



Tree Canopy in the Chesapeake Bay Partnership

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Eastern Region State & Private Forestry, Chesapeake Bay Program



2014 Agreement Goals and Outcomes



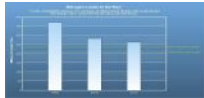
Sustainable Fisheries

- Blue Crab Abundance
- Blue Crab Management
- Oyster
- Forage Fish
- Fish Habitat



Vital Habitats Goal

- Wetlands
- Black Duck
- Stream Health
- Brook Trout
- Fish Passage
- Submerged Aquatic Vegetation (SAV)
- **Forest Buffer**
- **Tree Canopy**



Water Quality Goal

- 2017 Watershed Implementation Plans (WIP)
- 2025 WIP
- Water Quality Standards Attainment and Monitoring



Toxic Contaminants Goal

- Toxic Contaminants Research
- Toxic Contaminants Policy and Prevention



Healthy Watersheds Goal

- Healthy Waters



Stewardship Goal

- Citizen Stewardship
- Local Leadership
- Diversity



Land Conservation Goal

- **Protected Lands**
- Land Use Methods and Metrics Development
- Land Use Options Evaluation



Public Access Goal

- Public Access Site Development



Environmental Literacy Goal

- Student
- Sustainable Schools
- Environmental Literacy Planning



Climate Resiliency Goal

- Monitoring and Assessment
- Adaptation Outcome

Through the Chesapeake Bay Watershed Agreement, the Chesapeake Bay Program has committed to...



Vital Habitats Goal

Tree Canopy Outcome: 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.**



Forestry Workgroup

- ✓ Formed in 1989 - state, federal, local, ngo members
- ✓ Monthly meetings (calls, face to face)
- ✓ Source of forestry expertise at Chesapeake Bay Program (science/technical/policy)
- ✓ Key partnership goals adopted:
 - 1) Restore 900 miles of riparian forest buffer per year
 - 2) Conserve 695,000 acres of high-value forest by 2025
 - 3) Expand tree canopy by 2400 acres by 2025.

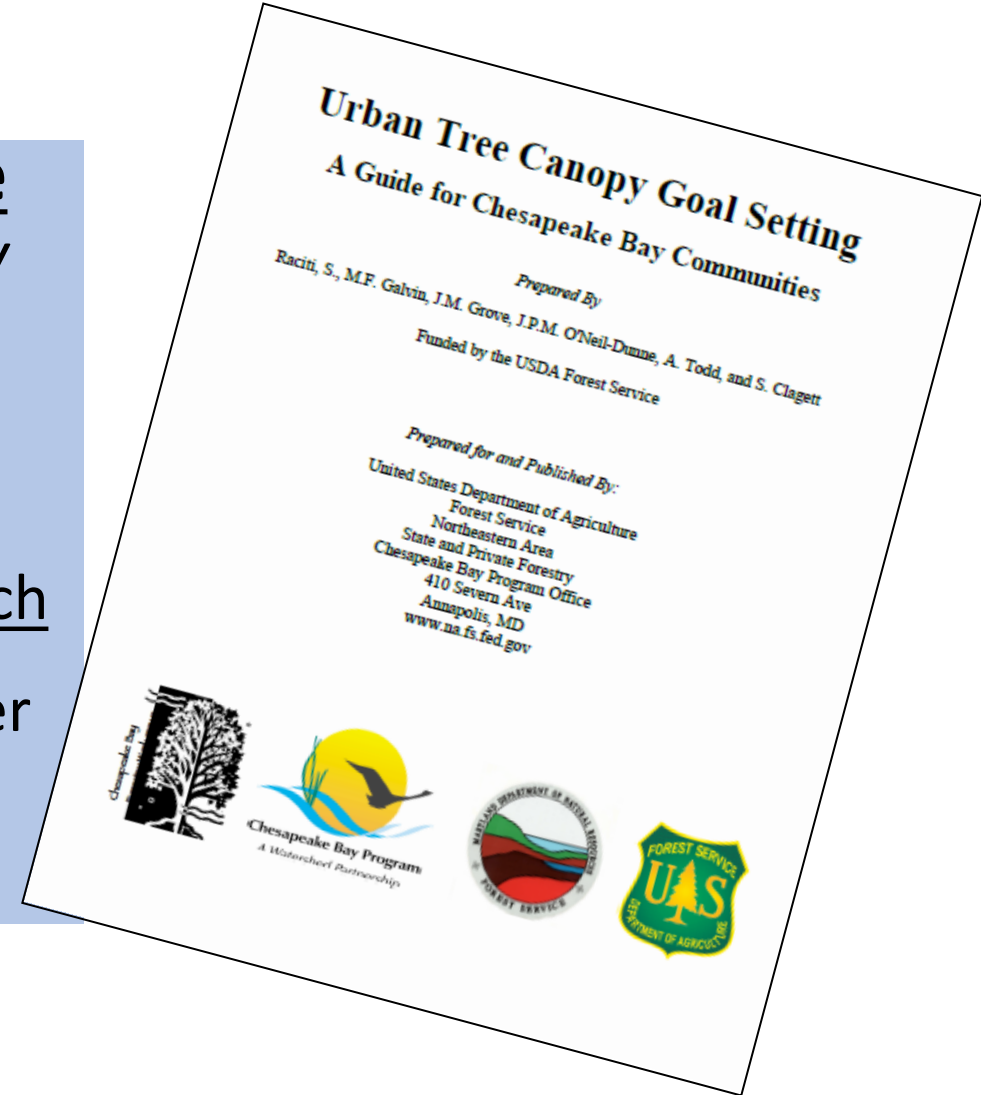


Where we've been...

2003 Chesapeake Executive Council Directive

...WE FURTHER RECOGNIZE THAT URBAN TREE CANOPY COVER offers stormwater control and water quality benefits for municipalities in the Chesapeake Bay watershed...

- **By 2010**, work with at least 5 local jurisdictions in each state to complete an assessment of urban forests, adopt a local goal to increase urban tree canopy cover and encourage measures to attain the established goals...



Where we've been...

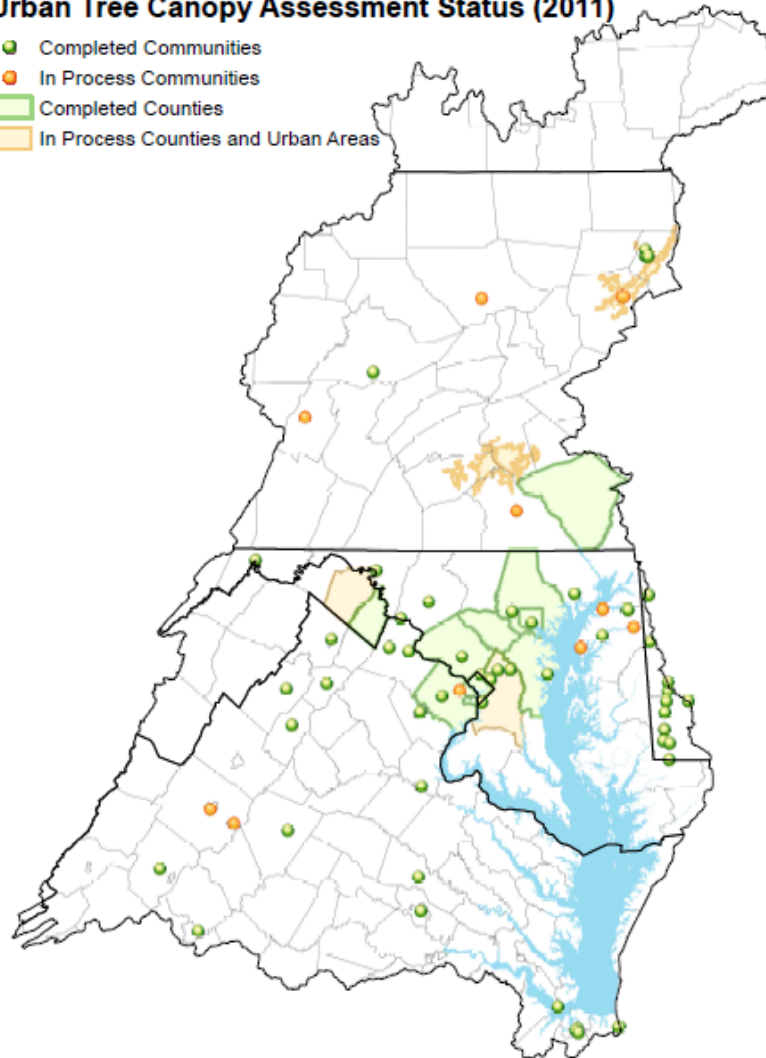
UTC Assessments in the Chesapeake Bay Watershed

70+ cities/towns

9 counties

Urban Tree Canopy Assessment Status (2011)

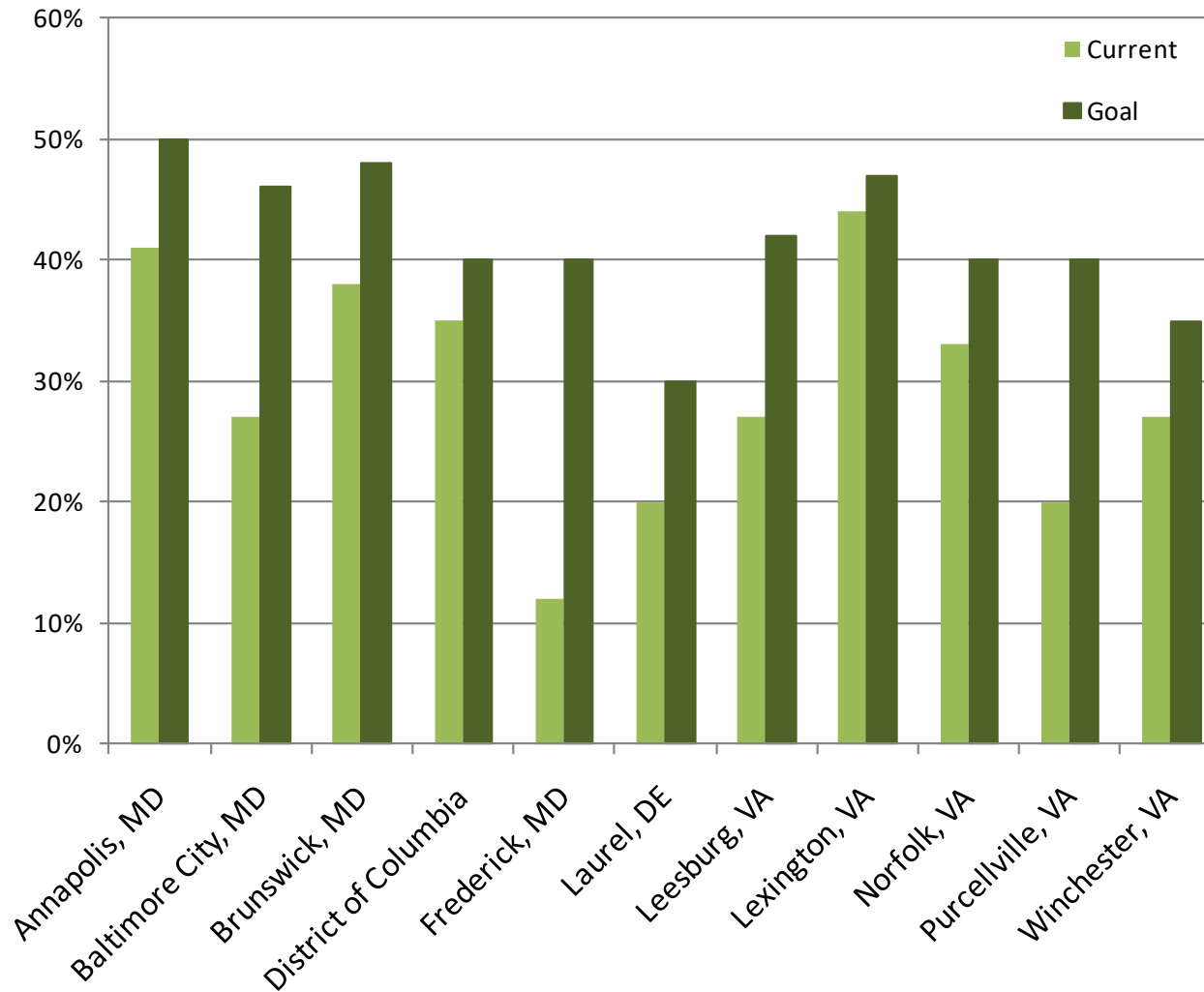
- Completed Communities
- In Process Communities
- Completed Counties
- In Process Counties and Urban Areas



Where we've been...

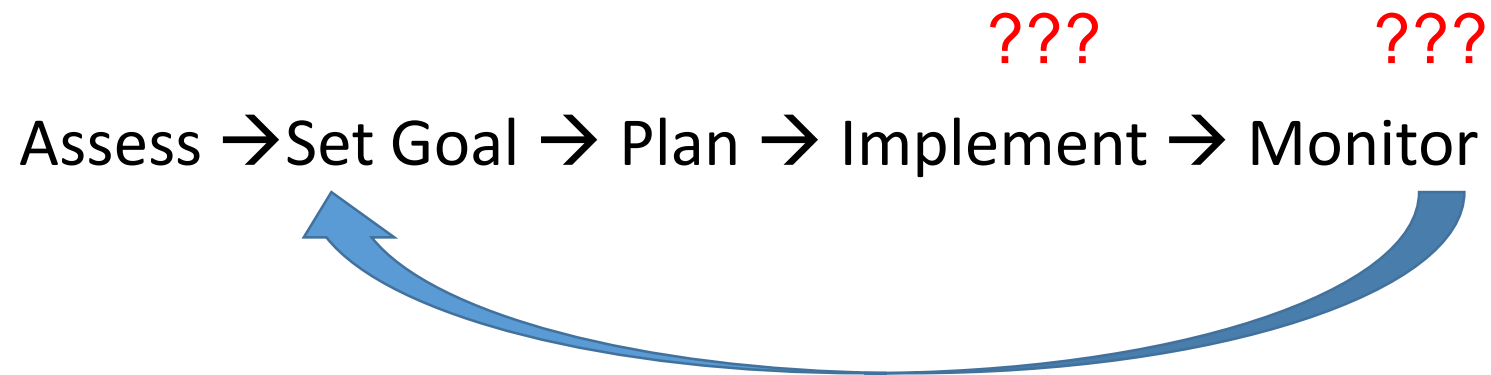
- 5 Counties and 40+ Cities/Towns have set UTC Goals

EXAMPLES – UTC GOALS



Where we've been...

Progress on the ground?



- We haven't had good information on actions taken and progress made in protecting and expanding urban tree canopy at the local level

Why is Tree Canopy So Important?

SEE HOW

TREES IMPROVE



HUMAN HEALTH



ECONOMIC DEVELOPMENT



WATER QUALITY



AIR QUALITY



PUBLIC SAFETY



EQUITY



TRANSPORTATION



EDUCATION



CITY PLANNING



SMART CITIES TECH



URBAN WOOD REUSE

VIBRANT CITIES LAB

IMPACTS, RESEARCH, CASE STUDIES URBAN FORESTRY TOOLKIT RESOURCES

Vibrant cities cultivate thriving urban forests that boost public health, safety, sustainability and economic growth.

www.vibrantcitieslab.com

for latest research on urban forest co-benefits

State Targets

Jurisdiction	Outcome Annual Target (New Acres)	Outcome 2025 Target (New Acres)
Delaware	5	60
DC	40	480
Maryland	45	540
New York	5	60
Pennsylvania	60	720
Virginia	40	480
West Virginia	10	120
TOTAL	205	2460

These Tree Canopy targets were set by states in 2014 to develop the Agreement Outcome

It's not just about planting...



Chesapeake Urban Tree Canopy Summit October 14-15, 2014

- 80+ local, state, federal, and nongovernmental participants from across watershed
- Ideas and priorities formed basis of our 2015 Tree Canopy Management Strategy & 2-year workplan



FACTORS INFLUENCING ABILITY TO REACH URBAN TREE CANOPY GOALS



Funding & Partnerships

Policies & Ordinances

Technical Knowledge & Capacity

Community Education & Outreach

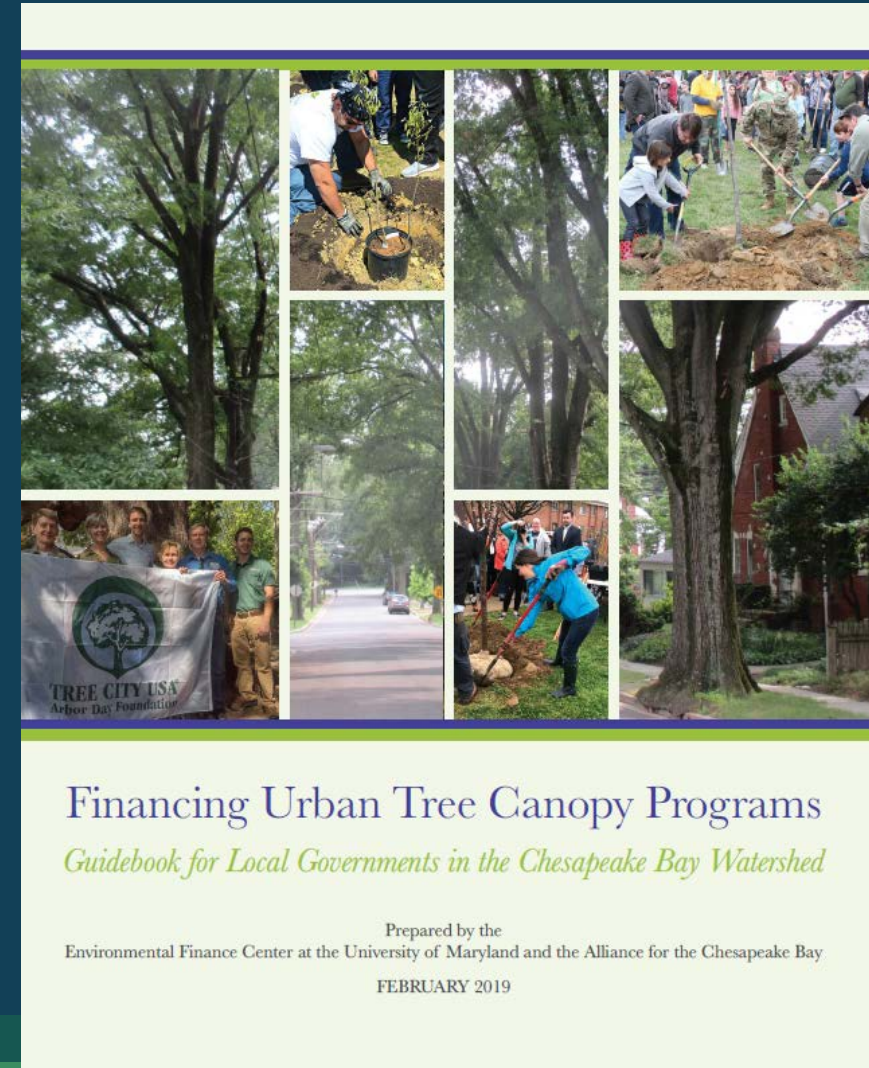
Drivers of Loss:

- Development
- Storms
- Pests/Disease
- Natural Mortality
- Utility Clearing
- Deer Browse
- Improper Maintenance

What Has Been Done to Support the Outcome?

PROGRESS: Funding & Partnerships

- Released this spring by our partners UMD Environmental Finance Center and Alliance for the Chesapeake Bay
- Financing principles, strategies, state programs, local case stories



See <http://chesapeaketrees.net/category/funding/>

What Has Been Done to Support the Outcome?

PROGRESS: Policy & Ordinances

- **Crediting Tree Canopy in TMDL/WIP efforts**
 - ✓ New Tree Canopy land uses/loading rates in Phase 6
 - ✓ BMP Expert Panel –urban tree canopy credit approved by EPA, state water quality agencies
 - ✓ 3 BMP credits now count towards our outcome:
 - 1) urban tree planting
 - 2) urban forest planting
 - 3) urban forest buffers

Recommendations of the Expert Panel to Define BMP Effectiveness for Urban Tree Canopy Expansion

Karen Capiella, Sally Claggett, Keith Cline, Susan Day, Michael Galvin, Peter MacDonagh, Jessica Sanders, Thomas Whitlow, Qingfu Xiao

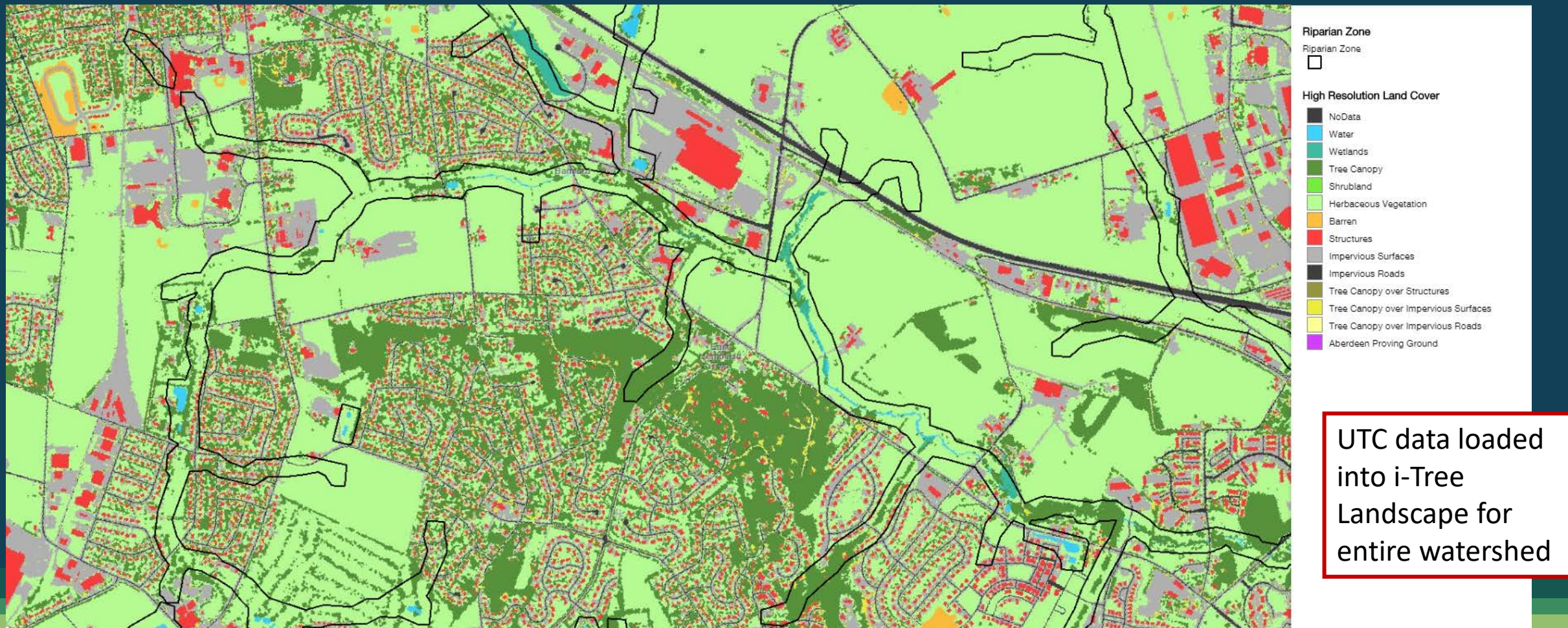


Accepted conditionally by Forestry Work Group, June 23, 2016
Approved by Watershed Technical Work Group, September 1, 2016
Final Approval by Water Quality Goal Implementation Team, September 12, 2016

See <https://chesapeakestormwater.net/urban-tree-canopy-expansion/>

What Has Been Done to Support the Outcome?

Progress: Technical Knowledge & Capacity:
High Resolution Land Cover/Tree Canopy Data- Watershed-wide



Links to [CB Land Cover Data](#); [CB Land Use Data](#)

What the land cover data shows us today (2013 Baseline)

Jurisdictions	Total Tree Canopy (acres)	Forest in Urban Areas & Clusters (acres)	Tree Canopy + Urban Forest
Delaware	6,320	3,414	9,734
District of Columbia	8,073	4,477	12,550
Maryland	317,076	331,308	648,384
New York	50,840	22,058	72,898
Pennsylvania	293,821	148,724	442,545
Virginia	407,940	303,375	711,315
West Virginia	46,069	15,481	61,549
Watershed	1,130,139	828,837	1,958,976

Tree Canopy = Tree Canopy over Turf Grass and Tree Canopy over Impervious (both from Phase 6 land use)

Forest = Forest as defined in Phase 6 model land use, exclusive of tree canopy; filtered to only 2010 Census Urban Areas and Urban Clusters

What Has Been Done to Support the Outcome?

PROGRESS: Community Education and Outreach

- Created new website to support and connect watershed tree programs

The screenshot shows the homepage of the Chesapeake Tree Canopy Network website. The header is dark blue with the logo on the left and navigation links on the right. The main content area is white with a large image of people measuring a tree. A featured article is highlighted with a white box. The footer is dark blue with a sign-up button and a search bar.

Chesapeake Tree Canopy Network

SIGN UP ABOUT US CONTACT US CHESAPEAKEFORESTBUFFERS.NET

WHY TREE CANOPY? UNDERSTAND YOUR CANOPY EXPAND YOUR CANOPY MAINTAIN YOUR CANOPY

Welcome to the Chesapeake Tree Canopy Network

Connecting you with resources, stories, and best practices to [understand your canopy](#), [expand your canopy](#), and [maintain your canopy](#). Learn about and make the case to others [why tree canopy](#) is so critical to a healthy, vibrant Chesapeake Bay watershed. We are building this resource as we go, so please [send your ideas](#) and suggestions for making the network most helpful.

DC: Using leading edge tools to manage our Capital's canopy

[Read More](#)

Get updates on tree canopy news and events! [Sign up](#)

Tree Canopy Initiatives

Find local tree canopy assessments, goals, and urban forestry contacts.

Address Search

chesapeake network

Looking to participate in the tree canopy

What Has Been Done to Support the Outcome?

PROGRESS: Community Education and Outreach

- Tree Canopy, Environmental Justice & Community Engagement Project (LSR)
 - ✓ 2017 Regional Workshop
 - ✓ 5 Pilot Communities in Anacostia
 - ✓ Case studies coming in 2019



Tree Canopy Indicator, Progress & Tracking

Tree Canopy Indicator has 2 components*:

- 1) States report three urban tree BMPs annually to track progress towards meeting the Bay TMDL
- 2) Long term progress analyzed through remote sensing in CBP Land Cover updates

RESOURCES

A Guide for Forestry Practices in the Chesapeake TMDL

Phase III WIPs



Prepared by the Forestry Workgroup, Chesapeake Bay Program Office

Latest Update: November 2018

Making Your Community Forest-Friendly

A Worksheet for Review of Municipal Codes and Ordinances

August 2018

Produced by the Center for Watershed Protection Funded by the USDA Forest Service



This project was made possible through funding from the USDA Forest Service. USDA is an equal opportunity provider, employer and lender.



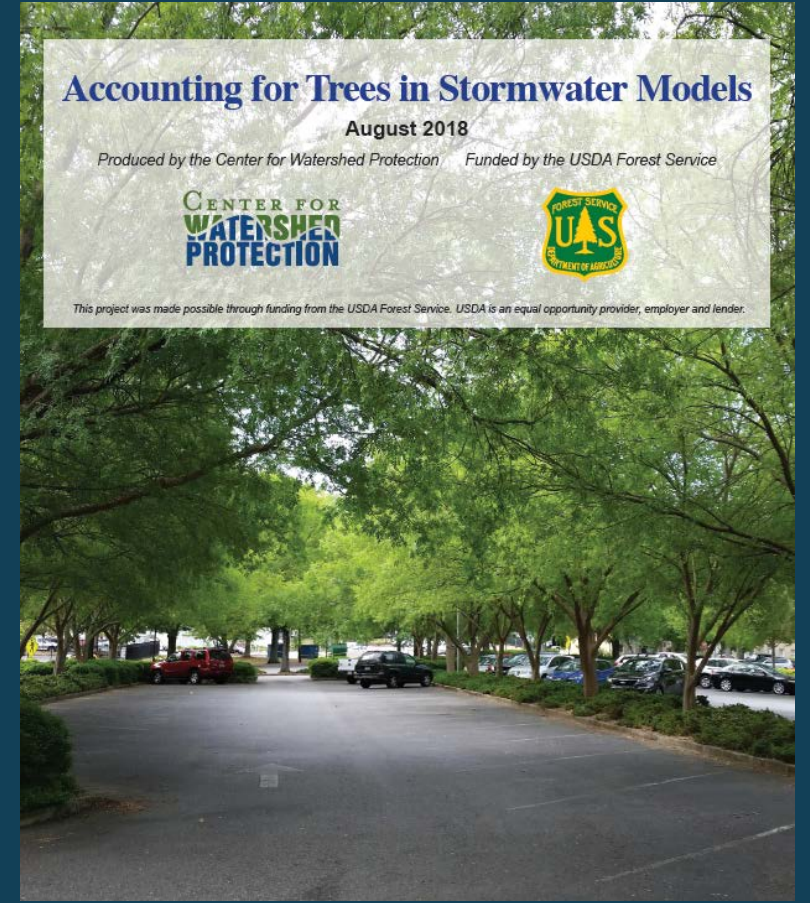
Accounting for Trees in Stormwater Models

August 2018

Produced by the Center for Watershed Protection Funded by the USDA Forest Service



This project was made possible through funding from the USDA Forest Service. USDA is an equal opportunity provider, employer and lender.



1. https://www.chesapeakebay.net/channel_files/31568/wip_forestry_bmp_packet_november_2018_update.pdf
2&3 <https://www.cwp.org/new-resources-trees-stormwater/>



**Based on what we've
learned, we plan to...**

Promote tree canopy more vigorously through state and local stormwater programs and WIP efforts

- ❖ Bolster urban tree BMPs in WIP III planning efforts
- ❖ Overcome barriers to tree protection and planting in urban stormwater programs
- ❖ Leadership Ask: Assure agency teamwork in integrating tree canopy goals in stormwater program delivery and WIP planning



**Based on what we've
learned, we plan to...**

Increase local and partner engagement in tree canopy strategies and tracking progress

- ❖ **Develop user-friendly BMP Tree Tracking tool to capture local/partner efforts not currently reported**
- ❖ **Engage local partners in latest tools, data, and strategies through Chesapeake Tree Canopy Summit 2.0**
- ❖ **Leadership Ask: Come to the summit! Help your local partners participate and identify funding for support**

Looking forward to hearing from you
about ways to promote the use of trees
to offset stormwater concerns.

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or

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