

CONSERVING TREES AND FORESTS IN METROPOLITAN WASHINGTON

Regional and Local Tree Canopy Goals, Charting the Path Forward - Informing the Tree Canopy Action Plan

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Region Forward
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Metropolitan Washington
Council of Governments

Tree Canopy Goal for Region Forward Coalition October 25, 2024

Outline

- History of COG's Leadership on Tree Canopy Planning Efforts
- COG's Tree Canopy Resolution and associated goals
- Why and How were Goals Developed
- Scope of the Challenge
- Tree Canopy Action Plan development
- Discussion



COG is Displaying Local and National Leadership

COG is providing national leadership through adoption of the regional tree canopy goals.

COG's record of leadership for regional initiatives and goals is extended to trees and forests.

Inspiring action at the local level.



Dafact/[pixabay](#)



James Wheeler/[pixabay](#)

History of Regional Tree Conservation Initiatives

Long history of state and local leadership on Tree Conservation and Tree Planting

- 1989/1990 – Virginia and Maryland enact tree conservation legislation
- 2006-2008 – Tree measures added to 8-hr Ozone Air Quality State Implementation Plan
- 2010 – Tree canopy strategies identified for COG Climate Report
- 2010 – 2024 – Trees as a priority for Climate, Energy and Environment Policy Committee (CEEPC)
- 2018 – COG Tree Canopy Management Strategy recommends setting a regional and local tree canopy goals
- 2019 – COG Board Establishes Regional Tree Canopy Subcommittee under CEEPC
 - ✓ *Tree Conservation Cookbook released with examples of successful tree programs*
- 2024 – COG Resolution establishes regional and smaller scale canopy goals
- Next up –Regional Tree Canopy and Forest Action Plan

April 10th COG Resolution R14-2024

- COG Board established a regional goal of maintaining a minimum tree canopy coverage of 50 percent across the Metropolitan Washington region;
- Board received the report *Conserving Trees and Forests in Metropolitan Washington* as a support for the goal recommendations;
- Board urges member jurisdictions to develop and update relevant policies, procedures, ordinances and the development of tree preservation and planting initiatives and goals; and
- Board requested that CEEPC and the Regional Tree Canopy Subcommittee develop a Tree Canopy Action Plan and reassess the regional goal and supporting target goals every five years until at least 2050.

Tree Canopy – Regional and Local Goals

COG's Regional Tree Canopy Subcommittee recommends three tiers of goals:

1. An overarching regional goal of 50%. Represents the minimum percentage of tree canopy that COG communities strive to achieve and maintain on a regional basis from present until 2050.
2. Intermediate Target Goals based on Population Density and Urbanization - provided to help communities identify canopy goals for watersheds, planning districts, census tracts, and towns and smaller cities.
3. Smaller Scale Target Goals for General Land Use Categories - identify mature canopy coverage levels recommended for 18 general classes of land use categories.

The intermediate and smaller scale target goals reflect a “***take care of the pennies and the dollars will take care of themselves***” approach to achieving and sustaining the regional goal.

How did the Tree Canopy Subcommittee develop these Recommendations?

COG's Regional Tree Canopy Subcommittee :

1. Utilized newly available satellite data to analyze detailed tree canopy data at a very fine resolution. Enables tracking of tree canopy coverage over time. Source is the Chesapeake Bay Program and Chesapeake Conservancy.
2. Analyzed tree canopy trends by jurisdiction. Researched best practices and current status of tree canopy levels by land use type.
3. Conducted scenario analysis to determine anticipated loss of tree canopy over time.
4. Estimated conservation and planting needs to meet goal.

Tree Canopy by Jurisdiction

Jurisdiction	Total Acreage of Jurisdiction w/o bodies of water #	Acres of Tree Canopy 2014	Acres of Tree Canopy 2018	% Tree Cover 2014	% Tree Cover 2018	Acres of Tree Canopy Gain/Loss
Arlington County, VA	16,638.28	5,647.7	5,655.3	33.9%	34.0%	7.6
Charles County, MD	292,971.63	198,908.4	198,119.6	67.9%	67.6%	788.9
Fairfax County, VA	250,252.38	140,120.1	139,299.2	56.0%	55.7%	821.0
Frederick County, MD	422,776.31	179,592.1	181,709.0	42.5%	43.0%	2,116.8
Loudoun County, VA	330,071.15	147,938.1	145,075.4	44.8%	44.0%	2,862.7
Montgomery County, MD	315,589.05	153,264.0	147,479.5	48.6%	46.7%	5,784.4
Prince George's County, MD	308,890.48	168,099.1	160,808.4	54.4%	52.1%	7,290.7
Prince William County, VA	214,563.21	122,543.7	121,310.1	57.1%	56.5%	1,233.6
City of Alexandria, VA	9,558.58	2,639.3	2,658.1	27.6%	27.8%	18.8
District of Columbia	39,120.61	15,235.8	14,760.3	38.9%	37.7%	475.5
City of Fairfax, VA	3,993.88	1,636.5	1,626.6	41.0%	40.7%	9.9
City of Falls Church, VA	1,309.72	541.1	536.4	41.3%	41.0%	4.6
City of Manassas, VA	6,299.49	1,502.4	1,498.9	23.8%	23.8%	3.5
City of Manassas Park, VA	1,941.63	426.0	424.6	21.9%	21.9%	1.4



Tree Canopy Scenarios

- COG tree canopy currently estimated at 49.6%.*
- CBP data projects a loss of 4,300 acres per year
- We'll need increased levels of tree preservation and planting efforts to offset loss.

**Chesapeake Bay Program (CBP) Land Use/Land Cover data provides accurate Tree Canopy coverage regionwide*



Will Need to Offset Tree Loss

Scenario	2022 Tree Canopy Coverage	2050 Tree Canopy Coverage	Offset by Tree Planting 2022 to 2050	Offset by Tree Preservation 2022 to 2050	Total Tree Canopy Loss 2022 to 2050
A	49.8 %	44.4%	N/A	N/A	119,932.4 acres
B	49.8 %	46.3%	39,019.2 acres	4,173.6 acres	76,739.6 acres
C	49.8 %	48.1%	74,136.5 acres	8,788.6 acres	37,007.4 acres



Examples of Past Action Plan Measures

When we tracked all the local measures in the 2010-2020 regional climate plan checklist, CEEPC included a variety of measures.

Green Infrastructure		Status**
41	75% of jurisdictions implement a plan to preserve and enhance ecologically valuable green spaces (such as forests, wetlands, stream buffers) in urban, suburban and rural areas, such as a green infrastructure plan, natural resource management plan, or green space plan.	64%
42*	100% of jurisdictions in the region are a Tree City USA .	73%
43*	75% of jurisdictions adopt a tree canopy/forest cover goal.	64%
44*	75% of jurisdictions have a green roof located on government property.	41%
45*	50% of jurisdictions adopt a green streets policy .	32%

Tracking Local Leadership

Jurisdiction	Tree or Forest Protection Ordinance	Tree Canopy Assessment	Tree Canopy/ Forest Cover Goal	Plan to Increase Tree Canopy	On/off-site, Bank, fee-in-lieu Mitigation	GI, UF, GS Plan **	Tree City USA, 2017
District of Columbia	●	●	●	◐	●	●	●
Charles Co.	●	○	◐	○	●	○	○
Frederick Co.	●	○	●	◐	●	●	○
Frederick	●	●	●	◐	●	●	●
Montgomery Co.	●	●	◐	○	●	●	●
Gaithersburg	●	●	●	◐	●	●	●
Rockville	●	●	●	●	●	●	●
Takoma Park	●	●	●	●	●	●	●
Prince George's Co.	●	●	●	●	●	●	●
Laurel	●	●	●	●	●	●	●
Bowie	●	●	●	◐	●	●	●
College Park	●	●	○	◐	○	●	●
Greenbelt	◐	●	●	◐	○	●	●
Hyattsville	◐	◐	◐	◐	○	◐	●
Bladensburg	○	●	○	◐	○	○	○
Alexandria	●	●	●	●	●	●	●
Arlington Co.	●	●	●	●	●	●	●
Fairfax Co.	●	●	●	●	●	●	●
City of Fairfax	●	●	○	◐	○	◐	●
Falls Church	◐	●	●	◐	○	○	●
Loudoun Co.	●	○	●	◐	○	●	○
Prince William Co.	●	○	●	◐	○	●	○
Manassas	●	●	●	●	○	◐	●
Manassas Park	○	○	○	○	○	◐	○
% Implemented + In Progress	90%	77%	77%	60%	42%	79%	75%

Source: *Tree Canopy Management Strategy, 2018*



Tree Canopy Action Plan

- What will it Take? Develop a *Tree Canopy and Forest Action Plan* to support the goal, Spring 2026
- Address uncertainties how regional canopy levels will be impacted by climate change; economic patterns; housing and transportation needs; and shifting societal values.

Current Action Plan Framework and Focus

Below are examples of the Action Plan Framework and Areas of Focus

- Prioritize human health by fostering policies and programs that protect, manage, and strategically expand tree canopy through new plantings.
- Optimize Forest Programs--build and strengthen forest management programs at the local and regional level.
- Inspire communities to take ownership of efforts to protect and expand tree canopy.
- Measure and report progress towards regional tree canopy goals every five years.



Dr. Seuss' *The Lorax* as portrayed by Universal Studios

COG's Resources to Support Tree Canopy & Forest Goals

- 2018 Regional Tree Canopy Management Strategy
- Tree Conservation Cookbook
- Conserving Trees and Forests in Metropolitan Washington (April 2024)

These are available on COG's website:

<https://www.mwcog.org/committees/regional-tree-canopy-workgroup/>



DISCUSSION



Conserving Trees and Forests IS Region Forward

- Trees align with and support other regional goals.
- Research shows positive relationships between tree canopy, forests, & public health, equitable communities, and vibrant economies.



CONSIDERATIONS: How do Trees relate to Other COG Goals and Plans, Including Equity?

Climate and energy goals

- Carbon sequestration
- Mitigation of heat islands and flooding
- Reduces energy bills for buildings
- *Rooftop solar*

Land development decisions and locations

- Trees add market value
- *Housing and transportation goals*
- *Land demands for data centers & other commercial development*
- *Preservation of ag land*

Health and Public Safety

- Better air quality through CO2 and particulates sequestration
- Positive mental health and reduction of crime rates
- Provide shade and cooling
- *Trees in storm events*

Workforce development

- Green jobs planting and maintaining trees
- Food & wood products

DISCUSSION: What Can Be Done to Support Attaining the Goals?

1. Tree Canopy Action Plan

An action plan is being developed to support action on this goal, considering how planning and implementing programs to foster conservation of tree canopy and forests can be integrated with other regional planning priorities, including land use, transportation, housing, energy, workforce, equity, and economic development, with considerations for water, air quality, energy, and climate change.

2. Discussion:

Discussion Topic: How can COG jurisdictions support Tree Canopy Goals and strategies and also support other land use development opportunities?

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