](#), Katheryn walked through the 2022 workplan, including which workplan items were covered at each meeting and other progress made outside of those meetings on workplan items. Workplan items were color coded based on the progress that has been made in addressing them. Katheryn emphasized that a lot of the meetings within the past year have focused on indicator development.

In 2022 the STWG experimented with a new structure for both meetings and attendees expected to be present in an effort to better accomplish the work plan items. One of the priorities behind this new structure was to ensure outcome representatives only needed to attend when the meeting was relevant to them, thus saving them time. Another priority was creating space for in-depth indicator development where concerns could be heard, and indicator workshopping could be done. In the later part of the year, specific topics required larger meetings with more attendees. Some notable progress includes the Local Leadership Indicator development process.

Breck Sullivan asked Katheryn for more details on the sub-item under workplan action nine in the [2022 end of year review](#) she and Peter Tango are responsible for. Katheryn said that was a sub-item under working with Goal Implementation Teams to incorporate discussions about common factors and relationships between outcomes during the Strategy Review System Process. Katheryn said she did not highlight anything because she felt it was not addressed at a STWG meeting and perhaps other spaces would be better places to address this workplan item. Breck suggested bringing this item up at a Scientific Technical Assessment and Reporting (STAR) meeting in 2023 or at one of the STAR Coordination Quarterlies.

Alex Gunnerson then solicited feedback from members on the priorities STWG had for 2022 and the structure used to approach these workplan items. Attendees who participated in the dot voting activity all indicated they found the 2022 workplan was focused on the right topics. Most attendees who participated in the dot voting activity

indicated they found the new STWG structure to be helpful for meeting their outcomes' needs. Kristin said she likes the way these meetings were structured this year and feels there is a much more supportive structure around developing metrics.

Katheryn then asked attendees to share their thoughts via a round robin on how they would like the workplan and structure for 2023 to change. Katheryn specifically asked attendees to provide comments on something they would like to prioritize, anything additional they would like to prioritize, and if they have any suggested changes for how this group meets. Katheryn emphasized this is a preliminary discussion and a full discussion on the next workplan will take place at the January 2023 meeting.

Renee Thompson said she appreciates the structure that has been implemented over the last year and has learned a lot from the other outcomes going through indicator development. Renee said doing the deep dives on other indicators is not directly helpful to her as an outcome representative.

Breck shared that the new workgroup structure and the focus on indicator development have been great steps for the STWG. Breck asked why this year had such a large focus on indicator development and if we could expect to see the same trend next year. Katheryn said it is a combination of two things. First, there was a backlog in reviewing indicators previously. Second, there was a lot of newly available data and much interest in developing new indicators. Katheryn expects this focus on indicator development to continue into next year.

Doreen said she needs to review the workplan in greater detail before she can provide feedback on what she would like to see in the next iteration of the STWG workplan. However, Doreen did express that she feels good about what STWG accomplished in 2022, especially the additional support for the development of new indicators. Katheryn suggested she send a survey to the workgroup with the materials presented today along with a request for workgroup members to review those materials, indicate what they would like to keep the same in the STWG, indicate what they would like to change in the STWG, and provide any additional feedback. Katheryn emphasized the point of this email correspondence is to practice adaptive management at the workgroup level and it will begin a larger conversation that will be had at the January STWG meeting.

Kristin asked what roles indicators can play in responding to the recommendations on living resources and shallow waters from the Comprehensive Evaluation of System Response (CESR) report. Kristin said there may be strong linkages to make there. Doreen agreed this is an important question.

Kristin emphasized setting Specific, Measurable, Achievable, Reasonable, and Timely (SMART) goals with indicators so that we can improve the measurability of outcomes. Kristin said developing indicators for outcomes with qualitative language should be a priority. Katheryn agreed and said that was part of the purpose behind the new STWG structure in 2022. Katheryn said this conversation can be continued in January, where outcome representatives can provide input on how the STWG can continue and improve their support on developing these types of indicators. Another priority topic for January

can be addressing indicator development resource needs, like staffing and financial needs.

Renee asked about procedures for releasing preliminary data partners have asked to use. Renee explained she has been working closely with Chesapeake Conservancy and many other partners to produce the 2022 Protected Lands dataset and while they are in agreement on the total number, they are still finalizing the ownership types. Renee asked who the final approval is on releasing draft, preliminary numbers the team is comfortable with so the partners can use the data before it is published. Katheryn said typically Rachel Felver is the contact for publishing numbers internally vs externally. Kristin said back in the summer of 2022, there was interest from the Chesapeake Conservation Partnership and National Park Service about using the Protected Lands data for America the Beautiful, but that it was then dropped. Doreen Vetter added that getting the numbers finalized, the documents reviewed, and the data posted on ChesapeakeProgress is what drives what can be discussed publicly and when. Doreen said this process is important because it involves quality assurance and quality control, which is why the Protected Lands data has not been finalized yet because Renee discovered some issues with it during that process and has been working to resolve them. Doreen said the exceptions to this policy have been when an indicator is near finalized and they outcome team wants to use that data in their quarterly progress meeting with the Management Board. Doreen said she would be concerned going beyond that precedent and sharing the numbers outside of the partnership given the concerns Renee flagged earlier this year. Renee said she is inclined to agree and is not sure what the response to the Chesapeake Conservancy should be if they decide to go forward. Renee shared that Joel Dunn of Chesapeake Conservancy plans to report the overall number for Protected Lands but will leave off the owner attribution. Doreen asked where he plans to do this release and at what time, but Renee did not know.

2:30   Adjourn

Participants: Alex Gunnerson, Ann Foo, Barbara McGuinness, Breck Sullivan, Caroline Johnson, Catherine Krikstan, Doreen Vetter, Jamileh Soueidan, Jeremy Hanson, Julie Mawhorter, Katheryn Barnhart, Katie Brownson, Kristin Saunders, Qian Zhang, Renee Thompson, Sam Austin, Scott Heidel, Sophie Waterman.