Chesapeake Bay Program
Science. Restoration. Partnership.

Forestry Workgroup Meeting
Jan 1, 2024
Meeting Materials

Cassie Davis, NYDEC
Lydia Brinkley, USC
Ned Brockmeyer, PA DCNR
Teddi Stark, PA DCNR
Kalaia Tripeaux, PA DCNR
Taryn Davidson, DEFS
Chris Miller, DEFS
Bryanna Lisiewski, Delaware Center for Inland Bays
Ben Harris, TU
Rob Schnabel, CBF
Lorenzo Cinalli, USFS
Katie Brownson, USFS
Susan Minnemeyer, Nature Plus
Craig Highfield, ACB
Alana Crowley, MD DNR
Anne Hairston-Strang, MD DNR
Rick Turcotte, USFS
Frank Rodgers, Cacapon Inst.
Kesha Braunskill, USFS
George Doumit, DE DNR
William Byrum, NRCS
Helen Golimowski, Devereux Consulting
Julie Mawhorter, USFS
Scott Fickbohm, Soil and Water Conservation District-NY
Emily Heller, EPA
Sarah McDonald, USGS
Michelle Katoski, USGS
Nicole Angelo, USDA

Habitat Tracker

Helen Golimowski of Devereux Consulting gave an overview of the new outcome and attainment tracking system, Habitat Tracker. This tool is currently being used to track progress toward the wetland outcome and is in development to be used for brook trout in the near future. The objective is to evaluate the ecosystem functional gains from projects.

The creation of the tracker came out of a 2021 Management Board discussion. The tool is focused on current and future projects rather than a place to put historical data. Several partners have helped with tracking the data: Ducks Unlimited, the Nature Conservancy, Bay jurisdictions, and federal agencies. The Tracker can also track projects that have multiple funders.

While this tool is created by the same folks who created CAST (Chesapeake Assessment Scenario Tool) this tool is entirely separate. It was noted that this tool is in its infancy and there is more work to be done to get folks to use it.

Helen then walked through how a user would add data to the tracker and explained the important components of uploading your projects. The tracker can provide acre reports, which show the number of acres, land use type, and wetland type. The tracker also spits out other reports that allow for others to do an analysis.

The tracking can help incentivize achieving goals and show the connection between practices and habitat benefits. There is going to be a persistent effort required to elicit the data needed to ensure the tool is useful.

Discussion

Q: Are there any forestry components? Especially when it comes to tracking salt intrusion and impacts to forests?

A: Not yet, but if there is enough interest, we could add forestry components. This tool is not like CAST. We have the flexibility to show the data and dish it out.

Q: The ability to tease out projects and see which programs are generating the biggest acreage gains in CAST is really, really hard. This tracker has the potential to help connect ecological outcomes and be clear about where projects are located and their acres. Does the forestry workgroup see a benefit to using the habitat tracker with the changes that are designed for forestry?

It was noted that evaluating impacts needs to be more balanced to also look at where we are losing forests. It is great that we are getting things in the ground, but are we seeing net restoration gains?

The land use data isn't well incorporated within the habitat tracker. Still, if we had more information about where restoration projects are happening, we could transfer it to the land use data and could have a better idea. This tracker helps with the accounting.

Lydia Brinkley asked if this is more beneficial for people working at the Bay scale or at the individual state level. She asked because, in NY, they know where all projects are; but can't share that info more broadly due to privacy concerns.

A: The Wetlands folks are using this data at the state level across the Bay Watershed. Because we are in the exploration phase of if we should be adding the forestry component to the tracker it would be up the workgroup to make that call.

This agenda item was introduced as a way to see if there would be a benefit for the workgroup to have a forestry focus within the tracker. If we do not see a need, then we do not have to pursue it. Katie noted that it would be nice to see where the biggest gains are located and who is doing that work and that might be a reason to pursue using the tracker.

Developing use cases for geomorphic indicators

Krissy Hopkins gave a presentation and solicited feedback on developing use cases for ways that geomorphic indicators might be used to address management decisions. She went over a few geomorphic indicators (e.g., channel incision and floodplain connectivity). She opened the floor to brainstorm ways those indicators might be useful within a restoration or conservation context.

The main interest is in how rivers are organized across space. Krissy and her USGS colleagues have been working on developing metrics that look at stream reach (the cross-section scale) and the stream segment (a larger reach segment). 2 years ago, USGS released a data set that took 3m digital elevation models (DEMs) and extracted a range of different characteristics of a stream characteristic for an individual cross-section and then summarized those for larger reaches (this data is known as the Floodplain and Channel Evaluation Tool (FACET)). USGS is currently working on compiling that information at the 1m scale. The finer-resolution data will be published later this year.

As a part of that new data release, USGS is trying to understand what geomorphic metrics the stream health workgroup is interested in. There is a recent Tetra Tech report that identified 5 main hydrogeomorphic indicators, with floodplain connectivity and lateral stability being the ones that Krissy and her team used the DEM data to understand the variability within those metrics across the watershed:

- Valley type/confinement
- **Floodplain connectivity**
- Riparian vegetation
- Bedform diversity/stability
- **Lateral stability**

Krissy then explained how the Floodplain and Channel Evaluation Tool (FACET) is being used to help understand the watershed scale variability within the floodplain connectivity indicator and the lateral stability indicator. The geomorphic metrics that FACET examines are the following (the ones in bold are relevant to the indicators in bold above):

- **Bank height**
- Bank angle, avg
- Bank angle, max
- **Channel width**
- Channel length
- Bank-full area
- **Active floodplain width (~2yr)**
- Floodplain elevation range
- Floodplain elevation, sd
- Sinuosity
- Stream slope

The geomorphic metrics relevant to stream health:

- Width to depth (incision)
- Entrenchment ratio (channel width/floodplain width)
- Deviation from Bieger regional curve for width (Observed/Expected)
- Deviation from Bieger regional curve for depth (Observed/Expected)
- Valley confinement (degree of confinement or Y/N)

Use case development is ongoing, and Krissy requested that those interested in developing forestry-specific ones reach out to her. The development process:

Objective: Develop use cases using hydrogeomorphic indicators to address a management challenge.

Timeline: January –September, 2024 Coincides with release of 1-m geomorphic metrics in the Spring 2024.

Time Commitment: Attend 2-4 meetings to provide direction and feedback on the use case.

Product: A 2-pg summary of the use case

Contact: Krissy Hopkins, khopkins@usgs.gov

Krissy then ran through current examples.

Discussion

Rob noted some concern because stream restoration projects already do not consider forestry concerns, this data would lead to even less concern for trees on banks. The fear is that this will be a band-aid to stormwater issues and not help figure out the root cause.

The upstream causes are not something that FACET looks at, but they are definitely a worthy concern.

Katie noted a potential use of this data would be identifying areas of good stream health and looking into the opportunities for buffers and conservation. Another potential use would be developing a method for determining if any of these geomorphic metrics could be used to screen the new 1:24K stream network to identify streams where forest buffers would be most beneficial. This screening would then need to be paired with some kind of ground-truthing by a partner to evaluate the efficacy of the methodology.

Judy noted the usability of this data as we deal with climate change, migration of streams uplands, loss of floodplain, and loss of buffers. This data could be a good way of tackling loss and intense problems.

2024 Forestry Workgroup planning

Katie Brownson shared with the group some Bay Program happenings in 2024 and then opened the floor to discuss activities and priorities for the Forestry Workgroup in 2024. A jambaord was used to capture thoughts.

Some things on the horizon relevant to the forestry workgroup include:

- Beyond 2025 work: Inform recommendations on forestry-related issues
- Phase 7 of the watershed model: Identify any needed forestry-related improvements
- New 2021/22 Land Use and Land Use Change Data
- SRS check-in

Focus areas include the above list and:

- Timber Harvest Task Force
- State of Chesapeake Forests 2.0- phase 2
- Communications
- Buffer-related work: implementing State Forest Buffer Action Plans, Advancing forest buffer conservation
- Findings from the tree canopy roundtable.

Katie gave potential topics for GIT funding and requested feedback. For forest buffers, we'd like to propose a project focused on advancing conservation of riparian forest buffers. The project would advance multiple actions in our workplan to look at effective conservation policies for reducing RFB loss, identifying model forest buffer easement programs, and working to deliver materials in a format that will be useful for local planners and contractors. For Tree Canopy, two options were presented, both of which help follow-up on recommendations from the Tree Canopy Funding & Policy Roundtable. The first would share models and best practices for effective incentive-based and regulatory approaches to protect urban tree canopy. The second would develop a trees & climate resiliency strategy guide for local governments. Although there was limited time to discuss, the Workgroup was generally supportive of these ideas.

Anne noted that there are similarities between the tree canopy and buffer projects in terms of their connections to local planning and climate. Could there be an option to make a combined project that

focuses on local planning and its connection to both outcomes? What is something that could help jurisdictions be more substantive and look beyond just “trees are good for climate”?

Judy also noted a merge of the climate resilience list with the canopy group and have our focus on RFBS. There is an opportunity for forest buffers and resilience to be piggybacked onto the tree and climate resource strategy guide for local government. Judy also noted that adding soils into the mix would be an important component.

Rob noted that there should be distinctions made between the benefits of grass vs forest buffers.

Beyond 2025

Katie and Breck provided an overview of the small group discussions around how CBP can better integrate climate change into our work beyond 2025 and led a discussion to get input from the workgroup.

Breck and Katie gave some background of The Beyond 2025 (B25) work, including introducing the different small groups:

- Climate
- Healthy Watersheds
- Clean Water
- People
- Shallow Water Habitats

The B25 Steering Committee has told the small groups to craft recommendations and consider 3V questions (Vision, Values, Vanguard), answer questions from the EC, consider cross-cutting questions, and answer other questions that are deemed fit. The answer the questions and recommendations will be shared at a two-day symposium in late February.

The scope and purpose of the climate small group is as follows:

Providing recommendations to transform Chesapeake Bay Program partnership policies, programs, and projects to address the significant ongoing and future impacts climate change will impose on the Bay and its watershed and people across generations. These recommendations should include strategies to better incorporate climate mitigation, adaptation and resiliency across the watershed and tidal Bay.

Breck shared the key questions that the group is considering and discussed the different research and recommendations that have been suggested in the past. Some of that research includes the rising water temperatures report and CESR.

The small group has heard from experts from different topic areas, including agriculture, decision science, and Adaptation Frameworks.

The role that CBP could play in climate mitigation has been an important topic area and multiple potential recommendations are emerging. Katie noted that this mitigation focus would be new for the program and we need to flesh out where the Bay Program could best contribute.

Discussion

Anne noted that we need to make sure we consider harvested wood products as a part of climate mitigation as it plays a big role in the carbon life cycle. How do we instill good forest management that gives us a mosaic of habitat?

Water quantity issues and data on that would also be great to have so we can better communicate about the role forests can play in maintaining baseflow during time of drought.

The monthly STAR meetings are open and are also being used to get input for the climate small group. The next STAR meeting will be 1/25: https://www.chesapeakebay.net/what/event/star-meeting---january-2024

Round Robin

New York: from Governor Hochul's State of the State delivered yesterday: "Achieving New York State's goals under the Climate Act will require unprecedented support for the environment, including the need to plant and maintain 1.7 million acres of new forest by 2040. To make this vision a reality and jumpstart creation of our forests of the future, Governor Hochul is announcing a goal of planting 25 million trees by 2033. This broad goal will invigorate our state's tree planting efforts, send an unmistakable market signal to private nurseries, and advance efforts to meet the Climate Act's net-zero goal, while growing the state's vital forest products industry"

Delaware: Forestry is included in Gov John Carney's 2024 priorities.

Maryland: The Board of Public Works just approved an expansion of the CREP easement program to all counties, not just the 8 priority counties.

USFS:

Lorenzo is looking to hear about successful RFB projects! Particularly if the RFBs are being used for alternate purposes, such as recreation, hunting, education, ect. Email him if you have anything to share: Lorenzo.cinalli@usda.gov

The Chesapeake Tree Canopy Roundtable Outcomes Webinar is being held on January 30 from 1-2. Register using this link: https://umd.zoom.us/meeting/register/tJIocuugqz8qGNfeHfIj6lGz1uptX0vNAvd9#/registration

The new GIT funding project regarding Nursery Tree supply for tree canopy is getting started. Julie is seeking urban forestry representatives for the steering committee, so if you are interested let her know (julie.mawhorter@usda.gov).

Martha Shimkin has been announced as the new Director of the CBP, and Lucinda Power is the new Partnership and Accountability Branch chief.

CBF:

IF Folks are looking for 2 and 3 gallon container trees for Spring projects, CBF's Clagett Farm nursery has 10,000 available. all great natives contact rschnabel@cbf.org