TREES in COMMUNITIES

CREATE VIBRANT COMMUNITIES

- Incorporating trees into common spaces in public housing increases social activities.[1]

- Having larger trees in yards and on the street can improve home values by 3%-15%.[2]

- Shoppers will spend 9%-12% more in areas with better tree canopy.[3]

REDUCE AIR POLLUTION

- Neighborhoods with lots of trees have lower childhood asthma rates.

PROVIDE SHADE & COOLING

- Tree canopy can reduce temperatures by up to 20 degrees, lowering health risks and utility bills.

IMPROVE HUMAN HEALTH

- Trees help reduce stress, lower blood pressure, and boost the immune system.

- Shade from trees reduces radiation that causes skin cancer.

CONTROL STORMWATER

- Tree roots can trap sediment and filter contaminants from stormwater.

- One tree can reduce stormwater runoff by 13,000 gallons per year.[4]

IMPROVE PUBLIC SAFETY

- Areas with increased green space have lower crime rates.[3]

Source:
Chesapeake Forest Restoration Strategy

Tree canopy outcome: what is our goal?

Through the *Chesapeake Bay Watershed Agreement*, the Chesapeake Bay Program has committed to…

Continually increase urban tree canopy capacity to provide air quality, water quality and habitat benefits throughout the watershed. **Expand urban tree canopy by 2,400 acres by 2025.**

Goal: *Vital Habitats*
Outcome*: Tree Canopy*

It's not just about planting...

Community Tree Canopy Goal = Existing Canopy + Planting + Growth (protection & maintenance) − Losses (mortality, removal, etc.)
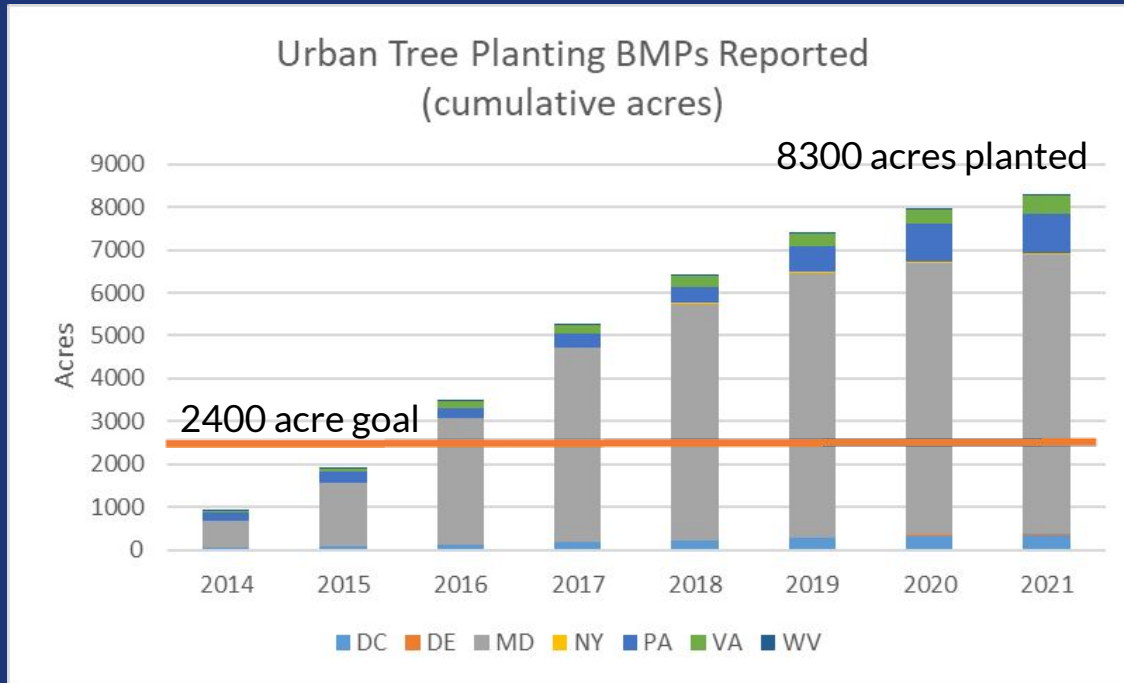
Most Significant Actions

We track Tree Canopy progress in two ways:
1) States report three urban tree planting BMPs annually for TMDL
2) Long term progress analyzed through high resolution Land Cover/Land Use updates

How are we doing?

New Plantings

Land Cover Change Detected from Imagery

Urban Tree Planting BMPs Reported (cumulative acres)

8300 acres planted

2400 acre goal

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

County data now available...

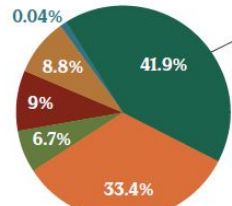## Tree Cover Status & Change
FOR CUMBERLAND COUNTY, PA

41.6%
Total Percent of County with Tree Cover

$14+ Million
Annual Benefits provided by Tree Cover
(in reduced air pollution, stormwater, & carbon dioxide)
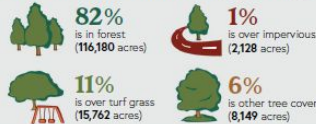
433 Acres
Net Loss of Tree Cover on Developed Lands, 2013 to 2017

What is the land use/land cover breakdown in your county?

341,668 ACRES OF LAND AREA IN CUMBERLAND COUNTY

- 0.04%
- 8.8%
- 9%
- 6.7%
- 41.9%
- 33.4%

41.9% Tree Cover[1] 142,219 acres

33.4% Agriculture 113,222 acres

6.7% Turf Grass (Lawns) 22,569 acres

9% Impervious (Buildings/Pavement) 30,882 acres

8.8% Other[2] 29,890 acres

0.04% Non-Forested Wetlands 163 acres

1. Tree cover includes all trees occurring on all land uses, such as individual trees found over turf, impervious, agricultural, wetlands, or other lands. It also includes areas of "forest," defined in this dataset as patches of tree cover 1 acre or greater, with a minimum patch width of 240 feet.

2. Other includes a mixture of non-treed land uses not captured in the main pie chart categories. See the Data Guide for detailed definitions of "other" and all the land use categories.

Land use/land cover statistics were generated using the 2022 edition of the Chesapeake Bay Land Use and Land Cover Database.

Where does tree cover occur in your county?

82% is in forest (116,180 acres)

1% is over impervious (2,128 acres)

11% is over turf grass (15,762 acres)

6% is other tree cover (8,149 acres)

What are some benefits of tree cover in your county?

Total Air Pollution Removal Value
9.7 million lbs removed annually
$9.2 million saved annually
Total air pollution removal includes CO, NO_2, O_3, SO_2, and Particulate Matter (PM2.5, PM10).

Gallons of Reduced Stormwater Runoff Value
560.1 million gallons reduced annually
$5.0 million saved annually

Carbon Sequestered Value
120,250 tons removed annually
$10,594 saved annually

Calculated based on 2017 tree cover data using: landscape.itreetools.org

CHESAPEAKETREES.NET
PUBLISHED AUGUST 2022

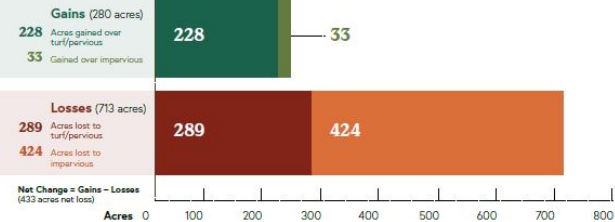### How is tree cover changing on developed and developing lands?
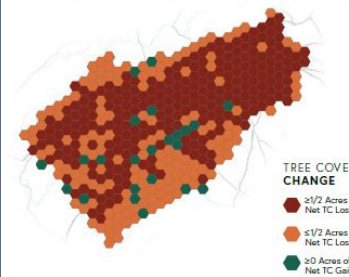
Understanding how your tree cover changes over time can inform the sustainable management of forests and community trees. The map to the left shows where your county has lost and gained tree cover from 2013 to 2017, focusing on land that is already or newly developed.

Tree cover can be lost quickly due to human activities (e.g., construction) or natural events (e.g. severe weather).

Tree cover can be gradually increased through tree planting and natural regrowth, but maintaining this new growth requires long-term investments.

Since mature, healthy trees provide significantly greater community benefits than newly planted trees, it is important to both preserve existing tree cover and seek opportunities to grow new trees and forests. Local land use planning, ordinances, and tree programs play a critical role!

TREE COVER CHANGE
- ≥1/2 Acres of Net TC Loss
- ≤1/2 Acres of Net TC Loss
- ≥0 Acres of Net TC Gain

Tree Cover Change on developed/developing lands (2013–2017)

Gains (280 acres)
228 Acres gained over turf/pervious — 228
33 Gained over impervious — 33

Losses (713 acres)
289 Acres lost to turf/pervious — 289
424 Acres lost to impervious — 424

Net Change = Gains – Losses
(433 acres net loss)

Acres: 0 100 200 300 400 500 600 700 800

Learn More:
Chesapeake Tree Canopy Network
Links to county fact sheets, user guides, map viewers, datasets, and more

Tree Equity Score
Explore maps of how tree benefits are distributed across communities

Capitalizing on the Benefits of Trees
A slideshow for local leaders featuring tree benefits, case studies and resources

State Urban and Community Forestry Assistance
(State contact and website)

Fact sheets produced through a grant from the USDA Forest Service. USDA is an equal opportunity provider, employer and lender.

Progress is not equitably distributed

Formerly redlined areas have less **tree cover** today than areas that weren't redlined.

0% Percentage tree cover 100%

Historical neighborhoods that were not redlined

The New York Times

How Decades of Racist Housing Policy Left Neighborhoods Sweltering

By Brad Plumer and Nadja Popovich
Photographs by Brian Palmer Aug. 24, 2020

But there is also good news

MARYLAND PLEDGES TO GROW 5 MILLION TREES!

SOURCE: WORLD RESOURCES INSTITUTE

FEDERAL INTERAGENCY COUNCIL

One Trillion Trees Initiative

GROWING, RESTORING, AND CONSERVING THE WORLD'S TREES

INFLATION REDUCTION ACT

$1.5 billion for the U.S. Forest Service's Urban & Community Forestry Program to help communities plant & care for urban trees.

BENEFITS INCLUDE:

- Contribute to carbon emissions removal
- Create new urban forestry jobs
- Reduce heat-related illnesses & utility costs & consumption
- Increase tree canopy in BIPOC communities

Image, The Nature Conservancy