

### Background Webinar: Enhancing CBP Monitoring to Improve Data Driven Decision Making

Tuesday, December 13, 2022 10:00 AM – 12:00 PM

Meeting Materials: Link

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

### **ACTION ITEMS:**

- ✓ All participants: Fill out the worksheet and email to Amy Goldfischer at agoldfischer@chesapeakebay.net by close of business (COB) Monday, January 9<sup>th</sup>, 2023. Please also bring a copy to the January 11<sup>th</sup> Meeting.
- ✓ All participants: RSVP via email to <u>agoldfischer@chesapeakebay.net</u> by January 6<sup>th</sup>, 2023 to indicate whether you will attend the January 11<sup>th</sup> Meeting in person or virtually.

### **MINUTES**

10:00 AM Introduction – We will introduce our team, and review today's goals:

- Background on the Enhancing Monitoring Networks report requested by the Principals' Staff Committee (PSC), and a review of the recommendations of the report
- Understanding six core monitoring networks plus toxic contaminants monitoring, their value, and products of the networks
- Current funding status of the networks, and what funding support is needed
- Begin identifying recommendations partners would like to invest in based on their priorities and work
- Feedback on how to make the January meeting effective

10:15 AM <u>Value of existing monitoring networks and recommendations for enhancement</u> – Peter Tango (USGS) and Breck Sullivan (USGS)

Background on the six core monitoring networks plus toxic contaminants, the process of addressing the request from the PSC, and key findings of the review. Overview of recommendations for the six core networks plus toxic contaminants from the monitoring report, and the partnership approach to funding the network.

• Liz Chudoba (Alliance for the Chesapeake Bay) highlighted the partners doing community science monitoring with the Chesapeake Monitoring Cooperative (CMC). Tier 3 groups include Blue Water Baltimore, Nanticoke Watershed Alliance, Maryland Department of Shellfish (CMC was able to enhance their existing monitoring on shellfish beds and add in-depth profile samples), and Arundel Rivers Federation. There are 80-100 other small watershed groups working in the Bay Watershed. CMC is a partnership between Alliance for the Chesapeake Bay, the Alliance for Aquatic Resource Monitoring (ALLARM), Izaak Walton League of America (IWLA), UMCES, and the Chesapeake Bay Estuarine Research Reserve through VIMS. Each organization works in different geographic parts of the watershed and has either chemical or biological benthic macroinvertebrate programs.

#### 10:45 AM **Q & A**

Bryant Thomas (VA DEQ) commented that he reviewed the draft report but hasn't had a chance
to review the final report. He used the draft report a number of times over the last months and
said it was helpful, thanking the team for putting it together. He liked the puzzle piece images
because it really is a puzzle trying to figure out how to get the best return on investments across
resources and programs. The Scientific and Technical Advisory Committee (STAC) is sponsoring a
workshop on utilizing local datasets to inform Bay model in the spring. That's not separate from
these discussions on utilizing the data the best we can.

### 10:55 AM Status of Funding – Lee McDonnell (EPA)

Where funding support has been provided for existing networks and networks enhancements, and where more support is needed. Examples will be provided of how EPA CBP Office has committed funds and worked with various partners on specific recommendations.

- Lee McDonnell (EPA) prefaced his presentation by saying when we first started the monitoring report, we weren't aware of the Infrastructure, Investment and Jobs Act (IIJA) funds. We got very lucky in that infrastructure funding came to us at the right time.
- Bryant Thomas (VA DEQ) commented regarding the tidal network that the vertical arrays and 4D interpolator are a fundamental need and a high priority, particularly in being able to help us assess all the designated uses or moving us in that direction. He said that being able to do more assessments is a fundamental need from a water quality and TMDL perspective. Bryant was interested in being kept in the loop on 4-D Interpolator updates.
- Lee responded the Bay Oxygen Research Group (BORG) team has been meeting, full speed away, and there will be a meeting with updates on that work soon.
- Bryant asked in the chat: For continuous monitoring, is there an option to have rotating stations? So, rather than keeping everything we have and expanding, we maintain select locations and have a network of rotating sites? (For nontidal and tidal as well.) With limited resources, has it been discussed to have some stations maintained as permanent locations, and some as rotating stations?
- Peter Tango (USGS) responded that we are anticipating that kind of sampling design on the tidal side, but haven't talked about it for small watershed monitoring/nontidal. We'll take that into our consideration.
- Peter added for the SAV network: as we understand the protocol for the implementing satellite based monitoring program, we have the opportunity to use a lot of that for free during the research phase. Once the data is used beyond the research phase it will cost money. The sentinel site network is a work in progress. There are opportunities there but we're still without funding for 20 sites that are proposed.
- Lee commented that for 117e conversations, because of high inflation, we want to come back every year and evaluate what it is we need to sustain the activities. Expect conversations starting in June or July. We want to work things out so we don't have to miss anything in the sampling world.

- Scott Phillips (USGS) said, if the infrastructure funding did not come through, a lot would not be funded, right? Lee McDonnell (EPA) said that is correct. Scott added that these recommendations cover a lot of the basic enhancements. But if partners want to come in and cover more designated uses and segments, we would have a conversation on how people want to contribute.
- Lee said we may have more expansion opportunities. Bryant had a good point. For the vertical profilers it's already built in that some will be on a rotating basis. Keep in mind we're looking at what we have, but I know there's more activity going on beyond the nontidal network. There are opportunities for more collaboration with activities you may already have going on, and we want to work these together for additional/better assessment.
- Scott said we have a bridge for the next 5 years thanks to IIJA money, but it will stop. We have to figure it out beyond 5 years.
- Lee agreed. It wasn't just EPA that got infrastructure money. Every state in some way shape or
  form got infrastructure money. Some of that may be available for monitoring and some of you
  may use it that way. There's a lot of money flowing now but have to plan for sustaining beyond
  5 years.
- Sandy Mueller (VA DEQ) said we did have some recommendations for locations with the vertical profilers with the assessment in mind. As we're moving forward, those sites weren't selected but what I'm interested in for the discussion in January is how the assessment will play out and if there is an opportunity to extrapolate the assessment results from the stations selected or future stations into other areas, for example tidal tributaries. Would we be able to gain efficiencies by locating these in ways so assessments can be extrapolated further so we don't have to have them located in all the tidal tributaries for example? Not sure yet how that will play out, but I want to underscore Virginia's interest in assessment of all designated uses.
- Peter Tango (USGS) responded saying that part of that 4D interpolator approach is that the model is expected to inform analysis for designated uses throughout the Bay. We can bring that to the January BORG meeting to ask, how does what we're doing with the investment play into the application. The investment needs came with the expectation we were filling a gap to address needs folks have voiced or were longstanding needs. These were the minimum to fill the gaps from the last time we did a monitoring review about a decade ago. That's not to say there aren't additional needs. In 2009 there was a similar review effort done.

### 11:30 AM Planning for an effective kickoff meeting in January – interactive activity

- Which CBP networks and associated recommendations is your organization most interested in supporting and investing? (You may choose more than one)
- Which Goals that don't currently have monitoring are your interested in supporting?
- What additional information do you need to consider these investments?
- What information do you need to be prepared for the January Meeting, when we will discuss leveraging the existing programs to help sustain the networks into the future?
- Regarding having multiple breakout sessions in the January meeting: Bryant Thomas said there
  wouldn't be enough people from VA to participate concurrently in multiple breakouts. Tom
  Parham (MD DNR) said there could be enough people if they could spread out. Nicoline
  Shulterbrandt (DC DOEE) said concurrent breakout groups would be an issue for DC folks due to

not having enough people. Mindy Neill (WV DEP) said WV wouldn't be able to attend multiple breakouts. Amy Williams (PA DEP) said it would depend and said they would need to know the specifics in advance and could potentially accommodate. Multiple other participants agreed with Amy.

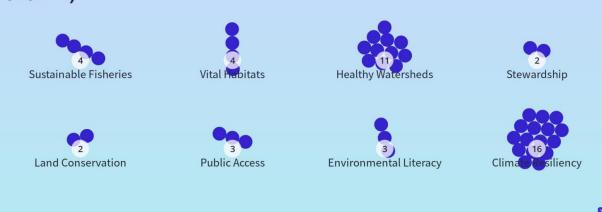
- Peter Tango (USGS) suggested having separate sessions for different networks in the morning and afternoon.
- Kaylyn Gootman (EPA) commented suggesting a subset of a breakout if we wanted to talk about toxics in tidal and nontidal, for example.
- Bryant Thomas (VA DEQ) said looking ahead to January and understanding funding partners in
  continuing funding in future, it almost seems like breaking out into small groups loses the aspect
  of how jurisdictional partners will have to choose top priorities since they won't be able to do
  everything. Bryant suggested that having broader conversations together will be more helpful as
  opposed to concurrent breakouts.
- Scott Phillips (USGS) said we could group the networks into broader categories such as grouping tidal with SAV and benthics, and nontidal with community science.
- Kaylyn suggested sessions rather than breakouts with everyone together to review different topics all at once.
- Breck Sullivan (USGS) commented for outcomes that don't have CBP monitoring networks, it will
  require working with Goal Implementation Teams (GITs) since the monitoring is only at the
  concept level right now and needs more details to make a monitoring plan. These don't have
  cost estimates or a monitoring design plan yet. It won't just be working with partners on who
  can fund the monitoring, in other words, but working with GITs on hashing out the details and
  doing the planning aspect. Scott added we would want to bring back the monitoring needs and
  estimates to the larger group.
- Scott asked why fisheries and vital habitats aren't as highly selected in the Mentimeter given that living resources are the goal of water quality improvements. Kaylyn suggested maybe because those are co-benefits of other goals. Healthy Watersheds leads to more sustainable fisheries.
- Breck asked if it would be helpful to do the explanation of funding structure for the tidal network as well as for the nontidal network to understand how everything is currently funded.
- Scott responded to a question about priorities, commenting that priorities have been about addressing core networks before other Outcomes. The report was organized by our best understanding of priorities.
- Peter clarified that for other Outcomes it's not that they are not priorities, but they are at a
  different stage in terms of understanding their information needs and planning for their
  monitoring needs. They have different histories; some Outcomes are newer. Some needs are
  mature and we were able to get very specific. Some are newer and have more developing
  programs. These are no less important. You as a community may see a particular interest in
  supporting one need in getting over the finish line.
- Lee responded to the question about EPA's expected contribution beyond IIJA funds. He said we're not allowed to lobby for money but what we want to do with this report is get it in front of people who do influence funding and drive home the importance of the monitoring program and networks. The more we can do that at all levels, the better off we'll be in the future. We're

- hoping that the future brings an increase in 117e. If we're all aligned in our messaging that will help a lot to get the need expressed to funders.
- Scott said a long term goal is to get more partners listed to help sustaining these networks (beyond EPA).
- Lee said another thing we'll continue to refine is the products we're putting out for public consumption. It's all about data driven decision making. We want to make sure we're putting out information that people can act on and we want to help them be able to act on that information as well.
- Scott highlighted the comment about pros and cons of supporting a network vs not supporting a network and what happens.
- Breck said the portfolios capture some of those pros/cons of supporting a network vs not supporting it with the vulnerabilities of the monitoring network and what we'll lose without it. Maybe putting more of an emphasis on the products the data produces, and how we're able to produce this but if we don't have the tidal water quality network, we won't be able to assess segments for their criteria. It is in the report in different sections so maybe just pulling it out and making sure it's front and center. A lot of partners already do support monitoring networks; a lot of our report's recommendations were on enhancing and improving the networks. Maybe focusing on the value of what the new technology and enhancements will do for us rather than value of what we currently have.
- Peter agreed. He said around year 3 we'll want to summarize the benefits we got from this investment. We can articulate some of them like having a full assessment of Bay criteria that have never been assessed since we don't have the right timescale of measurements, and the influence of greater spatial distribution and the influence of more data and what that means for benefiting our understanding. We can talk about this more in January and future meeting but also demonstrating the influence of what these investments are bringing so you can consider that.
- Regarding the question on what the expectations are for funding from state partners in the
  Nontidal Network (NTN): Peter commented that the NTN was formed by looking at existing
  networks and asking which stations give us important locations and fit the structure of the
  sampling program. Are there ways to leverage those insights if we're looking at small
  watersheds where you have a flow gauge, and if we're adding continuous monitoring of the
  nutrients and sediment it would inform the Best Management Practice (BMP) assessments and
  climate change influence. That's just one example of how we can better use the data out there.

# Which CBP core networks and associated recommendations is your organization most interested in supporting and investing? (You may choose more than 1)



## Which Goals that don't currently have monitoring are you interested in supporting? (You may choose more than 1)



## What additional information do you need to consider these investments?

The priorities of the CBP so that we can see what might also work for us.

Succinct pros and cons (liabilities and benefits) of supporting (or not supporting) certain monitoring programs.

What is EPA's expected added contribution (beyond what has been supported in the past) in the future after the IIJA short-term funds end?

Articulate specific benefits drawbacks of funding not funding

I will need to go back and talk with our other subject leads and check into projected future funding prior to considering investments

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## What information do you need to be prepared for the January meeting?

What the expectations are for funding from state partners in the non-tidal network. If there are expectations.

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11:55 AM Closing Remarks and Next Steps

12:00 PM Adjourn

### Participants:

Amy Goldfischer (CRC), Amy Williams (PA DEP), Apurva Patil (DC DOEE), Bhanu Paudel (DE DNREC), Breck Sullivan (USGS), Brian Powell (US Navy), Brooke Landry (MD DNR), Bryant Thomas (VA DEQ), Carl Friedrichs (VIMS), Carol Cain (MD DNR), Cindy Johnson (VADEQ), Emily Majcher (USGS), Holly Plaisted

(NPS), Jim Comiskey (NPS), John Cargill IV (DE DNREC), John Hoertz (US DOD), Jonathan Champion (DC DOEE), Josh Lookenbill (PA DEP), Josh Thompson (USGS), Julia Wakeling (DC DOEE), Lee McDonnell (EPA), Liz Chudoba (Alliance for the Chesapeake Bay), Mark Richards (VA DEQ), Mark Nardi (USGS), Mindy Neil (WVDEP), Nick Murray (WVDEP), Nicoline Shulterbrandt (DC DOEE), Pat Campbell (NPS), Scott Phillips (USGS), Peter Tango (USGS), Kaylyn Gootman (EPA), Sandra Mueller (VA DEQ), Sara Stevens (NPS), Tammy Zimmerman (USGS PA), Tom Parham (MD DNR), Wayne Richter (NYSDEC), Zachary Smith (NY DEC)