



Maintain Healthy Watersheds GIT Meeting
August 9, 2021 2:00-4:30pm

Webinar: <https://umces.webex.com/umces/j.php?MTID=mc91c63334e35017a3b8c10db039585fc>

Meeting number (access code): 120 026 2090 **Password:** 6bRN8J3fgYw

OR

Join by phone: +1-408-418-9388 **Access code:** 120 026 2090

Meeting Materials:

https://www.chesapeakebay.net/what/event/maintain_healthy_watersheds_git_meeting_august_9_2021

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

Attendees:

Renee Thompson, USGS
Jason Dubow, MDP
Breck Sullivan, CRC
Adrienne Kotula, VA CBC
Cassandra Davis, NY DEC
Emma Bisson, Student Ambassador at CBP
Jennifer Starr, Alliance for the Chesapeake Bay
Todd Janeski, VA DCR
Bill Jenkins, EPA
Jeff Lerner, Endowment for Forestry and Communities
Kristin Saunders, UMCES
Laura Cattell Noll, Alliance for the Chesapeake Bay
Marisa Baldine, CRC
Mark Southerland, Tetra Tech
Sally Claggett, USFS
Sequoya Bua-Lam, ORISE Fellow
Kirsten Hazler, VA Natural Heritage Program
Greg Barranco, EPA
Garrett Stewart, CRC
Debbie Herr Cornwell, MDP
Anne Hairston-Strang, MD DNR Forest Service
Andrew Szwak, Land Trust Alliance
Sherry Whitt, General Dynamics Information Technology
Katie Ombaski, Woods and Waters
Bo Williams, EPA

2:00 pm **Welcome, Introductions and Updates** - Renee Thompson, USGS Chesapeake Bay Program

Review Meeting Minutes from June 2021

Request for Chair nomination: *review Chair announcement, provide input, distribute*

Goal Team Staffer position announcement: *distribute*

2021 CBP GIT Funding Program cycle: Brainstorming/coordination session 9/1, project ideas due 9/22, 1 per outcome

[CBP Calendar: Meeting Materials](#)

Kristin Saunders - To hone your brainstorming on projects for GIT Funding, think about GAPS you have identified in your workplan.

Sally Claggett – Shared thoughts about GIT Funding. One idea is to put together documents for local governments to get everyone up to speed on new Federal Funding such as the FEMA funding for building resilient infrastructure and America Great Outdoors Funding. Another idea is compiling new data not just land cover data and creating a county level plan to show what they can do and what it can give them.

Renee – I like your ideas. I am interested in the land use plan, and we should consider how to include different pilot area so not just in MD.

Jason – I am available to provide feedback and brainstorming on GIT Funding projects.

Anne Hairston-Strang – The group could follow up on Virginia’s work on forest conservation and crediting for some other MS4 permits.

Renee – I reviewed the final reports, and the take home message is that COVID put a wrench in the wrap up of those projects. It would be interesting to know what are the next steps.

Jennifer Starr – I volunteer to help with providing feedback and brainstorming ideas.

Kristin Saunders – Workplans have identified gaps and factors that need to be addressed to make progress. It is worth to look back and see if there are gaps that could be met through GIT-Funding. One idea that comes to mind is translation. If there is engagement at the local level, the idea of translating technical information to terminology that resonates with the locals may be beneficial.

Laura Cattell Noll - The Local Leadership Workgroup is considering a proposal that would be "A Local Government Guide to the Chesapeake Bay 2.0" and would include the creation of 2 - 4 additional modules for local officials.

Renee – This is an opportunity to infuse our key messages that we want to make sure local governments know.

Laura Cattell Noll - The module topics could be relevant to healthy watersheds, for example outdoor recreation or agriculture

2:20 pm

EPA’s Healthy Watershed Consortium Grant Program Updates – Jeff Lerner, US Endowment for Forestry and Communities

The aim of these grants is to prevent nonpoint source pollution and to protect watershed lands and they’re aquatic ecosystems before they are severely damaged. Watershed protection is a major outcome for their program so key metrics includes acres protected and stream miles. It is important to note that none of their funding goes directly to land conservation. The funds help activate or secure funds for protection. The program interested in overcoming barriers for watershed and build capacity for when their funds end. Some of the limiting factors includes financing, availability of land, public policy, and stakeholder support. Even with these limiting factors, there has been much success. Jeff provided multiple examples of projects such as some with innovative finances and for planning and strategy.

Questions and Comments:

- Jason – What is the role of local governments for the different grants and which approach by local governments has been most effective achieving land preservation?
- Jeff – Not all of the grantees have worked with local governments, but for those who have worked with them, some are working through the local land use planning process. It has been somewhat successful, but it is a lot of work. Another approach they have seen is working with local governments establishing funds for land and watershed protection. It is a lot of engagement with local government, but there is a lot of support for the concept of creating new funds that can be utilized to protect land in the watershed. This approach has been affected by COVID because they are hesitant for allocating new funds.
- Renee – We will continue to infuse this conversation into the Goal Team Meetings and take opportunities that came out of the Mid-Atlantic and Chesapeake area to see if there are data gaps within the GIT those projects might fill or projects they can carry forward.
- Jeff – We've had some conversations among the grantees across the country, and they're all interested in learning from each other. They would like some of the folks in the Mid-Atlantic, who've been our grantees, talk more specifically about the process and project. There might be some opportunity for doing that with some of the other projects and topics that are more national in scope. We bring speakers from other parts of the country to talk to this group about how they have put together watershed protection initiatives.
- Renee – This speaks to a gap I've identified in our Logic & Action Plan, where we need to figure out how to bring in some federal partners that are not currently at the meetings.
- Bill Jenkins - Thanks Jeff!! Great success in leveraging resources and protecting a lot of acres! Look forward to seeing the "lessons learned".

2:45 pm

Monitoring needs: Responding to the PSC request to improve the CBP monitoring networks – Breck Sullivan, Chesapeake Research Consortium *Action: Provide input on monitoring network needs.*

An overview was provided to the Principal Staff Committee (PSC) at their March 2, 2021 meeting about the status of, and potential reductions to, the current Chesapeake Bay Program (CBP) monitoring networks. The CBP monitoring programs presented included the nontidal nutrient and sediment network, tidal water-quality monitoring network, submerged aquatic vegetation (SAV), tidal benthic monitoring network, and Citizen Science monitoring. In response to the status report, the PSC requested information be provided on what is needed to improve the CBP monitoring networks which has led to a 9-month review centered around 8 questions of status, vulnerabilities, innovations, and costs to sustain and grow the networks and support the Water Quality Standards Attainment and Monitoring Outcome.

Breck focused her presentation on how this effort can support the monitoring needs of other CBP Outcomes. There are two approaches a Goal Team may take to provide input 1) Updating the language and prioritizing monitoring needs in the Science Needs Database or 2) Developing a Discussion Paper addressing 6 key questions for potential new monitoring. The HWGIT voiced their interest in this effort and began to discuss monitoring needs.

Questions and Comments:

- Renee – I took a look at the monitoring needs presented to understand the status of them. The first need, “Investigate the potential to harness community-based monitoring...,” came from the need to utilize or incorporate citizen science. One example they can utilize is the stream temperature database John Clune is creating which includes citizen science data. The second need, “explore developing new watershed characteristics of health and vulnerability...,” is about the land use methods and metrics, and utilizing the land change model and high-resolution data. I feel we’re on track and have an idea of how to have it. The third need, “Develop and apply tools or methods to characterize watershed vulnerability to development and climate change...,” we are not at a place for the Healthy Watershed Assessment to make decisions about vulnerability and risk, but they have the framework for it. For the fourth need, “Determine a way to identify and track “marginally healthy” water and watersheds,” I expect the Healthy Watershed Assessment to show areas between healthy and not healthy. The last need, “Increased capacity for individual jurisdictional efforts to monitor...,” is a piece they are still needing. How are the jurisdictions doing with monitoring and assessing your state identified healthy watersheds? Where are your needs? And is there anything, within this framework that we can elevate to the PSC?
- Anne – It always seems like a huge struggle to keep our monitoring programs going, even as basic as USGS gaging stations. We can’t keep some of our core long-term monitoring.
- Jason – Should there be a standard for how often healthy waters are assessed?
- Peter – Are you talking about monitoring the condition in the streams in the watersheds or are you talking about monitoring the land condition for the indicators of healthy watersheds.
- Jason – Stream
- Peter – For the watershed side, they are monitoring in about 4 year intervals, and there is a proposal put forth to the Management Board for the CBP to continue that monitoring out to 2030. Maybe there is something that could dovetail that for monitoring.
- Breck – Building off of Anne’s comment about it being a struggle to keep the monitoring program going, financials is part of the report we are turning into the PSC. We are also trying to get an understanding with the potential of more years with flat funding of how to prioritize certain stations since some will have to be taken off the list. Getting information from the HWGIT on what stations are most important to the group will help those who need to make those decisions of defunding stations.
- Jason – I wonder if there is monitoring that is important for the Healthy Watershed Assessment.
- Renee – I will take a look at our individual metrics and see which ones require that type of monitoring like stream temperature. I heard two things

about the gaging stations – 1) where are the stations and 2) what type of information they are collecting that is important for healthy waters.

- Breck – Yes, this information would be very useful.
- Renee – What do people think about the idea to institutionalize a state identified healthy waters and watershed data collection effort? A map was updated in 2017.
- Todd – I think watershed scale assessments and monitoring is fine at the remote basis. Data mining what certain states are using is relevant. I am strongly concerned of using a standardized protocol. We're not consistent. We use a fish based approach, not a bug based approach. I strongly want folds to think about the applications at the state level of what the state programs are doing, and the fact that we only have 3 programs that on today's call to talk about it.
- Renee – I think the question was about if there was a desire to provide input into monitoring needs that Breck is compiling and if there was a need to update our state identified healthy watersheds.
- Todd – What the states need is resources. It takes too much time to train and work with contractors. We are struggling with funding.
- Renee – We do have an opportunity to continue this discussion as we refine and improve our science needs. Perhaps we can come to an agreement as a goal team on monitoring needs and work with jurisdictions individually to put together a state based jurisdictional monitoring needs too.

3:10 pm

Utilizing the Healthy Watersheds Framework for informing progress toward outcome

– Renee Thompson, USGS CBP; Sherri Witt, GDIT

- Interim indicator development
 - Potential Interim Indicators 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 high risk, underserved, low income or percent non-white
- Cross outcome (co-benefits, synergies) demonstration
- Healthy Watershed Outcome indicator development

Action: the GIT members are requested to approve the development of interim indicators for review by the Goal Team.

Discussion and Comments:

Jason - Here is the idea I had about an interim indicator using Maryland's regulatory list of Tier II anti-degradation waters:

<https://web.archive.org/web/20150620165321/http://www.dsd.state.md.us/comar/comarhtml/26/26.08.02.04-1.htm>

Jason Dubow - 2021 - 251 healthy waters - although some counties lost some, other gained some - <http://www.dsd.state.md.us/comar/comarhtml/26/26.08.02.04-1.htm>

Renee – When I’m thinking about an interim indicator, it is what could we say about those Tier II watersheds in relation to existing data or metrics.

Jason – I was looking for a before and after picture of state identified healthy waters in Maryland, so the two links show it. If some healthy waters disappear, it begins the discussion of why.

Renee – It is worth to look at them separately and see if we can find a relationship between them.

Todd – We’ve done some of the same small-scale studies in VA in different counties looking at land use change. We can figure out how to share it.

Renee – We could make a state-based tracking framework where each of the individual jurisdictions would be responsible for updating their healthy watershed and reporting progress based on their own metrics and data. From a science perspective, it would be remiss to not employ the wealth of information we have available at the catchment scale to inform and report on the regional scale even if it is using different metrics than what jurisdictions used to assess their healthy watersheds.

Kristin - Renee, the way you just described it was what Dana Aungst was interested in pursuing, so that we could have some common higher-level definition of the range that is considered healthy without undermining the state-specific designation criteria.

Anne – Think at a much bigger scale about how the work we are doing supports global sustainability standards. Is it too far off the charts?

Renee – I don’t think anything is off the charts.

Sherry Witt – Anne, what would the interim indicator statement?

Anne - Look at global sustainability measures and how the interim indicator could refine the lens for watershed health.

3:45 pm

Understanding, Adapting and Evolving: What have we learned over the last two years? What is on the horizon in term of science, fiscal and policy considerations? How will we move forward? Renee Thompson will provide some background slides to prompt a group discussion on how the GIT can shift, adapt, and evolve through 2023 and beyond. This will be a facilitated discussion with all GIT members. – Facilitator, Sherri Witt, GDIT

Renee also showed the Specific, Programmatic partners, Urgency of needed action, Risk of not acting, and Resources required (SPURR) concept for DEIJ considerations. She included specific recommendations as the Goal Team’s first step to look at their work through this lens in the Narrative Analysis. She welcomes input on these tasks and additional options to address it.

Discussion and Comments:

Additional comments on a Jamboard are available [here](#).

Breck - If you are in need of additional resources for the MD pilot project for MD HWA and technical data constraints, this is a good item to bring forward when updating your Science Needs in the next few months. If you don't need the additional resources right

now, STAR can help reaching out to different partners to see if anyone can help with the data or key metrics.

Anne - If there are major investments in infrastructure coming, can there be a pooled monitoring funding source as part of it to help jurisdictions produce baseline and trend data on the natural systems that we need to keep functional too? In combination with project specs building in green infrastructure components from the earliest stages (not an afterthought)

Renee – Do states have the capacity to report on their current state identified healthy watersheds to state which ones have been lost or gained and why.

Todd Janeski – VA could speak to it, and we want to redefine the boundaries by which we've defined our state identified healthy waters.

Kristin Saunders - Given the state-specific and unique criteria used to designate what a healthy watershed is, is there some level of information (signal) that would help 1) determine where you have had gains or losses within each state and/or 2) what is happening to signal this change? Looking to thread the needle by watershed-wide data capture but applied at the state specific level

Kristin Saunders - Is there an opportunity here to align the land conservation efforts (that are accelerating due to the 30 by 30 effort) with accelerating the protection of healthy watershed areas as preventive measures in parallel with the big push for WQ improvements before 2025?

Todd – VA has integrated healthy waters data into the conservation vision model. The real challenge is the prioritization and acquisition of the land. The challenge comes in with finding the willing landowners that then requires the on the ground capacity to build a relationship. They are moving towards that goal and using the data. Moving towards the smaller watersheds catchment base area will also help us track and achieve land conservation.

Renee – It sounds like we're going to have some state identified healthy watersheds for VA in the next cycle.

Todd – They we are working on how that is going to function.

Renee – Peter Claggett, has looking at changing land use due to the pandemic something that you all have been investigating?

Peter – We have thought about it, and there is a project on it. It is too early to tell because there is a housing shortage and a building supply shortage so they cannot move to the countryside if they want to do it.

Renee – Is it possible to turn it into a model scenario in the future?

Peter – Yes, we could do it. Our focus is going to be simulating conserving the land by 30% by 2030, and they could build it into their scenarios. The spatial patterns of conservations could be altered with future scenarios. Countering it would be change in development patterns. It is interesting to think about internet access and the sprawl of it due to people working remotely.

4:15 pm

Closing comments – the next GIT meeting is scheduled for Tuesday, October 12th, 2021 (Monday, October 11th is a holiday.)