



Status and Trends Workgroup Meeting

Monday, August 2, 2021

1:00 PM – 3:00 PM

Join by Webinar

Meeting Number: 120 315 6871 Password: **STWG**

Webinar: <https://umces.webex.com/umces/j.php?MTID=m7b071f4720ce7d0fc7aa34b6de079f47>

Or Join by Phone

Conference Call: +1-408-418-9388 Access Code: 120 315 6871

Meeting Materials:

https://www.chesapeakebay.net/what/event/status_and_trends_workgroup_august_2021_meeting

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

AGENDA

1:00 Opening and Roll Call - Katheryn Barnhart, Coordinator

1:05 [Communicating Progress on the Healthy Watersheds Outcome](#) – Renee Thompson

Renee Thompson, coordinator of the Maintain Healthy Watersheds Goal Implementation Team (GIT), will present on progress towards developing interim metrics for this outcome that would allow us to quantitatively communicate the impact of GIT management actions on this outcome.

The question Renee focused on for the presentation was whether something could be said about sustaining the watershed because they are in the process of gathering a lot of data and doing analysis on their decision support tools. They are not at a place where they can make decisions and state the progress of the outcome. They do have a baseline to identify what states consider to be their identified healthy watersheds and created a map for it in 2017. Each state and jurisdiction have their own definition of watershed health which includes a variety of different types of biological, recreational, and economic data. The challenge is what can be said about watershed health as a whole with regionally available data that they are developing across lots of different silos at the CBP and other partners. The Chesapeake Healthy Watershed Assessment (CHWA) is based on the EPA Healthy Watershed Assessment and uses regionally available information in the Chesapeake Bay Watershed. It includes information on landscape condition, hydrology, climate change, and more. They also worked with a contractor Innovative Inc. to create [the Chesapeake Healthy Watershed Visualization Tool](#). In addition to the metrics related to watershed health, they have also developed a suite of vulnerability metrics, and they can look at them in relation to other factors to make management questions and decisions. It may also be a tool for refining where one might put conservation or protection resources depending on if the area is resilient. They are working to refine the CHWA and working closely with Maryland to improve it through a project.

Discussion:

Peter Tango asked which of the excellent metrics are measured repeatedly thought time to allow change over time to be measured? Renee stated the land change data is updated repeatedly and the DEIJ metrics are pulled from census data.

Kristin Saunders commented the signal tells you to look more closely because the local folks have told us they can't watch and monitor everything.

Given these conversations about resources and available data about indicator development, Renee proposed three different interim indicators. Renee asked if people agreed with these indicators. They include:

- Proportion of state identified HW that are not protected and under threat of development./Pristine watersheds vulnerable to land use change.
- Presence of brook trout despite changing climate conditions/Brook trout watersheds resilient to climate change (conservation potential/signal of "sustained."
- Diversity, Equity, Inclusion, Justice (DEIJ) – watershed health and vulnerability as related to health risk, underserved, low income or percent non-white.

Kristin Saunders said she likes these generally. Wondering if there is a complementary indicator to Brook trout that would be from more tidal areas (more for balance than anything)? The University of Maryland Center for Environmental Science's recent addition of the social indicator might help too

Carin Bisland said one of the items she is struggling with is that the outcome says that 100% of the healthy watersheds are going to remain healthy. A lot of the indicators discussed are about threshold indicators to help manage toward keeping the healthy watersheds healthy. She thinks that is really critical. She wonders if the states have criteria they use to measure the ones that are state identified to see if they are still healthy. Renee said the metric consistent across all of them is stream health. She wants to focus on the relationship between things they can measure remotely and have repeatable high quality data compared to focusing on things that are less consistently monitored. The short answer is no, the states do not go back and see if they are still healthy. There's a huge monitoring gap. Carin says this is a good thing to remind the Management Board during her Quarterly Progress Meeting.

Peter Tango commented he is concerned how consistent across time the Brook trout information is for the possible interim indicator. There is a lot of discussion in progress for consistent data. For the DEIJ indicator, the Susquehanna Report Card has a social index that might be useful. Renee commented John Wolf has put one together too. She pulled out the metrics, but a social index rolls them all into one.

Carin Bisland loves the idea of the second bullet on brook trout if they can do it. Kristin, the complementary indicator in tidal waters may be Submerged Aquatic Vegetation (SAV). Specifically, something like eel grass. Is eel grass surviving in higher temperatures in some areas and why? Renee has talked with Brooke Landry about using SAV data. She doesn't feel they are at a point of understanding and analyzing the data, but it could lead to some good cross GIT discussions.

Kristin Saunders stated in essence what the indicators would be saying is the interim canaries are vulnerable people, vulnerable land, vulnerable brook trout and vulnerable SAV.

Britt Slattery commented there is (was?) a tidal IBI in MD - at least one was under development as a parallel to looking at benthic critters in freshwater. Peter Tango stated yes Britt, the tidal benthic work continues and is an excellent, consistent index that is a good living resource response measure to habitat conditions. It is also computed baywide as well as subsegmented to help dissect where conditions are improving, stable or degrading. Renee said she would like to see this data.

Breck Sullivan stated the CRWG fully supports the second bullet. The workgroup includes this work and their support in the Logic & Action Plan. The workgroup is very interested on how the areas are resilient and conservation potential for other areas.

Renee will follow up with Katheryn Barnhart once she is able to create draft maps.

1:55 Chair nomination

Caroline Donovan, University of Maryland Center for Environmental Science (UMCES), has been nominated to be chair of this workgroup. Katheryn will ask the group if they approve of her nomination. If so, the request will be brought to the larger STAR workgroup.

Carin Bisland said having Caroline Donovan as the chair brings the work of the UMCES report card and their development of indicators to be integrated into the Status and Trends Workgroup. She is also involved in the Chesapeake Monitoring Cooperative.

Katheryn Barnhart asked the workgroup if anyone does not agree with the nomination of Caroline Donovan. There were no disagreements so Katheryn will bring this nomination to STAR to be approved.

2:05 Housekeeping – Katheryn

Opportunity for workgroup members to share progress towards previous June meeting’s action items and also to propose any future agenda items they would like to pursue.

Action	Status
Katheryn -Review the menti results and comments provided in the meeting minutes to help draft SOP	In progress – will try to have a draft ready for review before next workgroup meeting
Revisit process of looking at the associated indicators and then look at the overall progress of the outcome when determining how to display trends, specifically on Chesapeake Progress - Bring to STAR?	In need of revisit – Katheryn is open to others helping with this process. Peter Tango said he can help. Katheryn will reach out to Kaitlyn May to work on a presentation to bring to STAR with the support of Peter Tango and Scott Phillips.
Toxic Contaminants Research Outcome: develop quantitative indicator(s)	From Emily: Have plans to discuss the indicator ideas with the TCW during an August 11 meeting and hope to present to STWG at a future meeting
Fish Habitat Outcome: present on their efforts to develop indicators	From Bruce: Outcome going through the SRS review in August and modifying our science

	needs and workplan as part of the process. Trying to focus priorities and identify indicators they anticipate developing for fish habitat, but instead of developing a metric/indicator that tracks progress toward the outcome, would prefer to develop a suite of indicators that evaluate habitat condition and living resource responses.
How do we get the Water Quality Standards Attainment and Monitoring (WQSAM) outcome and others in category of “Need data support” to the category of having targets, indicators and data support?	- Next meeting: presentation from Peter Tango on quantifying qualitative outcome language using WQSAM as an example - PSC request on improving CBP monitoring networks
Discuss with the Management Board what type of indicator/outcome status do they want to prioritize? (i.e. indicators that need data support or creating metrics for qualitative indicators)	In need of revisit –June STWG meeting suggested starting with Toxic Contaminates, Healthy Watersheds, and Climate. Is this still a priority? Carin Bisland suggested working on the WQSAM outcome to help the Management Board (MB) understand how to create metrics for qualitative indicators. Katheryn will readdress this topic after Peter Tango’s presentation at the next meeting.

2:55 Next steps and Actions – Breck Sullivan, Staffer

- Peter Tango will share information with Renee about the tidal benthic data.
- Katheryn will follow up with Renee on the interim indicators. Renee will create some maps for them and show them at a later meeting.
- Katheryn will bring the nomination of Caroline Donovan for chair to the next STAR meeting to be approved.
- Katheryn will provide a draft SOP to the next meeting.
- Members can reach out to Katheryn if they are interested in helping form the discussion around how to display trends on Chesapeake Progress. She will bring this presentation to STAR.
- Katheryn Barnhart will reach out to Peter Tango offline to work on the WQSAM presentation for the MB.

Adjourn

Participants: Breck Sullivan, Renee Thompson, Katheryn Barnhart, Carin Bisland, Caroline Johnson, Peter Tango, Rikke Jepsen, Kristin Saunders, Gary Walters, Mike Mallonee, Katlyn Fuentes, Roger, Kaitlyn May, Angie Wei, Britt Slattery, Cindy Johnson, Dustin Shull, Garrett Stewart, Greg Allen, John Wirts, Marisa Baldine, Julie R