Scientific, Technical Assessment and Reporting (STAR) Meeting
Theme: Connecting CBP Science with Local Entities

Thursday, October 26, 2023
9:00AM – 11:00 AM
Meeting Materials: [Link](#)
This meeting was recorded for internal use only to assure the accuracy of meeting notes.

ACTION ITEMS

- **STAR will work with the Strategic Engagement Team to develop a more comprehensive outreach plan for engaging with local communities, stakeholders, and underrepresented groups from the start of tool development. An example of what this might look like is developing the tributary summary story maps with input from local partners throughout the process.**

  - **STAR will keep in mind that communities that are on the front lines of climate change and environmental challenges are often underserved and should be a priority focus.**

- **STAR will support the work of the Beyond 2025 small group on shallow water to more clearly define what is meant by the term shallow water.**

- **STAR will compile notes on the Most Effective Basin discussion from various STAR meetings and share with the CESR authors.**

Meeting Minutes

9:00 AM   **Welcome, Introductions & Announcements –** *Bill Dennison* (UMCES), *Ken Hyer* (USGS) and *Kimberly Van Meter* (Penn State) - STAR co-chairs and vice chair, *Breck Sullivan* (USGS) STAR Coordinator, *Peter Tango* (USGS) CBP Monitoring Coordinator

Announcements

[USGS Chesapeake Accomplishments and Highlights for 2023](#).

Strategic Engagement Team (SET) Update – *Marisa Baldine (CRC)*

- SET created a [one pager](#) which summarizes their services, with the help of the coordinators and staffers. This was brought to the Management Board for approval in November. Jurisdictional representatives will be asked to contribute to the final version.

- Executive Council (EC) meeting recap:

  - The 2023 Executive Council [meeting recording](#) and [meeting materials](#) are available online.

  - Reaching 2025 recommendations were presented.

- The Agriculture Committee topic was brought up, but it was only an informative topic and could not be decided because there was not enough time for discussion beforehand.

- The communications team produced a [press release](#) and [blog post](#) summarizing the meeting.

- Greg Barranco said he is working with jurisdictional representatives to schedule the upcoming Principals' Staff Committee (PSC) meetings so they can continue to move forward on addressing the topics discussed at the EC meeting.

- Bill Dennison said not many EC leaders were present, but we were happy to have Janet McCabe and Wes Moore present.

- Bill said there were issues with the livestream and commented that the hybrid can be difficult.

Beyond 2025 Steering Committee Update – *Ken Hyer (USGS) and Peter Tango (USGS)*

- Breck Sullivan said at the last Beyond 2025 Steering Committee meeting they discussed the topics of small groups and who they are looking to bring in. They asked for a small group to decide which topics should be discussed. Breck and Peter provided some input.

  - NOTE: The committee approved the small groups after the October 26th STAR meeting.

- Peter Tango said the committee also talked about any topics people felt might not be represented. The rest of the October 26th Beyond 2025 meeting will be focused on public engagement.

- Ken Hyer said one of the emerging themes has been the critical role of the Goal Implementation Teams (GITs) and workgroups. Although we have ERG and the steering committee, this is not happening in a vacuum because the GITs have a critical role in providing input and feedback.

  - Peter said the questions of expertise on emerging science issues are distributed across the GITs and workgroups.

  - Greg said there is a limited number of small groups. Outside expertise is welcome because they recognize they cannot cover everything.

  - Kristin Saunders said we have been working behind the scenes to make sure that whatever shape the small group effort takes, that the goal teams and subject matter experts are intentionally connected to the small groups to help define and focus those discussion. STAR needs to support that matchmaking effort.

[STAR Accessibility Survey](#)

STAR Coordination Quarterly Meeting – The quarterly [STAR Coordination Meeting](#) was held on Thursday, November 2nd from 3-5PM and will be focused on the collaboration between STAC and STAR, and the roles of STAC and STAR in the updated Strategy Review System and science needs processes.

- Breck said anyone interested in the STAR Coordination meeting is welcome to join. One can consider this as a GIT meeting where we bring together all the coordinators, chairs, and staffers within STAR's 7 workgroups, but others are welcome too.

Upcoming Conferences, Meetings, Workshops and Webinars

- [Chesapeake Watershed Forum](#) – November 3-5, 2023, Shepherdstown, VA.
- [Mid-Atlantic Planning Collaboration (MAPC) Webinar: High-Resolution Land Use/Land Cover and its Applications to Land Use Planning](#) – November 9, 2023, 12:00PM, Virtual.
- [CERF 2023 Conference: Resilience & Recovery](#) – November 12-16, 2023, Portland, Oregon.
- [Maryland Water Monitoring Council Annual Conference](#) – November 17, 2023, Linthicum, MD.
- [National Conference on Ecosystem Restoration](#) – April 14-19, 2024, Albuquerque, New Mexico.
- [Chesapeake Community Research Symposium](#) – June 10-12, 2024, Annapolis, Maryland.

9:15 AM   Lightning talks: Success Stories on Utilizing CBP Tools

The CBP develops tools and products to better communicate scientific results and aid in science informed management decisions. The presenters showcased an example of utilizing CBP products to inform their local decisions. CBP staff also shared select new tools and resources.

Lightning talk presenters included Allyson Gibson (Lancaster Clean Water Partners), Nora Jackson (Northern VA Regional Commission), and David Wood (Chesapeake Stormwater Network). Examples included use of MARISA Intensity-Duration-Frequency (IDF) change factors, [use of land use/land cover data in the Occoquan Watershed Program](#), use of IDF curves to create new stormwater ordinances in Virginia Beach, and more. Alex Gunnerson (Chesapeake Research Consortium) also shared the Tributary Summaries Story Maps, a new resource from the CBP.

Summary of presentations

[Land Use Data – Nora Jackson](#)

Nora explained how the Northern Virginia Regional Commission (NVRC) utilized the 1-meter land use data to calibrate the Occoquan Basin Computer Model, thus supporting the mission of the Occoquan Basin Nonpoint Pollution Management Program to provide clean drinking water for approximately 1 million residents. More information can [be found here](#).

[IDF Change Factors – Nora Jackson](#)

Nora explained how the NVRC utilized the IDF change factors to translate the data into policy, regulation, and local ordinances. This comes down to proving the cost of adaptation is cheaper compared to no action.

[Lancaster Clean Water Partners – Allyson Gibson](#)

Allyson shared some lessons learned from working with the Chesapeake Conservancy's high resolution land use data. The first lesson was focus on rapid stream delisting because it allows for fastest recovery, efficient implementation, and building momentum. Partnership with Chesapeake Conservancy was the key to success for this effort because they provided technical skills. Equally as important was partnership with local stakeholders because of their hyper-local knowledge. Index of Biotic Integrity (IBI) monitoring data was used to keep track of progress.

[CBP Tributary Summary StoryMaps: Communication Tool Describing Water Quality Trends to Inform Management Decisions – Alex Gunnerson](#)

Alex began with an overview of the tributary summaries, their purpose, and intended audience. Alex then explained how to reach a different audience, a Chesapeake Student Recruitment, Early Advisement, and Mentoring (C-StREAM) intern was brought on (Anoosh Tauqir) for the summer to develop story maps to communicate the information in these tributary summaries. Anoosh co-produced a story map on the Rappahannock with Friends of the Rappahannock. Anoosh also solicited advice from other organizations, like Wicomico Environmental Trust and Nanticoke Watershed Alliance. This approach created a template for other Chesapeake Bay tributaries that ITAT will implement.

Adjusted IDF Curves Informing New Stormwater Regulations – David Wood

David spoke from his experience at Chesapeake Stormwater Network (CSN) being a GIT Funding Project lead to update IDF curves with new climate change projections. After developing an initial tool, the team spoke with stormwater practitioners around the Chesapeake Bay watershed to get insight into how they

may or may not use the tool. This survey learned that practitioners are interested in the practicalities of how to apply these tools and wanted a case study. David said CSN began producing training tools to fulfill this need.

Questions for presenters:

- What are the lessons learned from each example?
- What were the elements that allowed the utilization of the tool to be successful?

9:40 AM   Aligning Local Entities and CBP Science Tools – Panel Discussion

From the [2023 Biennial Meeting Report in Brief](#), participants shared that the CBP has created many technology-driven tools, but they are hard to use or require expertise. STAR invited the panel participants, along with representatives from the Local Leadership Workgroup (LLWG), the Local Government Advisory Committee (LGAC), Stakeholders' Advisory Committee (SAC), and Diversity Workgroup (DWG) to start a discussion on finding a way to direct potential users to the tools and understand how the CBP can make them more accessible and easier to use for local decisionmakers and practitioners. Connecting our partnership to existing networks and organizations close to local leaders and communities, and moving information in both directions, has the potential to create beneficial feedback loops that inform our work.

Discussion Summary

- Breck posed the question "how can the resources and knowledge of the CBP align with local priorities?"
    - Allyson said county wide action plans are key. The CBP has been a key supporter on this.
    - David said with MS4 permits, alignment is built in, but only a few are highly engaged. Many of the local governments don't have time to invest in training or new applications that are not obligatory.
    - Allyson said this conversation is a great demonstration of the importance of relationship building. People like Laura Cattell Noll and Jennifer Starr are critical for building these relationships.
    - Jess Blackburn said they often hear at Stakeholders' meetings that better links between environmental issues and human health is often something that is missing and would help frontline organizations to galvanize local communities.
        - Alex mentioned that Anoosh heard from Wicomico Environmental Trust that bacteria monitoring data is a key metric for engaging local communities.
        - Bill said human health is an important connection to environmental justice.

- Liz Chudoba said the Chesapeake Monitoring Cooperative (CMC) is working to expand and standardize bacteria monitoring with non-traditional monitoring groups. Ideally, we will have more data over the next few years. Liz expressed this is a great conversation to have.
    - Jennifer Starr said we need to develop more comprehensive communications plans and a guiding mission for our work.
        - Allyson said in Lancaster County, they have a local communications plan that we're happy to use or make more robust if it can be helpful for a specific audience.
- Kristin asked each of the panelists to tell us where they learned about these tools and whether they needed support to learn how to use them? Part of our effort to move information to decision makers is to understand how to effectively get these tools into user hands. We welcome ideas of how we get the word out if you have suggestions.
    - Nora said the tools need to be part of the path of least resistance. In the case of NVRC, they know about CBP tools because Nora and Ally were both staffers and Norm Goulet is involved in the Chesapeake Bay Program's Urban Stormwater Workgroup (USWG).
    - David said we cannot forget about the private sector, especially engineering firms that are contracted to do this work. They should be a large focus of outreach.
        - Bill asked if CSN does training as part of their outreach.
            - David said CSN is unique because outreach is part of their job. Outreach is mostly focused on local government because they have less formalized training regimens, whereas private sector can already have specific training procedures.
    - Laura said these panelists are wonderful examples of the value of local or regional technical assistance (sometimes called circuit riders). See LGAC's recommendations to the Executive Council this year on the need for expanding this support.
- Bruce said being able to maintain the tools and local connections seems important. It is important to consider this maintenance in mind from the beginning.
    - Ken asked if we have a best practices plan for ensuring improvement with local engagement? Circuit riders?
        - Allyson said we are looking for a people person who also has the technical background. This can make it difficult to hire because we are looking for a unique intersection of skills.
        - Kristin said internally in the CBP, the SET is working on this. The LLWG under Laura Cattell Noll has been producing a series of training webinars to teach local government staff on how to do this.

- Allyson said the training webinars are an important tool.

▪ David Wood said there is also a broader network of capacity-building organization around the watershed that are actively thinking about how to do this connecting most efficiently - led by the Alliance for the Chesapeake Bay and Choose Clean Water Coalition. Might be worth connecting there as well.

o Breck asked what are some challenges we have with encouraging tool utilization? Why don't people use the tools?

▪ Jess said lack of awareness of tools and how to use the data are the biggest concerns.

- Julie Lawson agreed and gave the example of trash clean up programs being added into reporting for Anacostia Trash TMDL. Hyper-local organizations were doing clean ups, but DOEE had them under the umbrella of community health and not water quality, so they were not being counted until Julie and Matt Robinson worked together to document these efforts in the framework of the TMDL.

▪ Julie Lawson asked for clarification on the definition of tool in this context. She asked because part of the reason advisory committee members have not said as much during this meeting is because they do not know exactly what the CBP is talking about.

- Breck said she would define tools broadly in this context, such as a dataset, online resource, or map viewer that informs the work of local and jurisdictional partners. It should help with informing decision-making and producing awareness.

- Ken said he agrees with Breck's definition of tools, and added that these tools should also inform the targeting of resources and management. Ken said he recognizes not every tool is going to be relevant for each partner.

- Breck thanked Julie for asking that question, since it raises a good point about where communication with stakeholders needs to improve.

▪ Katie Brownson said we need a centralized Chesapeake Bay Toolbox website.

- Britt Slattery responded we have the Targeting Tools portal, which includes the people side of tools as well. This webpage will be revamped as part of the project being led by John Wolf, the Chesapeake Conservancy, and Blue Raster.

- Bill said the CBP web team has a new user experience person starting shortly who could help define where the toolbox is sited and how to optimize its effectiveness.
    - Bruce shared he is interested in starting the conversation about shoreline hardening thresholds again. Bruce asked Jennifer and Laura if there are places where communities and decision makers would be interested in applying the metrics available.
        - Laura said she is happy to chat more offline about this, but groups like Envision the Choptank and locales like the Virginia Middle Peninsula would be excellent places to start.
        - Jennifer said she thinks it could be a discussion at a hyper local level.
        - Kristin said this comment came up the week before in the CRC webinar on shallow water. It might be a really good focus for the Beyond 2025 small group on shallow water to seed thinking there also. The idea of living shorelines for coastal resiliency, flooding, marsh migration, fish habitat as a nexus for local landowners is work we want to see happen.
    - Jess said maybe a closer connection to a broad spectrum of funders who provide support to organizations is an easier approach versus trying to link to individual organizations. Use existing networks? In addition to linking with funders, also ensuring local technical assistance providers are aware of CBP tools.
    - Sarah McDonald noted the Mid Atlantic Planning Collaboration Land Use webinar on November 9th had 3 presenters highlight how they have used the data for local and state applications, including developing climate action plans and BMP targeting efforts.
- Kristin Saunders said we need to continue to lift up the stories that demonstrate the utility of the 1 meter data and the continued investment into having that resource. It is costly and not a given it will continue to be funded, so keep the use stories coming.
    - Sarah agreed and said it is great to hear that the data is making a difference in local applications.
    - Jess Blackburn said one of the recommendations from the Stakeholders' Advisory Committee to the Executive Council this year is to consistently fund the 1-meter high resolution data tool so it can be used locally for decision making.
- Kristin said she appreciates that these tributary summaries are finally getting into hands of advocates.
    - Laura Cattell Noll said she commends the co-production of story maps with local partners.
- Breck and Melissa Fagan commented on the representation of the environmental management career development program on this panel. Julie Reichert-Nguyen said it demonstrates the value of the program.

- o Jennifer Starr agreed the program is beneficial, but said it was no coincidence the panel has a strong staffer presence. It is indicative of the challenge to reach partners unfamiliar with the intricacies of the CBP's tools. Staffers are a helpful bridge to these organizations, but former staffers do not work everywhere.

10:30 AM   Most Effective Basins – Discussion

The Comprehensive Evaluation of System Response (CESR) team and STAR members brainstormed criteria for the top five important areas for shallow water habitat for evaluating most effective basins in January 2023 and in August 2023. STAR also discussed structuring science recommendations to pursue and identify what work is currently being done to address CESR's recommendations and what science needs still need to be addressed. STAR looked at identifying the critical uncertainties for the CBP, assessing what tools and resources are available or needed, and what is needed to start implementing the learnings in CESR.

Discussion Questions:

- What criteria are most important to local communities?
  - o Do any of these science related criteria resonate for you?
- What are values from your stakeholders that should be incorporated into Bay Program priorities that are not currently?

<u>Discussion Summary</u>

- Kristin asked if anyone may articulate how to define the current term "most effective basin" since it has been changed several times over the last few years.
  - o Ken said as he understands it, it was a targeting exercise for limited funding led by Chesapeake Bay Commission and CBP to get the most bang for our buck in reducing nutrients.
  - o Kristin asked this question because she believes they used Justice 40 as a layer in the most recent iteration and that may have changed some of the results.
  - o Ken said he thinks that was an additional analysis that they did.
  - o Brittany Hall confirmed it is an additional layer.
- Larry: I think we need to clearly define shallow water. Whether it is encompassing just tidal water, non-tidal waters, or both will drastically affect the scope and shape of the response to CESR's call here. This would also influence actions and the distribution of resources across the watershed. Perhaps the Susquehanna may be less relevant for the shallows compared to other factors.
  - o Ken said he has not heard the shallow waters concept be applied to non-tidal areas, so he would need to think on the implications of this further.

- o Kristin said this is an important question because we do have different understandings of what STAC meant with the CESR shallow water definition. In the last STAC meeting, Kristin understood it to mean the land/water interface in all watershed area. But other people have different understandings. And if we are going for improved living resource response in shallow waters, then at the local level, the recreational and commercial aspects for communities as well as public access and flooding would be angles to explore.
  - o Bruce said we need to think about other currencies of success, like living resources. The CBP is currently structured where water quality improvements are the only successes that are truly rewarded. We need to align our incentives with our goals.
    - ▪ Scott Heidel said this is a great point and also what makes urban restoration so challenging. The bugs and fish that we assess for just really don't stand much of a chance to recolonize regardless of water quality because the habitat is crushed.
    - ▪ Bruce said we need a total habitat goal to pair with TMDL.
    - ▪ Scott agreed and said we assess for habitat in Pennsylvania in the 303(d) list. Scott emphasized critical habitat, threatened and endangered species, recreation, and restorability should be considered for nontidal areas if you want to attract local investment and effort especially in Pennsylvania.
    - ▪ Brittany Hall agreed and said there is much cross-outcome applicability for changing the currencies of success.
- Brittany Hall said the Stewardship Index needs to be further refined as well. But, Brittany emphasized the need to tap into the "likelihood" of adopting actions, with emphasis on communities that have less resources for implementation, but the greatest need.
- Jess said she has heard members of the Stakeholder's Committee say that Most Effective Basins seems to be driven by the Bay Model, so how does that relate to them and their local rivers? Communities were not asked to weigh-in when the MEB targeting was created. Also, Jess agreed with Kristen's assessment of recreation, public access, and flooding. But, Jess is not sure we have the all the right people here for us to "guess" what criteria is most important to local communities. We have to ask them.
  - o Brittany said with the development of all these tools, there should be stakeholder engagement from the beginning. This is an ESSENTIAL practice. Not only do you get the best data, but it is also a ready-made audience for use.
  - o Breck said this is a great point and highlights that we need clear stakeholder engagement.
  - o Kristin said we can carry the lessons of today's meeting to the Beyond 2025 Steering Committee by advocating for the needs of community engagement.
  - o Brittany said really quickly I saw some sticky notes on the Jamboard that we should go for the easy win. I think that is problematic. See my suggestion for greatest socioeconomic need. Reminder that Black and Latino communities are not only most affected but also most concerned, thus present greatest opportunity.

- Breck thanked Brittany for the closing comment and said STAR would keep it top of mind moving forward.

Participants: Alex Fries, Alex Gunnerson, Allyson Gibson, Amy Handen, Ann Foo, August Goldfischer, Auston Smith, Bailey Robertory, Bill Dennison, Breck Sullivan, Britt Slattery, Brittany Hall, Bruce Vogt, Chris Guy, Doug Austin, David Wood, Doug Bell, Eric Hughes, Gary Shenk, Greg Barranco, Jamileh Soueidan, Jennifer Starr, Jess Blackburn, John Wolf, Julie Lawson, Julie Reichert-Nguyen, Katie Brownson, Ken Hyer, Kim Van Meter, Kristen Saacke Blunk, Kristen Wolf, Kristin Saunders, Labeeb Ahmed, Larry Sanford, Laura Cattell Noll, Liz Chudoba, Lorenzo Cinalli, Marisa Baldine, Matthew Kierce, Meg Cole, Megan Thynge, Melissa Fagan, Nora Jackson, Peter Tango, Sarah McDonald, Scott Heidel, Tou Matthews.