Chesapeake Bay Program
Science. Restoration. Partnership.

Forestry Workgroup Meeting
September 6th, 2023
Meeting Materials

Lydia Brinkley, USC
Robbie Coville, PA BOF
Celine Colbert, PA DCNR
Derrick McDonald, PA DEP
Osri Lazar, PA BOF
Teddi Stark, PA BOF
Matt Keefer, DCNR
Anne Hairston-Strang, MD DNR
Alanna Crowley, MD DNR
Craig Highfield, ACB
Dexter Locke, USFS
Sarah McDonald, USGS
Katie Brownson, USFS
Lorenzo Cinalli, USFS
Rob Schnabel, CBF
Rachel Felver, ACB
Chris Miller, DE DOF
Caitlin Verdu, VA DOF
Meghan Noe Fellows, DCIB
Kesha Braunskill, USFS
Kalaia Tripeaux, PABOF
Joe Schell, DNREC
Sophie Waterman, CRC
Susan Minnemeyer
Emily Heller, EPA
Helen Golimowski, Devereux Consulting
William Byru, NRCS
Judy Okay, J&J Consulting
Julie Mawhorter, USFS

9:00 Welcome and Introductions- *Rebecca Hanmer, chair*

9:10 Farewell to Rebecca and Welcoming Our New Chairs

Rebecca Hanmer will be stepping down from the chair position after many years. The workgroup took time to thank Rebecca for her 14 years of dedication and leadership to the Workgroup.

Katie Brownson introduced the workgroup to the new co-chairs, Kesha Braunskill, USFS, and Anne Hairston-Strang, MD DNR. She also introduced Lorenzo Cinalli, a new USFS Watershed Specialist that will be working out of the Bay Program Office.

9:25 Riparian Indicators- *Sarah McDonald, USGS*

Sarah led a guided discussion on the development of new riparian indicators under the Land Use Methods and Metrics Outcome. The workgroup was asked to provide suggestions and feedback on what riparian indicators will benefit the Bay Program to be monitored over time.

The GIS team has created a riparian zone layer to identify the riparian areas within the watershed and the land use at 1m resolution within that zone. Sarah then presented the group with some questions:

- What applications/decisions will the riparian data support?
    - E.g., tree planting opportunities
- Does proximity to streams within the 100’ buffer matter when reporting land use change? E.g., land conversion immediately adjacent to streams vs on the periphery of the buffer area?

- What land uses within the riparian zone should the Bay Program monitor as an indicator?
    - What aggregations are valuable (Natural lands vs tree cover, Development vs Impervious surfaces vs pervious development (e.g., turf grass)?
- What scales should we monitor riparian indicators?
    - Catchments? HUCs? Jurisdictions? Etc.

Discussion

The distance to stream and connectivity really matters. Trees are important, but if you are looking at hydrology, we need to look at impervious surfaces and connection to streams.

VA noted that knowing what is in the riparian area will be crucial to identify land that could be planted (whether it is impervious or more easily plantable). There will be a plantable space analysis will be done with the second phase of SOF to help identify patches.

The Workgroup may consider whether we should modify goals for forest buffers based on plantable areas would be helpful. Getting a pulse on where we have existing RFB and then the analysis of plantable space would be helpful with those goals. It could also be helpful to identify riparian buffer opportunities by county.

USFS has developed a tabular area tool to identify plantable space. The tool could be used with many CBP classes, so we don't need to reinvent the wheel in terms of what is plantable- we can get plantable area and subdivide that into perviou and impervious areas.

In terms of the actual indicator it was noted that forest and other tree canopy be considered as that is a better indication of actual forested land.

A project is coming up to better understand flow permanence to ensure that flowing streams are buffered. It was noted that it is also important to include intermittent streams as water tables are dropping, and trees play a big role in recharge.

Differences in soil organic matter play a role in health. Having agricultural land better defined will help the program understand water quality. Things like silvopasture benefit stream health, so having more detailed ag data would help. 1. Are there things we can pick up in the data on silvopasture? 2. Are we getting people to report what they are doing on their land properly?

Can we tell the elevation of the buffer from the water? The higher the bank relative to the water, the less effective the buffer is. Some 1M elevation data will be coming out soonish as a part of FACET; there won't be change data associated with it, and it probably will not be something that is updated consistently. But this is definitely something that is explored.

Could be beneficial to calculate the amount of directly connected impervious areas , but can be heard to assess because of land use around it.

Cornell has been researching roadside ditches and has found that they are pretty significant contributors of nitrogen in streams. Best practices around them could make ditches important sources of filtration and denitrification. Buffering ditches would be a water quality benefit, but there is probably not a huge ecosystem benefit.

The itree Landscape tool from the Forest Service includes a plantable space mapping tool as part of the Itree Landscape. It's an index of areas not covered by impervious surfaces, water, or existing tree cover. The iTree platform does not have the high-resolution data incorporated. It might be beneficial to look at their methods and then apply them to the high-resolution data.

Stream restoration projects are taking out established canopies in the name of MS4. It could be helpful for counties to understand where their ditches are and focus their efforts there and in headwaters instead of downstream waters. We should be tracking that canopy loss.
Do we have spatial data on these stream restoration projects? No, we would have to find by project by project.

Buffer width variety: what other buffer widths are useful to jurisdictions? 35, 100, and 300 feet were numbers that were given as useful.

Sharing parcel data and who owns the land would benefit non-profits doing RFB plantings. Landowner data is public, but making that readily accessible is a concern. A federal agency might not want to make that data public-facing within a tool.

9:55 Updates from Beyond 2025- *Katie Brownson, USFS*

Katie provided the group with an update on the Chesapeake Bay Program's Beyond 2025 work. The B25 contractor, ERG, has created a draft evaluation plan with three questions to guide their work.

- EQ1: Looking Inward: To what extent does the current organizational structure and processes support effective (1) decision-making and (2) outcome attainment?
    - If so, why?
    - If not, why not?
    - What aspects of the structure and processes need to be kept or changed to better support effective decision-making and outcome attainment?
- EQ2: Looking Outward: Does the Program know the external decision-makers it needs to reach?
    - Does the Program understand the needs of the decision-makers outside the Program?
    - To what extent is the Program providing decision-makers outside the Program with the information needed to make decisions contribute to the Program attaining its outcomes?
    - Does the current organizational structure allow for taking into account the needs of diverse stakeholder groups?
- EQ3: Logical Program Flows: What is the Program's goal/outcome attainment logic?
    - Specifically, what are the logical flows of program activities to outputs, from outputs to outcomes, and from outcomes to goals?
    - What are the underlying assumptions that underpin the flows from outputs to outcomes and are those assumptions grounded in sound theory/logic?
    - Is the Program's performance tracking structure aligned with the logical flow?
    - What is the unique contribution of the Partnership in terms of outcome/goal attainment (i.e., the value-added)?
    - Is the program investing in the appropriate outcomes and goals?

Questions about the science and exploring the science of practices that extend beyond 10-15 years were brought up. Katie noted that ERG will not be looking into the science; the steering committee should be looking into it directly through their work. Science will be addressed in the context of each evaluation question's

primary objective.

The FWG emphasized a need to address water quantity issues and should be a part of this B25 work. Carbon markets and climate solutions were mentioned as issues they would like to elevate in the B 25 discussion.

Email Katie Brownson if members want to share their thoughts on these questions. The evaluation is located on the meeting webpage.

10:10 Preview of the State of Chesapeake Forests Storymap- *Katie Brownson, USFS*

Katie previewed the State of Chesapeake Forests StoryMap and asked for feedback from the workgroup.

Discussion
Members expressed their support and excitement for the Storymap.

Members input included suggestions for:

- Creation of an overlay showing permanently protected agricultural easements and the amount of forest loss within those easements.
- Net change analysis of tree cover within different types of protected lands.
- Silvopasture concerns- making a distinction between the creation of pasture from a forest and leaving a few trees vs. pasture getting trees planted.

10:30 Round Robin

This agenda item was skipped due to time.