



Minutes Maintain Healthy Watersheds GIT

January 30, 2020 10:00am-2:00pm

[Fish Shack](#), Chesapeake Bay Program Office
410 Severn Avenue,
Annapolis, MD 21403

Meeting Attendees

Renee Thompson (USGS, *Coordinator*)
Nora Jackson (CRC, *Staffer*)
Angel Valdez (MDE, *Chair*)
Jason Dubow (MDP, *Vice Chair*)
Deborah Herr Cornwell (MDP)
Todd Janeski (VA DCR)
Lee Epstein (CBF)
Steve Epting (EPA)
Bo Williams (EPA)
Jennifer Greiner (USFWS)
Scott Stranko (MD DNR)
Jennifer Miller-Herzog (LTA)

Jennifer Starr (Alliance)
Kelly Meadows (DEQ)
Tanner Haid (WV Rivers Coalition)
Jeff Learner (HW Consortium Grant Program)
Peter Claggett (USGS)
Julie Reichert-Nguyen (NOAA)
Rebecca Chillrud (CRC)
Bill Jenkins (EPA)
Matt Nicholson (EPA)
John Griffin (CCP)
Laura Cotell-Noll (Alliance)
Peter Claggett (USGS)

Connecting Climate and Healthy Watershed Outcomes- Julie Reichert-Nguyen, NOAA, CBP Climate Workgroup Coordinator and Renee Thompson, USGS

Julie provided an overview of the Climate Resiliency Workgroup goals and outcomes, and collaborative work being conducted with the Healthy Watersheds GIT. The major projects include the Climate indicator development and the Climate Smart Tool. Based on feedback from the pilot groups, Julie will be working with Renee on updating and changing the tool, which is expected to be ready in the fall when HWGIT will pilot test it at an in-person meeting. Renee connected the ongoing climate projects with the Chesapeake Healthy Watersheds Assessment (CHWA) and discussed the large landscape area datasets that other groups and outcomes selected as relevant, and shared other suggested dataset, feedback that came from the October GIT Chairs Meeting. Worked through an example of using the climate framework to work through a management question, of where to protect and restore brook trout habitat in climate resilient areas. Nora walked through an example of how to use the CHWA to answer specific management questions using the brook trout probability data and several landscape metrics from the CHWA.

Questions and comments:

- Tanner Haid asked what the vulnerable geology metric refers to.
 - The vulnerable geology layer was assembled from multiple USGS sources, and represents carbonate regions and coarse coastal plain segments, which describes flow rates and nitrate travel, soils that tend to drain quickly and filter nitrates poorly.
- Julie Reichert-Ngyuen: What data is fed into the 6-degree Celsius probability?
 - It's compiled from the NALCC, but it doesn't include the original source data. **Action item: investigate the opportunity to improve the climate datasets with CBW data.**
- Steve Epting asked about the scale of the CHWA data, one of the things that the EPA Healthy Watersheds team struggles with is resolution restraints of projected data and was surprised to see such variation in vulnerability in small areas. How zoomed in can you get for planning purposes, and what are the restraints? Would be good to let users know the resolution and constraints.
- Jennifer Greiner is interested in an analysis looking at restoration ready lands that might buffer forested blocks, especially given the urgency related to the riparian forest buffer outcome. Brook Trout like shaded streams, so it would be interesting to investigate tree cover.
- Jennifer Miller-Herzog- Why didn't human health issues like HAB or urban tree canopy show up as a key indicator? They could be for the HWGIT, but there are other important issues with stewardship, local governments, community health, etc.
 - Julie explained how it was focused on habitat and living resources, but it's just preliminary. There are other efforts looking into the human health, urban, city planning, flooding, and public safety sectors.
- **Action item: Send out indicator list (from Julie) to entire goal team to provide feedback.**

Protecting Drinking Water through Land Conservation- Tanner Haid, West Virginia Rivers Coalition

The Safe Water Conservation Collaborative formed in 2017 to assist water utility companies in implementing Source Water Protection Plans (SWPPs) by bringing together cross-sector partners in the Eastern Panhandle of WV in Berkeley and Jefferson counties, Cross-sector collaboration with a diverse group including multiple utility companies, state and federal agencies, land conservation organizations, and watershed organizations. They are using a parcel prioritization tool to look for the most effective parcels to target for land conservation in critical drinking water source areas, that were also fundable to establish an easement, and looking at planning and zoning areas the counties targeted for growth- wanting to keep growth in already urban areas and preserve larger landscapes, and reduce fragmentation.

Questions and comments:

- Renee highlighted the language used when talking about future growth and development. It resonates with the land policy BMP work going on at the CBPO, where is growth projected to occur that we don't want it.
- Bo Williams asked about the growth areas, what process went in to defining those areas and how is the collaborative prioritizing or using this? Tanner explained that the group's main concern with this route was that growth was projected in most areas of the county. Something they are keyed into moving forward is the issues, maybe it's an opportunity for the collaborative to work with the county planners. They are looking for what short-term impact they can make.

There are concerns with the county plans and they would like to better align them with the collaborative goals.

- Lee Epstein asked about the focus of voluntary easements, are they looking for other financial sources to purchase easements or just work on easements? Tanner said the financial support would go towards preserving WV rivers coalition to serve as the host partner and continuing education and outreach initiatives for the long-term success of the collaborative and applying for larger funding sources and projects.
- Jennifer Miller-Herzog commented that all easements are “voluntary,” but some are donated, some are purchased, and some are combinations. This region does not have a staffed land trust, and the collaborative is filling a gap by land conservation as a strategy for preserving clean drinking water.
- Jennifer Greiner mentioned the Habitat GIT project on culvert assessments in WV, and habitat restoration that the Army Corps of Engineers (ACE) Comprehensive plan is funded, and they are looking for large scale restoration projects. Tanner said they are interested in finding overlap with that large-scale work involving ACE.
- Nora asked about funding for stewardship of the easements, and if that was factored into the short or long-term plans. Tanner said this is an issue raised by land trusts, they are all volunteer based and it is a challenge for them, but the collaborative has an opportunity to address it in their short-term objectives and their 5-year action plan.
- Steve Epting asked about longer-term planning or watershed scale thinking, how do you know you’ve reached the end point of protection? Has the collaborative thought about that in communicating with landowners, how their easement would protect specific resources and the water quality benefits? Tanner said they are in the beginning of that process, connecting this work into the larger implementation objectives in the state WIPs, and thinking about next cycle programmatic and numeric milestones.
- Jennifer Miller-Herzog commented that all conservation efforts face this question, what do you need to conserve and protect to reach these long-term outcomes.
- Lee Epstein- The impacts of impervious surface are known, and we can use data like that on source water treatment to model the water quality outcome you need.
- Renee’s closing comments highlight major takeaways from this presentation, thinking of these questions as we go over local engagement; how do we know are actions are working, and when are we done, what are the messages and things that resonate? What other efforts will resonate with actors on the ground?

Accountability and the CBP Adaptive Management Process- Dr. Carl Hershner, Virginia Institute of Marine Science (VIMS) / Scientific and Technical Advisory Committee (STAC)

Renee reviewed the adaptive management process for the Healthy Watersheds Outcome and the management strategies in this outcome. A key step in the process is assessing performance or monitoring our own efforts, ensuring that the actions we take succeed in changing the behavior of actors. Communication is a major theme in

Questions and comments

- Angel Valdez commented that getting people information doesn't lead to behavior change. At some point, don't we have to decide to change behavior and not just gathering and disseminating information?
 - Carl explained that this is the crux of adaptive management, deciding whether the strategy is working.
- Lee Epstein pointed out that another crucial actor is the private sector, they are the driving force for land use change and development. Unless we engage with these actors, other work may be pointless.
 - Carl agreed and explained that if this group is crucial to reaching the outcome, then you do need a strategy to communicate with these actors, and a way to assess the success of that strategy.
- Renee asked what does strategy mean in this context?
 - It is the combination of all the actions you intend to take, with actions addressing one or more of the factors. Around each of these "actions", your strategy, you need to build a monitoring framework and determine a metric for whether that strategy was successful in changing behavior.
- Jason Dubow simplified the idea into, "is the method effective or not in achieving the result"
 - Renee asked if we haven't figured out the method, how can we assess if it's effective?
 - Carl said to decide the method and how to evaluate the method before implementing it. The idea is that you identify both, so you are accountable for resources and efforts, clear understanding of how to assess it.
- Renee reminded the group that we took actions and tried to fit them into this framework, and we need to take a step back and think about what it is we are ultimately trying to accomplish.
- Angel Valdez, where does information gathering fit in the table?
 - Carl said to use common sense over making an action fit in the table. Think of it three categories; increasing understanding, how do we deliver the information, and what resources do we have to do it (personnel, political, funding). The challenge is how to implement the logic into your strategy and use it to decide where your priorities should be.
- **Action item: Continue work on how to monitor the efficacy of our efforts with small team including Angel Valdez, Jason Dubow, Steve Epting, Lee Epstein, and Jennifer Miller-Herzog.**

Local Engagement Progress - Renee Thompson, USGS and Laura Cattell Noll, Alliance for the Chesapeake Bay, Coordinator Local Leadership WG

Renee updated the group on continuing efforts towards all our outcomes, including Land Use Options Evaluation and Land Use Methods and Metrics and Laura Cattell Noll reviewed the [Local Engagement Strategy](#) and engaged with HWGIT members to develop our next steps in aligning our actions and strategies with broader CBP local engagement efforts.

Questions and Comments

- Angel said that the audience receiving technical content and information will be planners, who are mostly staff. The board and commission overseeing planners may be a combination of elections and appointments, and they change a lot.

- Lee Epstein added that there should be a connection to the water, thinking about agricultural land use and sediment and erosion control. These functions can be set at the local or state level so we should include those officials in our targeted audience.
- Steve Epting suggested that funding sources should also be an audience, explaining the benefits of protection and restoration activities.
- Bo Williams said that local chapters looking to protect drinking water can also funnel information to some of our audience, having mission-minded groups presented to homebuilders and homeowners associations.
- Laura Cattell Noll talked about how to prioritize by identifying actions first, then your audience, and then investigate how to build a relationship with that audience.
- Renee asked what it would look like if we applied this local engagement strategy using the HWA. What questions can we answer, and how can we tie it to HWGIT priorities? The data dashboard can provide a framework for hosting different types of information alongside watershed characteristics by providing appropriate policies, incentives and planning tools for a jurisdiction based on the vulnerabilities in their watershed.

Action Items and Decisions Summary

- NALCC Data sources
- Send out indicator list (from Julie) to entire goal team to provide feedback.
- Continue work on how to monitor the efficacy of our efforts with small team including Angel Valdez, Jason Dubow, Steve Epting, Lee Epstein, and Jennifer Miller-Herzog.
- ***How can we engage HWGIT membership, and start working more effectively and efficiently together as a group?***

