



Scientific, Technical Assessment and Reporting (STAR) Meeting

Thursday, March 28, 2019
10:00 AM –12:30 PM

Conference Line: 929-205-6099 Meeting ID: 984-334-403

Webinar*: <https://zoom.us/j/984334403>

Meeting Materials:

[https://www.chesapeakebay.net/what/event/scientific technical assessment and reporting star team meeting march 2019](https://www.chesapeakebay.net/what/event/scientific_technical_assessment_and_reporting_star_team_meeting_march_2019)

CBPO Location: Fish Shack

*If you are joining by webinar, please open the webinar first, then dial in.

AGENDA

Action Items:

- ✓ Consider a future meeting discussion on sturgeon.
- ✓ Sustainable Fisheries GIT asked for STAR's help on finding funding for the array at the mouth of the gate tracking fish.
- ✓ A STAR staffer will send out a reminder 2 weeks before May 1st about the due date for CERF abstracts.
- ✓ Continue to work on the Strategic Science and Research Framework, gather a resource assessment, incorporate STAC recommendations, engage STAC members, and develop a plan to integrate the framework into state and federal budgeting processes.
- ✓ In about a month, John Wolf will send out the URL for the Open Data Site for feedback.

10:00 **Welcome, Introductions & Announcements – Bill Dennison (UMCES)- STAR Co-Chairs, Peter Tango (USGS) and Emily Trentacoste (EPA), STAR Co- Coordinator**

Bill Dennison made an announcement from the STAC Quarterly Meeting earlier this week. STAC plans to take a deep dive into the state of the science for the 2025 TMDLs. However, Gary did not get the impression that it pushed past the TMDL.

Bill Ball mentioned how this endeavor will include more than just looking at the TMDLs when incorporating the Strategic Science and Research Framework.

Gary suggested two ways for STAC to include the entire program: 1) Suggest it needs to be broadened; 2) Realize this endeavor is going to take up a significant part of the STAC agenda for a long time, but it leaves the rest of the agenda for other items.

Bill Dennison stated that when it was first proposed he thought it was a step backwards. He thought we had moved past just TMDLs and towards the 31

outcomes. The important part is STAC is motivated to be active and focused. He believes there is way to steer this to include the bay and the watershed.

Brian also gave his takeaways from the STAC meeting. He agrees initially we were thinking about water quality attainment, but it has broadened. He also agrees it will be a significant effort, but the new additions to STAC membership will help broaden it.

Bill Dennison stated peer review publications should come out of this, and we need to focus more on completing these throughout the process.

Upcoming Conferences, Meetings, Workshops, & Webinars-

- MCOG April 1st Salt Workshop- Issues tracking salt applications/monitoring options for tracking change in WQ to managing salt (by invite)
- [Coastal and Estuarine Research Federation Conference](#) (CERF), November 3 – 7, 2019. Mobile, Alabama. Abstracts due May 1, 2019.
- [Annual Water Resources Conference](#) (AWRA), November 3 – 7, 2019. Salt Lake, Utah. Abstracts due May 6, 2019.
- [Association for Environmental Studies and Sciences](#) (AESS), June 26 – 29, 2019. University of Central Florida.
- [International Symposium on Sustainable Systems and Technology](#) (ISSST), June 25 – 27, 2019. Portland, Oregon.
- [Esri User Conference](#), July 8 – 12, 2019. San Diego, CA.
- [AGU Understanding Carbon Climate Feedbacks](#), August 26 – 29, 2019. San Diego, CA. Abstracts due May 8, 2019.
- NOAA Science Seminar – “Carbon Cycle of North America and Research Needs for Enhancing CO₂ Removal.” April 2, 2019. <https://www.nodc.noaa.gov/seminars/index.html>
- NOAA Science Seminar – “The Social Implications of Pervasive Carbon.” April 9, 2019. <https://www.nodc.noaa.gov/seminars/index.html>
- NOAA Science Seminar – “State of Carbon in Soils and Agriculture: Linking North America Science to Global Efforts.” April 16, 2019. <https://www.nodc.noaa.gov/seminars/index.html>

10:10

Communication Team Update – Joan Smedinghoff (Alliance for the Chesapeake Bay)

The Chesapeake Bay Program featured a published a paper that Qian wrote on data analysis.

https://www.chesapeakebay.net/news/blog/chesapeake_bay_water_quality_inches_toward_a_new_record

Bill Dennison mentioned how they are currently calculating the Chesapeake Bay Report Card scores. They haven't completed the SAV or Benthic IBI scores, but the other five indicators only dropped a few points. As a results, it will not drop a letter grade. The Chesapeake Bay Foundation had a huge drop in their score that they released earlier in the year, but the data does not support it. The initial

result will not set us back too much, but we must be careful when we release the news due to interannual variability. By next month, they will have probably have the data and release the report card in May.

Bruce mentioned they are putting together an article about the continuing low salinities in the bay. They are trying to link the low salinities to what it will mean to a suite of living resources such as striped bass spawning and oysters. Bill Dennison asked if it will reveal bad news. Bruce stated it will be a mix because low salinities is not good for oysters, but it lowers disease and increases spawning for striped bass.

Bruce also went to a sturgeon meeting to learn about North Atlantic sturgeon recovery. After several years of trying to catch young sturgeon, they caught 283. The theory is that the high flows may have helped because it cleared areas and increased spawning habitat. NOAA is looking more into this theory. He also stated that the striped bass numbers are low. The stock is overfished, and overfishing is occurring. They are going to do an article of what those numbers are and what it might mean for the Chesapeake Bay and management. Bruce thinks the communication team should do an article on North Atlantic sturgeon. It is not part of an outcome, but it is listed an endangered species so there is a government mandate to study them and recover the species through healthy habitat which becomes a fish habitat issue. Bill Dennison mention a graduate student at VIMs, Katie May Laumann may be a good contact to learn more about sturgeon. Bill Dennison stated a future meeting should include a discussion on sturgeon.

Bruce also mentioned how funding by NAVY for a gate at the mouth of the Bay is ending. The array at the mouth is going to be funded through 2019, but uncertain after that. Without this gate, they won't know what species are coming in and out such as sharks, cownose rays, striped bass, and more. It is helping them learn about how fish are moving and can help with connections to climate change conditions. They are going to put this on their science needs list, but he is asking STAR to find a way to get funding for it. Bill Dennison mentioned maybe there is a way to connect citizen science with it like the dolphin app.

Rebecca gave an announcement on upcoming work for the communications team. The theme for Earth Day is endangered species so a story on sturgeon would fit in nicely. Yesterday the press release for water quality came out, and next Tuesday, the Bay Barometer will be released. They are doing a series of climate change blogs with updates on high precipitation and the high freshwater flows. They are starting to think about the winter dredge surveys and dead zones so would like input from people whenever they hear about those topics or working on it.

10:20

CERF Updates – Gary Shenk (USGS), Jeni Keisman (USGS)

Material: [Presentation](#)

An update will be provided on planned CERF sessions so CBP folks can consider abstracts by May 1.

Jeni presented on the CERF session Qian Zhang will be leading titled [Innovative approaches for estuarine/watershed data analysis mining and visualization](#). The motivation for this session is from the push a few years ago for more advanced approaches to data analysis because more information can be pulled out from the data but more significant techniques are required. Jeni states this session is to not only promote the Chesapeake Bay Program research but also the research from around the country. This session encourages abstracts that feature innovative analytical approaches for understanding ecosystem conditions and changes across a range of time, space, and seasonal scales. Published or ongoing research contributions on water quality and biological resources in both coastal and inland waters are welcomed.

Gary presented on the CERF session [Responsive, relevant, ready: new directions in coastal science and modeling](#). The session examines the changes underway in the science and modeling assessment of the Chesapeake Bay to meet future challenges. The session is looking at the midpoint assessment essentially, but they want to bring in other ideas such as climate change and multiple model approaches. It is supposed to be a broad session.

Bruce asked if any sessions will be about adaptive management. Bill Dennison and Jeni both mentioned the following sessions:

- [Identifying restoration priorities and evaluating socio-ecological benefits at multiple scales](#)
- [Solutions-based science to support coastal environmental management: approaches and challenges](#)

10:30

Report out from SRS Strategic Science and Research Framework Session– Kristin Saunders (UMCES)

Material: [Notes](#)

Discussion on major common themes and takeaways throughout the session.

Everyone agrees that prioritization of science needs is important, but not everyone agrees on how to create a systematic way of doing this. A regular structure of prioritization such as 1 – 53 will not work. In this prioritization of science, there will be two types: 1) Short-term operation science which is more guided towards the GIT funding process, GIS analysis, and work that could be completed in a year; 2) Longer-term fundamental science which may need more than two years. This effort will also tie in the longer-term, deep dive, science

research needs to incorporate into the framework. Kristin mentioned they don't know how to do that right now, but they want everything to loop back to each other and have everything connected. She stated that there are other questions that need answering that include but are not limited to how do we integrate the science framework outputs into the budget process for state and federal money as well as for national foundations? The goal is to have this framework available to hand off to the states and federal agencies for whenever they come to the Bay program with opportunities.

Bill Ball mentioned the CRC board would like to see a national or regional board that looks into the discovery science that is needed. He would like to see the Chesapeake Bay Program help champion this effort.

Bill Dennison stated the work presented to the EC in relation to this framework should coordinate with what STAC brings to the EC.

Jeni recommend to contact Mike Grunge. He is very insight on how to go about the prioritization in a structured way to link the decision to the needs. Kristin said he has talked before to the Management Board, but maybe it will be good to bring him back.

10:45 **STAC Feedback on Strategic Science and Research Framework- Rachel Dixon (CRC)**

Rachel will provide feedback from March STAC meeting on STAR's work for the science needs list and strategic science and research framework.

Rachel stated there is an ongoing conversation on how STAC could contribute to the long-term prioritization in the framework. STAC members mentioned this is a key part to keep in mind with talking with program officers when they are deciding their funding strategies. Next steps include STAC taking a proactive step in the longer-term prioritization. STAC will regroup with the small subcommittee and get some new members. Annabelle and Breck will continue to incorporate STAC recommendations and ask STAR to continue to engage STAC with needs that are noted as research.

Rachel will be departing this summer to go get her PhD at VIMs.

11:00 **Strategic Science and Research Framework Update – Emily Trentacoste (USEPA)**
Material: [Presentation](#)

Discussion on next steps for the strategic science and research framework, and an opportunity to gather ideas for next steps. Some next steps include continuing to incorporate STAC recommendations into the list, STAC looking at

long-term research needs, evaluating the resource assessment GITs provided, and contacting other agencies about their available resources.

Thoughts and feedback from the SRS Biennial meeting include clarifying Management Board's role and how the GITs utilize them. An idea that came up was for GITs to come forward with a specific ask to a specific MB member. Other items are how to link the strategic science and research framework to the SRS process and engaging agency representatives on these science needs. Next steps are continuing to link STAC recommendations with the science needs, more consistently engage with STAC, and pull together a resource assessment. Also, it needs to be determined how this framework is going to be shared with different science providers. A database with all this information is a possible solution.

Bill Dennison announced there is an RFP out by the Chesapeake Bay Program through STAC to initiate a science synthesis project. It is due May 10th. It is in effort to get the academic side more involved.

Bill Dennison asked for recommendations on how to engage the academic side more. Jeni talked about her ITAT meetings which gathers a different audience for a scientific presentation once a month. Gary states how we are missing a process in which to contact academics. Rick was able to go and talk to the right person, but there wasn't a process, and without him the Chesapeake Bay Program is missing that connection now. Brain mentioned how this list of science needs can be given to the CRC board and then disseminated to the members. This will help those writing proposals because they need to fit a certain science call. Kristin suggested to reach out to historically black colleges with this list too.

11:30 Open Data Site Discussion – John Wolf (USGS), Angie Wei (UMCES), & Andy Fitch (USGS)

Material: [Presentation](#)

The Chesapeake Bay Program Office is developing an Open Data site to facilitate data discovery and access to our GIS (and potentially other) data holdings. The Open Data site is based on existing technologies that are used by numerous partners around the watershed. This presentation will provide a preview of the site and raise several issues for discussion among STAR representatives regarding purpose, scope, and potential workflows for populating and managing content.

John briefly presented on the new open data site for the Chesapeake Bay Program and the reasons behind it. Angie gave a live demo. This is a work in progress and there are future potential roles for the Bay Program staff to help complete it. Coordinators and staffers could nominate certain content for inclusion and continually monitor portal content for usefulness to GITs and

Workgroups. An aspect this data site cannot provide is raster data, but it will point the user where they can download the data.

Bill Ball asked if Angie could provide him with a short paragraph describing this site so he can forward it and to STAC members. John asked another week or so to make it more stable before sending it out for feedback.

Bill Dennison asked if the GAM work done by Rebecca was on this site. Jeni mentioned it was on the Watershed Dashboard.

Renee asked if the dashboard provided data to download and how the dashboard was created. Emily stated the dashboard started around WIP development and how local folks didn't know what data was available and where to find them. The data behind the dashboard is available, and in the future users will access to it on the dashboard.

When sending out the url, Jeremy suggested to provide a summary document which states what is and what is not provided on this data site and why.

12:15 Adjourn

Next Meeting Dates: April 25th

Bill Dennison, Angie Wei, Kristen Saunders, Annabelle Harvey, Rebecca Chillard, Jeremy Hanson, Andy Finch, Renee Thomposn, John Wolf, Jeni Keismen, Bruce Vogk, Gary Shenk, Cuiyin Wu, Emily Tentacoste, Dave Strong, Jennifer Dopkowski, Brian Benham, Jennifer Greiner, Liz Chudoba, Laural Abowd, Mark Monaco, Morgan Corey, Michelle Williams, Bill Ball Paige Hobaugh, Breck Sullivan, Sebastian Donner, Megan Thyng, Tom Parham