

Getting to know each other!

Introductions to the HWGIT, FWG, and LUWG

How are we organized?

- Healthy Watersheds Goal Implementation Team (GIT): Standalone goal team with no workgroups
- Forestry Workgroup and Land Use Workgroup: Workgroups under the Water Quality GIT

Healthy Watersheds

- Goal: Sustain state-identified healthy waters and watersheds, recognized for their high quality and/or high ecological value
- Outcome: 100% of state-identified currently healthy waters and watersheds remain healthy
- Progress: Uncertain due to insufficient data
- Role of Healthy Watershed GIT: Outreach & Communication, Science & Data, Planning Support, and Capacity Building

The Chesapeake Healthy Watersheds Assessment 2.0

- Predicted model of stream health based on 60 watershed metrics
- Local governments can use the CHWA 2.0 to better understand what's happening in their water and serve as an early warning sign if watersheds start to degrade
- Helps identify areas more resilient or vulnerable to climate change impacts
- Provides supporting information for strategies to protect and maintain watershed health
- [Link to CHWA 2.0 tool](#)

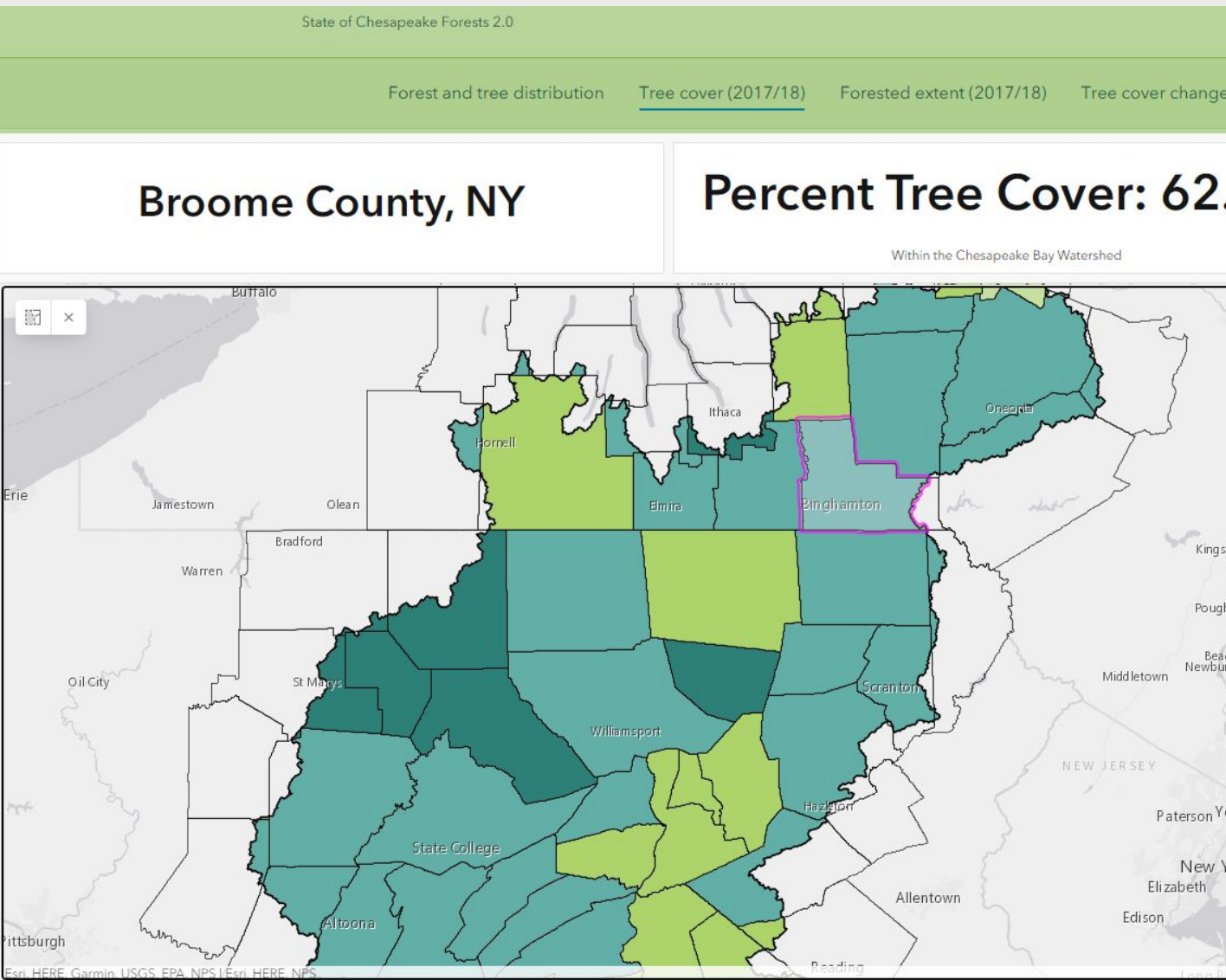
New CBP Land Use Strategy

1. Monitor land use/land cover change at high spatial, temporal, and categorical resolution.
2. Forecast plausible future scenarios of land use change.
3. Assess impacts of current and future changes in land use to water quality, wildlife and aquatic habitats, climate resiliency, and other ecosystem services.
4. Encourage smart growth policies for new development (e.g., infill, redevelopment, and preserving rural character).
5. Effectively communicate land use/land cover information to local decisionmakers.

Vital Habitats

- Goal: Restore, enhance and protect a network of land and water habitats to support fish and wildlife and to afford other public benefits, including water quality, recreational uses and scenic value across the watershed
- Outcomes:
 - Forest Buffers: Restore 900 miles of riparian forest buffers per year and conserve existing buffers until at least 70% of riparian areas in the watershed are forested
 - Tree Canopy: Expand urban tree canopy by 2,400 acres by 2025
- Progress: Off course. Planting rates have been increasing, but the new planting area is being far surpassed by loss of riparian forest and community tree canopy.

Putting new data to use: State of Chesapeake Forests 2.0 Storymap



What are some benefits of tree cover in the Chesapeake Bay watershed?



Total Air Pollution Removal Value

1.6 billion lbs removed annually
\$595.1 million saved annually
Total air pollution removal includes CO, NO₂, O₃, SO₂, and Particulate Matter (PM_{2.5}, PM₁₀).



Reduced Stormwater Runoff Value

30.9 billion gallons removed annually
\$276.3 million saved annually



Carbon Sequestered Value

30.7 million tons removed annually
\$5.2 billion saved annually

Calculated based on 2017 and 2018 tree cover data using landscape.itreetools.org

Putting new data to use: Tree Canopy Status and Change Factsheets

Tree Cover Status & Change

FOR TIOGA COUNTY, NY

62.5%

Total Percent of
County with Tree Cover

\$41.2 Million

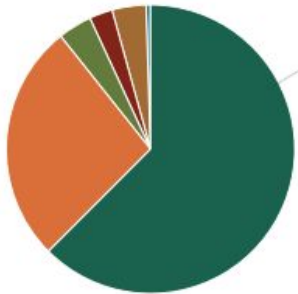
Annual Benefits provided by Tree Cover
(in reduced air pollution, stormwater, & carbon dioxide)

-5 Acres

Net Loss of Tree Cover on
Developed Lands, 2013 to 2017

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

330,635 ACRES OF LAND AREA
IN TIOGA COUNTY



62.5% Tree Cover ¹
206,742 acres

26.8% Agriculture
88,661 acres

3.8% Turf Grass
(Lawns)
12,672 acres

2.6% Impervious
(Buildings/Pavement)
8,480 acres

3.8% Other ²
12,528 acres

0.5% Non-Forested
Wetlands
1,553 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 based on 2017 imagery using the 2022 edition of the [Chesapeake Bay Land Use and Land Cover Database](#).

Where does tree cover occur in your county?

92.7%
is in forest
(191,608 acres)

0.8%
is over impervious
(1,604 acres)

2.8%
is over turf grass
(5,830 acres)

3.7%
is other tree cover
(7,701 acres)

What are some benefits of tree cover in your county?



Total Air Pollution Removal Value
11.5 Million lbs removed annually
\$2.4 Million saved annually
Total air pollution removal includes CO, NO₂, O₃, SO₂, and Particulate Matter (PM2.5, PM10).



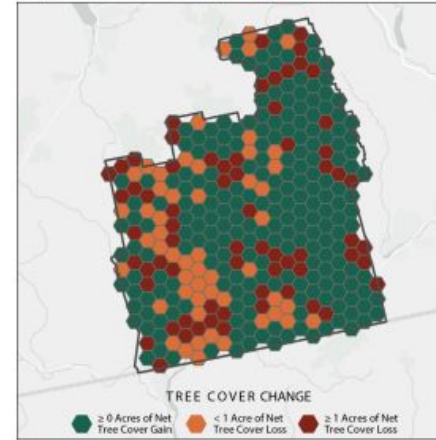
Gallons of Reduced Stormwater Runoff Value
115.8 million gallons reduced annually
\$1.0 million saved annually



Carbon Sequestered Value
201,000 tons removed annually
\$37.7 million saved annually

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

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 these gains may take 10-15 years to be detected in high resolution imagery.

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 on developed/developing lands (2013–2017)

Gains (93 acres)

72 Acres gained over
turf/pervious

22 Acres gained over impervious

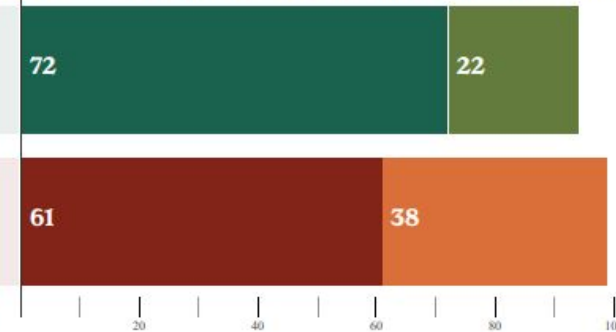
Losses (99 acres)

61 Acres lost to
turf/pervious

38 Acres lost to
impervious

Net Change = Gains – Losses
(-5 acres Net Loss)

Acres



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
(Gloria VanDuyn, New York Website)



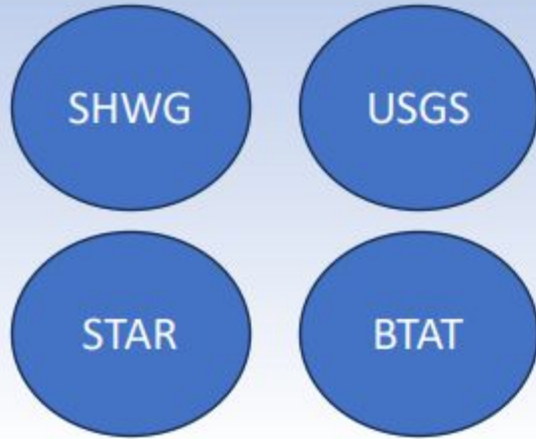
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Alignment: Maintaining Watershed Health Takes a Village

Watershed Science



Land Conservation & Management



Land Use Planning



Outreach & Communication



BTAT: Brook Trout Action Team
CCP: Chesapeake Conservation Partnership
CRWG: Climate Resiliency Workgroup
FWG: Forestry Workgroup
LLWG: Local Leadership Workgroup
LUWG: Land Use Workgroup

PLWG: Protected Lands Workgroup
SET: Strategic Engagement Team
SHWG: Stream Health Workgroup
STAR: Scientific, Technical, and Reporting team
USGS: U.S. Geological Survey
USWG: Urban Stormwater Workgroup
WWG: Wetlands Workgroup

Opportunities for collaboration to advance conservation and restoration



LEVERAGING DATA



IMPROVING
TARGETING AND
EVALUATION



INCREASING
CAPACITY AND
COMMUNICATION