



## Chesapeake Bay Program

*Science. Restoration. Partnership.*

Peter Claggett, USGS

Jeff Lerner, EPA

Sophie Waterman, USGS

Gabriella Vailati, DNREC

Kristin Saunders, UMCES

Holly Walker, DNREC

Scott Stranko, Maryland DNR

Sarah McDonald, USGS/CBP

John Wolf, USGS

Kara Kemmerer, MDE

Arianna Johns VA DEQ

Sean Emmons, USGS

## Maintain Healthy Watersheds GIT Meeting

April 8, 2024

11:00am –1:00pm (ET)

[Meeting Materials](#)

Kelly Maloney, USGS

Alex Gunnerson, CRC

Alanna Crowley- Maryland DNR

Shane Kleiner, PA DEP

Elise Turrietta, US EPA (ORISE)

Ashley Hullinger, PA DEP

Jason Dubow, Maryland Department of  
Planning

Bonnie Bick - Mattawoman Watershed Society

Andrew Szwak, LTA

August Goldfischer, CRC

**11:00 Welcome** - Jeff Lerner, HWGIT Chair, Partnerships Program Branch Chief within EPA's Office of Wetlands Oceans and Watersheds'

**11:05 [Healthy Watershed Indicator Update](#)**- Sarah McDonald, USGS

Sarah presented the final draft of the Healthy Watersheds Indicator and sought feedback. The proposed indicators will monitor the landscape within the state-identified healthy watersheds using a 1-meter resolution Land Use/Land Cover and 2022 Protected Lands dataset.

The metrics used:

- Percent and Acres of Impervious in 2017/18 and change from 2013/14-2017/18
- Percent and Acres of protected natural lands in 2017/18.

Sarah then ran through some imagery to help highlight what the indicator is showing us. Sarah also made a note that there are protected agricultural lands within some of our State-Identified Healthy Watersheds, these do NOT count towards the protected lands within in our indicator as we are only looking at protected natural lands.

## *Discussion*

A question about why we are seeing a decrease in imperviousness was asked; the answer is that the decrease is rare but does happen due to the demolition of buildings- as an example.

Jason Dubow made a comment on the legends on the maps "I got confused by the yellow in the legend, since it encompasses both decreases and small increases - might be better to create two separate labels for that."

It was also noted that it might be helpful to show where water, especially for drinking water, flows into a healthy watershed. Jeff noted that B 25 recommendations include a need to protect source water/drinking water.

Shane Kleiner noted that in northern PA, lots of ag lands that were previously row crops are now going fallow and are transitioning back to forests. Has there been anything done to look into that shift? Peter responded by saying the next evolution of the land use work should hopefully include bi-monthly data that will help answer Shane's question and track ag land change more efficiently.

Jason expressed concern over the fact that we have healthy watersheds that have an impervious cover that is greater than 10% or 20%, and it raises the question about why that is and does that change the way we think about how much impervious cover is, too much for a healthy watershed. Does that mean that 10% or a greater impervious cover is not too much for a healthy watershed to continue to be a healthy watershed?

Sarah noted that not all impervious surface mapped is not equal as we do not know all the facts about impervious cover.

Jeff noted that the healthy watersheds were defined years ago and may not still be considered healthy. Jurisdictions have not been re-evaluated. Kathryn Barnhart noted that we don't have monitoring systems in place for state identified healthy watersheds. The data is from 2017 and has not been updated. Criteria also varies across states and may not mean that higher impervious cover isn't as damaging as our assessment

Andrew Szwak noted that a quick analysis of how much protected land exists in these >10% impervious watersheds might be interesting. I.e. is increased land protection supporting watershed health in otherwise intensely developed areas. Peter commented that Peter Claggett we'll need to wait until we can associate a date stamp to protected lands so that we can actually track them temporally and spatially.

Peter noted that we do have development and ag within our SIHW and that we need to characterize and communicate collectively to the public about what's being done in these healthy watersheds could include things like, you know, BMPS and other other actions that minimize the impact of not just agriculture on water, but also development.

**11:30** [Healthy Watersheds SRS \(Strategy Review System\): Progress Review-](#) *Sophie Waterman, HWGIT Staffer, CRC*

Sophie led a discussion on progress towards achieving the Healthy Watersheds Outcome over the previous 2 years. She provided some background on SRS and then talked about the success and

challenges the HW outcome faced over the last 2 years. Members were asked to speak on accomplishments and best practices, evaluate progress and gaps, and discuss lessons learned within their state ID healthy watersheds. Members had a conversation and utilized a [Jamboard](#) to get their thoughts out.

Questions that were asked include:

- What key successes would you like to highlight to the Management Board?
- What challenges do you think we should bring the Management Board?
- What targeted activities have been done to help maintain the health of state-identified healthy watersheds?
- What have you done as a Jurisdiction to build awareness and communicate the value of healthy watersheds?
- What are the factors/barriers that prevent us from achieving our Outcome?
- What or how could the Partnership (or GIT/WG) address these factors?
- What factors/barriers no longer exist for us? What did we learn from those successes?

#### Discussion

Scott Stranko talked about successes in MD, including wide use of the information beyond just the healthy watersheds here. Of course, it's used for the Clean Water Act, but also for a lot of other uses in our State. People have seen it as a valuable tool for lots of things, and it's helping get attention to these watersheds in Maryland.

Shane Kleiner noted that in PA grants include climate resilience and environmental justice priorities. This has helped with targeting and improving the health of watersheds that might have historically been overlooked. PA is also targeting smaller sub-watersheds with partnership of communities to help maintain and improve the health through the use of BMPs.

Scott Heidel added that PA's healthy watersheds are their anti-degradation watersheds that are high quality and exceptional value. PA has recently done a GIS exercise to see whether or not those watersheds are actually obtaining their designated uses, and where they are not, they are trying to isolate ag impairments. PA has a block grant for county-wide action plan implantation throughout counties within the Chesapeake watershed where higher level BMP saturation is occurring to help with reducing pollutant loads and converting a watershed back to healthy.

Kara Kemmerer from MDE talked about their pilot outreach partnership with MD counties interested in learning more about Tier II watersheds and how they can prepare applications for things like forest mitigation. MDE is also creating a tracking database to help track how much forest conservation is occurring within Tier II watersheds.

Peter noted that because we can not track protected lands through time, that makes tracking conservation within the SIHW challenging. Our indicator is really only highlighting the change of imperviousness. To counter the narrative of negative impact we need input from jurisdictions to help tell the story of the work being done within SIHW. What are the barriers that are preventing you from doing the work within SIHW?

Kristin in the chat wrote: Per Peter's comment, is there any value to noting the decisions about local development and local comprehensive planning does not rest with the state and that stronger connection to local decision makers with healthy watersheds assessment information is really critical and strategic at improving the trends on land use conversion. How can we leverage this to MB? Local capacity is going to be crucial to ensure they are seeing what we are seeing.

Scott Stranko responded to Peter's question by saying that having the SIHW identified provides areas where additional conservation from additional groups. Both the MDHWA, CHWA, and land use data are useful and important. DNR is looking to continue to expand their healthy watersheds lists by looking at the aquatics within in streams. BMP importance is something that we need to continue to learn more about.

Shane Kleiner noted that PA heavily relies on the HQEV designation based on assessments and sampling.

Jeff noted that we should be reaching our goals of protected lands, but there is still work to be done, especially within SIHW.

Shane Kleiner noted that barriers within PA include funding and prioritization of projects based on impairments or related to things such as acid mine drainage. There is minimal funding going into already healthy watersheds.

Peter suggested that we have a future meeting related to protected lands and stream health to continue to learn about the work being done.

Scott Heidel noted that a joint WQ and HWGIT meeting could also be beneficial to explore BMPs that are both related to WQ and HW.

Kristin noted that a part of our message to the MB could be about how we want to be better integrated and connected to other relevant outcomes and groups and how it is important that their reps on our goal team and others see the importance and connection to HW.

**Action:** better connect with other groups and GITs to ensure that we are silo-busting and being a place of shared learning.

**12:10 [Beyond 2025 Healthy Watersheds Small Group update-](#)** *Jeff Lerner, HWGIT Chair, EPA*

Jeff provided an update on recommendations from the Beyond 2025 Healthy Watersheds Small Group and facilitated a discussion on how those recommendations might impact the HWGIT work plan over the next two years.

**Discussion**

Peter spoke on how the recommendations can either be read as slight shifts to the same old, or can be seen as foundational shifts from what we are currently doing. Peter asked that members review the recommendations and think about what these recommendations mean and how folks want to interpret them.

**12:40 GIT Funding project ideas for 2024 –** *Peter Claggett, HWGIT Coordinator, USGS*

Peter led a discussion on potential 2024 GIT funding projects to enhance local capacity for implementing land conservation and restoration actions. The projects that HWGIT has started exploring include:

- Quantifying and valuing ecosystem services provided by natural capital including costs avoided by mitigating hazards;
- Guidance for achieving “zero impact” development.

John spoke on the ecosystem services project. This project was born out of the STAC workshop on the same topic. This quantification project will be submitted under STAR, but could be a benefit to the HWGIT and something we could support.

Jeff noted that quantifying and monetizing ecosystem services would be beneficial to all states within the watershed. LGAC has shown some support for this project as well.

Jason spoke on the “zero impact” development project. Not all impervious surface is created equally. There is technology out there that can help us achieve a 0 impact type of development, this would go beyond the current regulatory requirements. Design matters and a project like this would investigate ways to achieve 0 impact development.

Jeff also brought up the Healthy Watershed Consortium Grant and the idea that we could bring to the Bay program. This grant would help with capacity of conservation groups.

**1:00    Adjourn**