

Primary Goals and Objectives of Regional Tree Canopy Management

AIR AND CLIMATE PUBLIC ADVISORY COMMITTEE (ACPAC)
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Overview

- Regional Tree Canopy Management background
- Work plan
- Accomplishments
- Next steps

Background

- COG's Regional Tree Canopy Workgroup was an ad-hoc committee formed to develop strategies, tactics and recommendations that could be used to conserve and manage regional tree and forest resources in support of environmental, land use planning, regulatory and socio-economic goals.
- Formed 2011 from earlier 2007 workgroup
- Final recommendations presented in 2013

Regional Tree Canopy Work Group

- Initially, RTCW efforts centered around the development of a credited tree canopy measure for air quality plans
- Focus expanded to develop strategies and recommendations that support a broader set of regional environmental and planning goals
- Recommendations to CEEPC July 2013
- Tree Canopy Management Strategy Report 2018

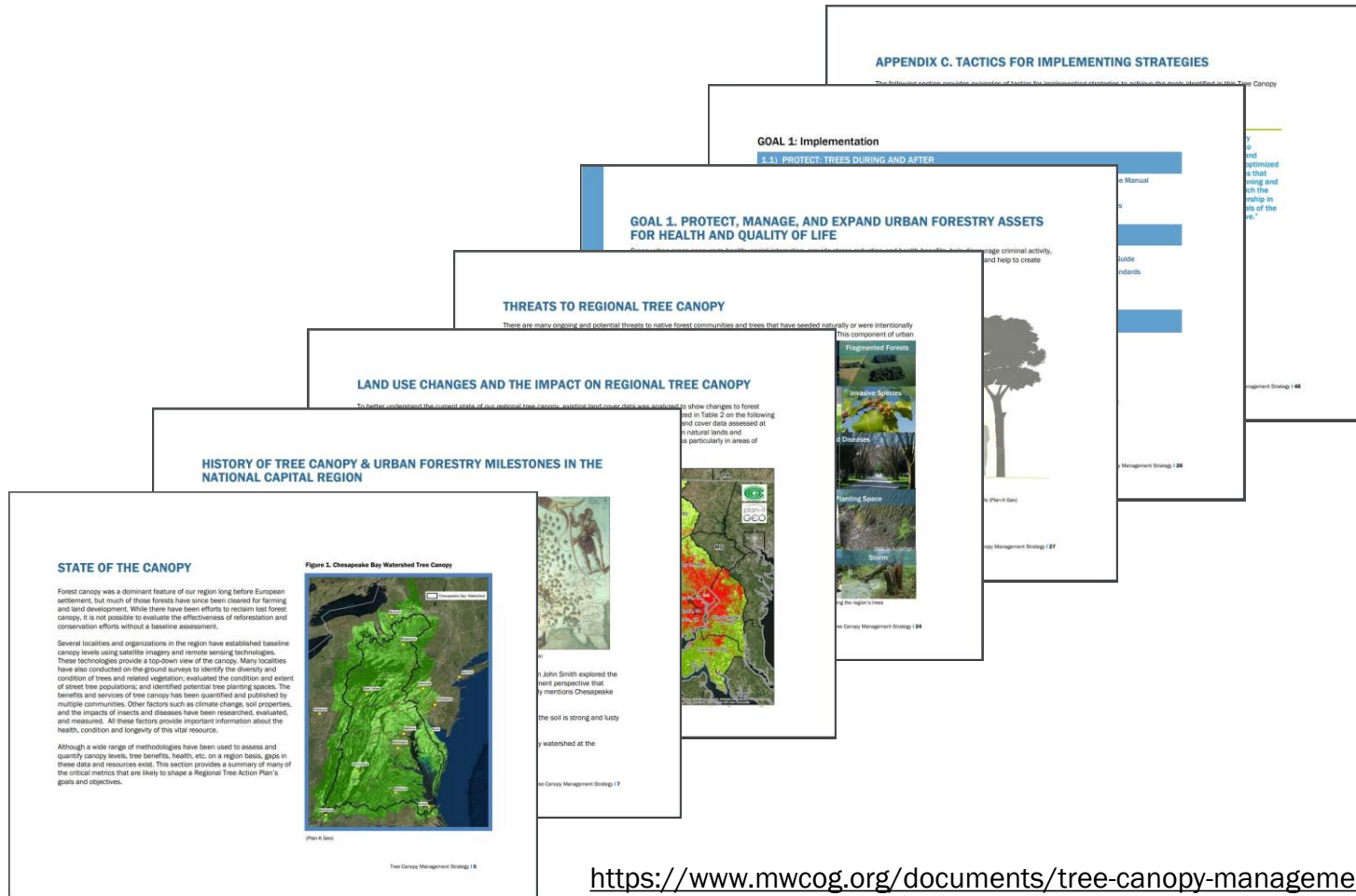
RTCW Recommendations

1. Utilize the full potential of urban forests to mitigate climate change and to address regulatory concerns
2. Encourage all COG jurisdictions to adopt effective and consistent programs, policies, and practices
3. Establish a forest policy and planning committee to support and guide regional collaboration
4. Keep forested lands forested, intact and ecologically functional
5. Increase the extent & vitality of urban tree canopy while minimizing potential risks and conflicts
6. Develop quantitative and qualitative metrics
7. Encourage public participation in the development of goals, strategies and a common vision
8. Lead by example
9. Build synergistic partnerships with Key Stakeholders
10. Take steps to integrate urban forestry goals and metrics into Region Forward

Tree Canopy Management Strategy Report



Tree Canopy Management Strategy Report



<https://www.mwcog.org/documents/tree-canopy-management-strategy/>

Overarching Goal

- To conserve tree and forest assets in a manner that maximizes the ability of those resources to deliver vital environmental, economic, social, health and aesthetical benefits; and conversely, to minimize its inherent risks



Recommended Objectives

1. Protect, Manage, and Expand Urban Forestry Assets for Health and Quality of Life
2. Optimize Urban Forest Programs
3. Develop A Regional Urban Forest Action Plan and Canopy Goals
4. Inspire the Community to Take Ownership of Efforts to Protect and Expand Urban Forests
5. Integrate Urban Forestry with Region Forward

Tree Canopy Management Strategy Report

KEY RECOMMENDATIONS

1. **Encourage COG member jurisdictions to conserve and expand urban forests.** Share the report with all COG communities and encourage local officials to determine the policies and recommendations that could be used to protect, manage and expand trees and forests in their community
2. **Establish an on-going forest policy committee** to advise COG committees on issues and trends related to regional trees and forests; develop a regional tree action plan and regional tree canopy goals; and, promote, monitor, and realign policies and recommendations as new conditions and trends emerge.
3. **Align regional urban forestry initiatives and metrics with the Region Forward Vision** to support of broader land use planning goals and policies.

Regional Tree Canopy Management Subcommittee

- September 2018 - RTCW Presentation to ACPAC
- January 2019- CEEPC Resolution to Broad to form a regional tree canopy committee
- February 2019 - The board endorses establishment of a Regional Tree Canopy Subcommittee of CEEPC for a two-year period ending in December 2020 (with the option to extend) charged with:
 - protecting, managing, and expanding urban forestry assets for health and quality of life;
 - optimizing urban forest programs;
 - developing a regional urban forest action plan and canopy goals;
 - inspiring the community to take ownership of efforts to protect and expand urban forests;
 - and integrating urban forestry with Region Forward and meeting Chesapeake Bay water quality goals.

Regional Tree Canopy Management Subcommittee

- COG invited 13 participants from various COG Member jurisdictions, 2 NGOs, and COG Staff
- Two-year work plan based on recommendations of Regional Tree Canopy Management Strategy Report
- Deliverables based on what is realistic to accomplish within two-year timeframe
- Kick-off Meeting on June 14, 2020
- Six meetings held to date
- Next meeting tentatively scheduled for Aug 2020

Strategy & Urban Forestry Plan (UFP) Element	Strategy	Related Urban Forest Action Plan Element	Deliverable (As related to Strategy Column)	Delivery Date
Strategy 2.2 (Strategies listed in order of proposed delivery date)	Examine local tree-related policies and ordinances for opportunities to enhance and strengthen tree preservation and maintenance policies.	UFP 11: Encourage local governments to evaluate the current capacity, scope and effectiveness of their public tree care and forest conservation programs.	<ul style="list-style-type: none"> • Local ordinance examples • Model tree ordinance examples • Urban tree canopy -what is this item? A map? A number? • Forested lands • Include legal and planning review • Tree care and conservation best practices • Guidance how practices can be embedded in land use policy and land development review processes 	Strawman Guidance Document: October 2019 Final: December 2019
Strategy 3.3	Establish attainable canopy goals at regional and local scales using existing goals and efforts as examples.	UFP 1: Recommend a regional tree canopy goal and canopy levels for major categories of land use.	<ul style="list-style-type: none"> • Status of tree canopy • Suggested tree canopy goals for major land use categories • Metrics 	March 2020

Strategy & Urban Forestry Plan (UFP) Element	Strategy	Related Urban Forest Action Plan Element	Deliverable (As related to Strategy Column)	Delivery Date
Strategy 1.3	Plant trees to expand the regional tree canopy to (a) absorb and sequester carbon; (b) reduce use of fossil fuels to cool and heat buildings; (c) lower ambient air temperatures during summer months; (d) absorb and slow stormwater runoff; public health; and (e) remove pollutants from air and rainwater.	UFP 1 (Support of Regional Tree Canopy Goal). UFP3 (Describe opportunities). UFP 7 (Describe strategies to mitigate impacts of land use change).	Identification of strategic tree planting programs to address Strategy elements a. through e. and associated benefits as listed in the Strategy Column.	July 2020
Strategy 3.1	Develop a Regional Urban Forest Action Plan that helps guide and integrate local forest management plans and initiatives.	UFP 3: Describe opportunities, threats and challenges likely to be encountered. UFP 9: Describe practices to mitigate tree-related costs and risks such as tree risk and storm impact assessments and street tree life cycle planning.	UFP 3 - Report describing opportunities, threats and challenges and strategies/tactics needed to address these initiatives. UFP 9 - Report Identifying practices localities can use to mitigate potential impacts of major storm events on urban trees	December 2020

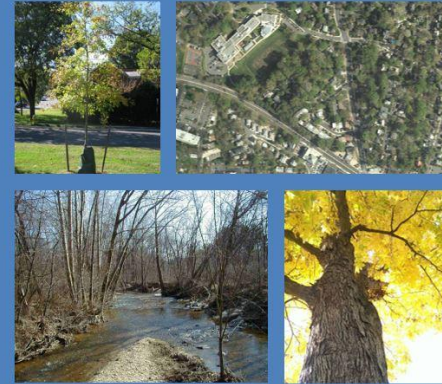
Tree Conservation Cookbook

- Document mimics a cookbook. The contents are separated into two categories:
- **Essential Recipes**, which represent the “must have” features
- **Side Dishes**, which represent a variety of features that localities may find useful in addressing specific conditions or concerns
- A description of how the recipe or side dish is applied is provided to help place the examples provided in context.

TREE CONSERVATION COOKBOOK - DRAFT

Essential Recipes for Tree Canopy Preservation and Enhancement in the Metropolitan Washington Region

January 2020



Tree Conservation Cookbook

- Each example provided is classified as originating from a *Central, Inner, or Outer* jurisdiction
- Each example is associated with a *State, County, City or Town.*
- Designations help readers target example language that originates from communities similar to their own
- Appendix containing entry level model ordinance

TREE CONSERVATION COOKBOOK - DRAFT

Essential Recipes for Tree Canopy Preservation and Enhancement in the Metropolitan Washington Region

January 2020



Tree Conservation Cookbook

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Tree Conservation Cookbook

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Tree Conservation Cookbook

Essential Recipe 6

Requirements to protect existing tree canopy

Application: This Recipe is used to conserve existing trees and forests. Although tree replacement can be an essential component of tree conservation, research conducted by the U.S. Forest Service indicates that mature trees typically provide 60 times the level of environmental services provided by newly planted trees. These services may include air and water quality improvements, stabilization of soil, energy conservation, carbon storage, etc. Subsequently, tree preservation is preferable over tree planting if preservation opportunities are present and are determined to be realistic given the level of disturbance and environmental change that is likely to occur. Regulations should emphasize that tree preservation must be considered early in the land development planning process and must result in healthy and structurally sound trees that will be assets to the new development and surrounding community.

Essential Recipe Example 6.A

Central Jurisdiction (City)

Code of the District of Columbia

Chapter 6B. Urban Forest Preservation.

Sec. 8-651.04. Preservation of Special Trees; permits; penalties

8-651.04. Preservation of Special Trees; permits; penalties.

(a) It shall be unlawful for any person or nongovernmental entity, without a Special Tree removal permit issued by the Mayor, to top, cut down, remove, girdle, break, or destroy any Special Tree.

(b) The Mayor shall issue a Special Tree removal permit under this section where the applicant has:

(1) Shown that the Special Tree in question is a Hazardous Tree;

(2) Shown that the Special Tree in question is of a species that has been identified, by regulation, as appropriate for removal; or

(3) Paid into the Tree Fund an amount not less than \$55 for each inch of the circumference of the Special Tree in question.

(4) Repealed.

(c) Repealed.

(d) A violation of subsection (a) of this section, or a failure to comply with the conditions contained in a Special Tree removal permit, shall constitute a violation subject to a fine of not less than \$300 per each inch of the circumference of the Special Tree in question.

(e) The Mayor may increase the fee described in subsection (b)(3) of this section or the fine described in subsection (d) of this section by regulation.

Tree Conservation Cookbook

Essential Recipe Example 6.B

Central Jurisdiction (City)
Code of the District of Columbia
Chapter 6B. Urban Forest Preservation.
Sec. 8-651.04a. Protection of Heritage Trees.

(a) It shall be unlawful for any person or nongovernmental entity, without a Heritage Tree removal permit issued by the Mayor, to top, cut down, remove, girdle, break, or destroy any Heritage Tree.

(b)(1) The Mayor shall issue a Heritage Tree removal permit under this section where the applicant has:

(A) Shown that the Heritage Tree in question is a Hazardous Tree; or

(B) Shown that the Heritage Tree in question is of a species that has been identified, by regulation, as appropriate for removal.

(2) The Mayor may issue a Heritage Tree removal permit under this section where the applicant has averred in the Heritage Tree removal permit application that the applicant will relocate and replant, in compliance with any applicable regulations, the Heritage Tree to an identified new location within the District, without significant harm to the tree; provided, that it shall be a violation of subsection (a) of this section if a Heritage Tree that is relocated and replanted pursuant to this paragraph dies within 3 years of replanting.

(c) A violation of subsection (a) of this section, or a failure to comply with the conditions contained in a Heritage Tree removal permit, shall constitute a violation subject to a fine of not less than \$300 per each inch of the circumference of the Heritage Tree in question.

(d) The Mayor may increase the fine described in subsection (c) of this section by regulation."

Essential Recipe Example 6.C

Inner Jurisdiction (County)
Fairfax County Virginia,
Public Facilities Manual, Chapter 12: Tree Conservation
12-0200 STANDARDS FOR PRESERVING TREES AND FORESTED AREAS

12-0201 Purpose. The purpose of this section is to provide standards that will optimize the preservation of structurally sound, healthy and functional trees and forested areas; minimize the retention of high-risk tree conditions that have potential to cause personal injury or property damage; minimize harmful practices and conditions that can degrade the long-term health, structure, functionality and regenerative capacity of forested areas; and to provide guidance concerning which trees can and cannot be used to meet 10-year Tree Canopy requirements.

Tree Conservation Cookbook

APPENDIX 1 - Basic Model Ordinance Language

TITLE Chapter XX Protection and Management of Publicly Owned Trees

Be it ordained that the Governing Body of this Municipality enacted a new chapter XX of Municipal Code entitled *Protection and Management of Publicly Owned Trees* on April 22, 2025 to conserve and manage tree canopy on public lands. This chapter shall become effective at 12:00 a.m. on May 1, 2025.

FINDINGS

The Governing Body finds that it is in the public interest to regulate the maintenance, protection, planting and removal of trees growing on public lands such those found in parks, governmental facilities, schools, and rights of ways maintained by the municipality. Publicly owned trees are a valuable component of our community's public infrastructure and represent a significant percentage of our community's overall tree canopy. Public trees contribute significant levels of environmental, social, economic, ecological, and human health services to the public at large. The Governing Body finds that it is important to take steps to maximize the capacity of our public tree canopy to deliver these important services in order to sustain a high quality of life and environmental health for current and future generations, and to set a good example of natural resource stewardship for our citizens to follow. At the same time, it is equally important to minimize the potential risks and disservices of public trees by establishing regulations to govern their establishment, removal, management and long-term conservation.

INTENT AND PURPOSE

This chapter establishes goals, strategies, policies, regulations, and standards necessary to ensure that the municipality will continue to realize the benefits provided public trees. The provisions of this chapter are enacted to:

- A. establish and maintain the maximum sustainable amount of tree cover on public lands;
- B. maintain public trees in a healthy and nonhazardous condition through good arboricultural practices;
- C. establish standards to protect existing tree and to minimize their unwarranted removal during the development and/or expansion of municipal lands and facilities;
- D. encourage the planting of trees to help the community achieve broad environmental, socioeconomic, and ecological goals;
- E. establish technical standards to guide the planting of trees to ensure that trees species selected:
 - 1) are planted in spaces large enough to facilitate future growth and root development needs
 - 2) do not cause significant damage to underground utilities, pavement, sidewalks, curb and gutter and other grey infrastructure



Suggested tree canopy goals for major land use categories

Land Use	Examples and notes to consider	Canopy target
Residential, Low	Detached homes, either single-family or duplex. Often the home of most of a jurisdiction's canopy	60%
Residential, Medium	Attached homes, such as townhomes or single/double story multi-family buildings	40%
Residential, High	High rise condominiums and apartment buildings	25%
Commercial, Low	Single or double-story buildings, sometimes with parking lots	40%
Commercial, Medium	Multi-story buildings, with parking lots or small parking garages	25%
Commercial, High	High rise commercial.	20%
Mixed Use	Commercial mixed with residential or other compatible uses	25%
Industrial, extractive and railway	Manufacturing, quarries/asphalt/concrete plants, railways, and their immediate rights-of-way	20%
Park, low development	Natural parks with trails, and minimal constructed facilities (nature centers, bathrooms) and arboreta	80%
Park, Medium development	Passive recreation (cemeteries, gardens, and golf courses)	40%
Park, High development	Sports fields, paved plazas, heavy traffic urban parks with high density of buildings	30%
Local Roads	Leading to residential or connecting small residential roads, low speeds	20%
Arterials	Transportation within a local community, medium speeds	15%
Freeways and highways	Transportation through communities and states, high speeds	15%
Airports	Consider buffer tree areas and areas around departure/arrival zones	10%
Agricultural	Consider stream buffers and road buffers	25%

Notes: Tree canopy targets assume mature tree canopy levels, and includes coverage of individual and blocks of trees over impervious and pervious surfaces, including ground and rooftop locations

Tree canopy dependent on planting the right tree species for the location - the right tree in the right place - to account for local conditions

Recommended canopy areas include active development areas and associated buffer zones

Disclaimer: These land use categories are not based on zoning types. Local jurisdictions can use their understanding of the community to assign these categories to their zoning categories.

Next Steps

- Status of regional tree canopy (report)
- Metrics for evaluating regional success
 - Quantitative (e.g., % of landmass covered by tree canopy)
 - Qualitative (e.g., health of canopy)
- Identification of strategic tree planting programs

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