BIENNIAL STRATEGY REVIEW SYSTEM Chesapeake Bay Program

Narrative Analysis



TREE CANOPY OUTCOME FEBRUARY 2023 QUARTERLY PROGRESS MEETING

ABSTRACT: OFF TRACK. Although significant progress has been made by CBP partners in planting over 8300 acres of urban trees since 2014, the latest land use/land cover change data shows an overall net loss of over 25,000 acres of tree canopy in urban/community areas between 2013/14 and 2017/18. This valuable new dataset is being used to create county and municipal fact sheets on tree canopy status and change, and local engagement to use the data in planning and policy will be a critical next step. The Tree Canopy Funding & Policy Roundtable project (FY22 GIT-funded)—focused on priority issues of tree canopy losses, equity, and climate resilience—will generate actions for our next 2-year Logic & Action Plan as well as jurisdiction-specific action plans. Aligned with these themes, future work will also include addressing regional tree supply/nursery capacity and advancing tree equity through new Inflation Reduction Act funding and other partnership efforts.

<u>NOTE</u>: The narrative analysis summarizes the findings of the logic and action plan and serves as the bridge between the pre-quarterly logic and action plan and the quarterly progress meeting presentation. After the quarterly progress meeting, your responses to these questions will guide your updates to your logic and action plan. Additional guidance can be found on <u>ChesapeakeDecisions</u>.

1. Are we, as a partnership, making progress at a rate that is necessary to achieve this outcome? Would you define our **outlook** as on course, off course, uncertain, or completed? Upon what basis are you forecasting this outlook?

How would you summarize your **recent progress** toward achieving your outcome (since your last QPM)? If you don't have an indicator, would you characterize this progress as an increase, decrease, no change, or completed? *If you have an indicator and it was updated since your last QPM*, use your answer to question 16 from your Analysis and Methods document.

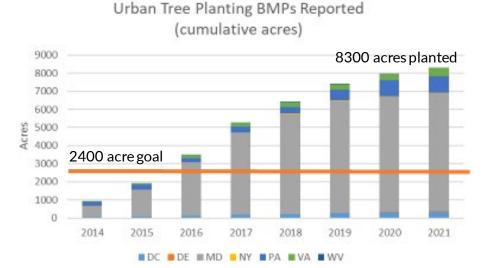
Explain any gap(s) between our actual progress and our outcome.

OFF COURSE.

The Tree Canopy Outcome goal is to expand tree canopy by 2400 acres in urban and community areas between 2014 and 2025. This is a net gain goal, in which we strive to maintain existing tree canopy, mitigate losses, and expand tree canopy by an additional 2400 acres.

The Tree Canopy Indicator has two components. First, annual progress in acres of trees planted in developed areas is tracked through state BMP submissions to NEIEN each year. The BMPs which count towards the outcome are urban tree planting, urban forest planting, and urban forest buffers. Table 1 below shows that from 2014-2022, states reported around 8300 acres of tree planting BMPs on developed lands. These data are helpful for measuring state and local efforts towards tree canopy expansion, but they do not capture the tree canopy losses that occur every day through factors such as development and removals, storms, pests and diseases, and natural mortality.

TABLE 1: Tree Planting Indicator



The second component of the Tree Canopy Indicator consists of an analysis of the high resolution land use/land cover data developed and updated by the Chesapeake Bay Program partnership approximately every 4-5 years. These data are critical for accounting for both gains and losses of tree canopy that occur on the landscape and helping us track our progress towards the net gain goal. In the past year, we have been working with the newly released land use change data to test, refine and finalize our Indicator methodology for tracking change for this outcome. The approved Indicator focuses on tracking net tree canopy change within a fixed urban/community footprint, as defined by 2010 Census Places. Table 2 shows the urban/community tree canopy change for the 2013/14 - 2017/18 period to be a net loss of over 25,000 acres (in census places). It is important to note that in the land cover/land use change mapping, losses of tree canopy are detected more readily/instantaneously than gains; tree canopy gains from newly planted trees or growth at the margins of existing canopy take much longer to pick up in these datasets, which are predominately based on NAIP imagery supplemented by LIDAR where available for the appropriate time period. Specialized local land use analyses that use two dates of high quality, comparable LIDAR data are likely to pick up newly planted trees or canopy growth more precisely and yield different net change numbers.

The 8300 trees planted from 2014-2021 — which will not likely show up in the land use change data for 10-15 years after planting — are an important offset to the 25,000+ acres of net loss detected, but clearly much effort is needed to reverse the trend and achieve the net gain specified in the outcome.

TABLE 2: Draft Tree Canopy Change Indicator (will be updated before Feb. meeting)

Tree Canopy Net Change	
in Census Places	
(2013/14-2017/18)	
	Net
Jurisdiction	Change
(CB Only)	(Acres)
Delaware	-28
DC	21
Maryland	-13,804
New York	78
Pennsylvania	-2,444
Virginia	-9,548
West Virginia	-107
Total	-25,832

2. Looking back over the last two or more years, describe any scientific (including the impacts of climate change), fiscal, and policy-related developments that impacted your progress or may influence your work over the next two years. Have these resulted in revised needs (*e.g.*, less, more) to achieve the outcome?

SCIENCE/DATA

The most important scientific development for our outcome has been the development and release of CBP's high resolution land use/land cover change data for the period 2013/2014 to 2017/2018. This is the first time we have been able to assess overall trends and progress towards meeting our tree canopy net gain goal. The findings reveal that losses are significantly outpacing current planting efforts, pointing to the need for local and/or state policies that help reduce tree canopy losses, as well as scaling up tree planting programs to better offset and reverse these losses.

FISCAL/POLICY

In the past two years, urban tree canopy has gained national and global attention as a key arena for building equity and climate resilience in communities. For example, at the state level, Maryland passed the ambitious Tree Solutions Now Act in 2021, which calls for 5 million trees to be planted by 2031, including 500,000 trees in underserved areas. At the federal level, the Inflation Reduction Act establishes a new \$1.5 billion for Urban & Community Forestry over the next 10 years, with focus on disadvantaged communities.

3. Based on the red/yellow/green analysis of the actions described in your logic and action plan, summarize what you have learned over the past two years of implementation.

Successes

Putting New Data to Use

Anticipating the release of the new CBP land use/land cover change data, USFS & the Forestry Workgroup collaborated with Chesapeake Conservancy, USGS and many partners to develop a 2-page Tree Canopy Status & Change Fact Sheet template which is being produced for every county in the watershed. Municipal fact sheets will be produced as well in 2023. The template

was developed with substantial input from the CBP Strategic Engagement Team, as well as input from the Local Action Cohort outcome coordinators and Local Government Advisory Council. The fact sheets will be posted on Chesapeake Tree Canopy Network-Understand Your Canopy in February 2023.

Tree Canopy Funding & Policy Roundtable
The Forestry Workgroup was successful in securing FY22 GIT funding to complete the highest
priority action in our 2021-22 Logic & Action Plan: convening a Tree Canopy Funding & Policy
Roundtable for state and local leaders. With University of Maryland Environmental Finance
Center as the contractor, the project commenced with steering committee formation and input
(summer 2022) and pre-Roundtable jurisdiction strategy sessions for input on needs and
priorities (fall 2022). The 2-day virtual Roundtable for state and local leaders will be held on
March 13-14, 2023, with a summary report and recordings/materials to be made publicly
available online. A post-Roundtable strategy session will be held with each jurisdiction, resulting
in a jurisdiction-specific action plan for the next two years.

Other Accomplishments:

- Updated Tree Canopy module of Local Government Guide to the Chesapeake and developed companion State Tree Resource Guides
- Completed Chesapeake Trees & Schools Guide: Growing the Connection, in collaboration with CBP Education Workgroup (linked <u>here</u>)

Challenges

- Tree Canopy Losses As noted above, the new tree canopy change data shines a light on our biggest challenge tree canopy losses are far outpacing current planting efforts. This points to the need to develop or strengthen new local and/or state policies that can help conserve and maintain canopy where possible. In addition, the rate of tree planting (and maintenance for successful canopy growth) must increase to offset losses and move in the desired direction of net gain. Although the overall trend Baywide is net loss, there has been progress in maintaining and expanding canopy in major cities like DC and Baltimore as well as some smaller communities. Learning more about drivers of loss and what policy or programmatic approaches have been effective in maintaining/expanding canopy is a critical next step.
- Tree Equity research from across the country has shown that communities of color and low income neighborhoods tend to have the lowest tree canopy and highest urban heat island and other climate-related risks. Addressing this inequity will require substantial resource investments in community-based solutions, robust and inclusive community engagement efforts, and deliberate policy/program/funding adjustments to ensure these communities receive first priority in financial and technical assistance.
- Nursery and Workforce Supply an emerging need from the Forestry Workgroup and other stakeholder forums in the past 2 years is addressing constraints with nursery supply to ensure the quality and quantity of tree stock will be available to meet ambitious tree planting goals that have been set forth. A related challenge is the need to build (and fund/hire) a robust, well-trained workforce to meet the scaled-up tree planting and maintenance needs.
- Time Delays/Capacity Challenges there are a number of actions in our last Logic & Action Plan that are occurring later than planned due to unanticipated delays in project timelines; those that are still a priority will be carried over into next Logic & Action Plan

4. Based on what you have learned through this process and any new developments or considerations described in response to question #2, how will your work change over the next two years? If we need to accelerate progress towards achieving our outcome, what steps are needed and, in particular, what specific actions or needs are beyond the ability of your group to meet and, therefore, you need the assistance of the Management Board to achieve?

Our priority actions in the next two years will be guided by the leadership recommendations and state action plans that come out of the Tree Canopy Funding & Policy Roundtable process in the first half of 2023. This project is designed to help generate our next set of priority state and CBP actions around funding, policy, and programmatic needs related to addressing tree canopy losses, equity and climate resilience. These will be used to update our Management Strategy and develop our next 2-year Logic and Action Plan. Once these actions are developed, we will share findings with the Management Board and seek support in their implementation.

Another new priority action in 2023-2024 will focus on nursery supply challenges and related workforce development opportunities through the FY23 GIT-funded project "Addressing Regional Tree Supply Challenges & Opportunities."

The County Tree Cover Status & Change fact sheets will be ready to disseminate in early 2023, and we will continue collaboration with the Local Action Cohort and Strategic Engagement Team to implement a multi-faceted strategy to get these tools out and being used by communities. In addition, the Forestry Workgroup will continue working with partners to complete a State of the Forests 2.0 StoryMap and report as an interactive platform for understanding and engaging with the rich land use/land cover and change datasets, as they relate to forests and urban tree canopy. In the next two years, we aim to expand our cross-GIT collaboration with the Local Action Cohort, Strategic Engagement Team, Healthy Watersheds GIT, Stewardship GIT to better integrate tree canopy into related local engagement efforts.

Expanding our tree equity investments and partnerships will be a driving focus, as described briefly below.

Management Board Help Needed:

- Tree Canopy Funding & Policy Roundtable MB support developing and implementing jurisdiction action plans (spring 2023 + beyond)
- MB Agenda time to discuss priority recommendations/ needs from the Roundtable process and new Logic & Action Plan (mid-late summer 2023)
- Assistance getting local Tree Cover Change Fact Sheets out and in use through state/partner networks (spring 2023+beyond)
 - 5. What steps are you taking, or do you recommend, to ensure your actions and work will be equitably distributed and focused in geographic areas and communities that have been underserved in the past?

The new Inflation Reduction Act funding for Urban and Community Forestry will be a significant vehicle to focus new funding and technical assistance in disadvantaged communities.

Although the funding mechanisms are still being developed, the Forestry Workgroup will help coordinate across state and local partners as new grant projects are developed and funded.

In the next two years, we would like to develop new inclusive webinar forums that help build and connect the network of tree equity practitioners working on the ground. This can be a venue for sharing funding and technical assistance resources and peer-to-peer sharing on strategies to address common challenges.

Building equitable workforce development pathways in the tree sector is another priority which we will seek to advance through participation in the cross-GIT Workforce Action Team/GIT project and other partnership efforts.