



The Fairfax County Tree Commission
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Fairfax, Virginia 22035
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DATE: October 14, 2022

TO: Fairfax County Board of Supervisors

RE: Tree Commission 2021-2022 Annual Report

Sent by email to: clerktothebos@fairfaxcounty.gov

Dear Chairman McKay and Members of the Board of Supervisors:

It is with great pleasure that the Tree Commission presents to you its consolidated 2021-2022 Annual Report.

We are energized by your continued commitment to our county's urban forest and other natural resources. This includes the ongoing implementation of the CECAP and Resilient Fairfax climate reports where trees are concerned, the upcoming anticipated data reports on our tree canopy, and support for the growing initiatives of members of the Community of Practice who are working to both protect what we have and plant more trees for our future.

We hope to follow the example of the very trees we are seeking to preserve and to champion—to stand tall, be strong, communicate well with others, and know that together we are deeply rooted in the health and well-being of our community.

We look forward to working with you in 2023.

Cindy Speas, Chair

Fairfax County Tree Commission

Fairfax County Tree Commission
Consolidated Annual Report
July 1, 2021 to June 30, 2022

The Fairfax County Tree Commission
12055 Government Center Parkway, Suite 518
Fairfax, Virginia 22035
703-324-1770

Approved for Submission to the
Fairfax County Board of Supervisors

October 6, 2022



Fairfax County Tree Commission

Cindy Speas	At Large, Chair
Jim McGlone	Virginia Department of Forestry, Vice Chair
Jeanne Kadet	Braddock District
Robert Vickers	Dranesville District
Jessica Bowser	Franconia District
Bret Leslie	Hunter Mill District
Kevin Holland	Mason District
Elaine Kolish	Mount Vernon District
Laura Beaty	Providence District
Cory Suter	Springfield District
Perry Rhodes	Sully District
Rick Healy	Fairfax County Environmental Quality Advisory Council
John Burke	Fairfax County Park Authority
Jerry Peters	Northern Virginia Soil and Water Conservation District
Brenda Frank	Virginia Cooperative Extension Service

Fairfax County Urban Forest Management Division (UFMD) Staff

The Tree Commission extends its gratitude to the UFMD staff for their support and looks forward to our continuing partnership on efforts to identify, save and expand our urban forest.

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ACKNOWLEDGMENTS

The Fairfax County Tree Commission has prepared, reviewed and approved, and is responsible for, this report. Many Fairfax County agencies, nonprofit organizations, and individuals participated in its compilation. This report is intended as a snapshot of work done in Fairfax County during the period of review, and any omission of relevant information is inadvertent.

These listed organizations and agencies are members of the Community of Practice as established by the 2019 Tree Action Plan, and they have engaged in tree planting and tree-related activities in the county. The Fairfax County Tree Commission extends its gratitude and appreciation to all of them for contributing information to this report, or otherwise assisting the Tree Commission in its work.

Audubon Naturalist Society

Casey Trees

Earth Sangha, Inc.

Fairfax County Environmental Quality Advisory Council

Fairfax County Park Authority Invasive Management Area Program

Fairfax County Park Authority Natural Resources Management Division

Fairfax County Stormwater Planning Division, DPWES

Fairfax County Urban Forest Management Division, DPWES

Fairfax ReLeaf

McLean Trees Foundation

Northern Virginia Soil and Water Conservation District

Plant NOVA Natives, including Plant Nova Trees and Tree Rescuers

Virginia Cooperative Extension

Virginia Department of Forestry

Virginia Native Plant Society

EXECUTIVE SUMMARY

This report constitutes the second consolidated Annual Report of the Fairfax County Tree Commission (TC) to the Board of Supervisors (BOS), and it provides an overview of the state of our county's urban forest. The TC appreciates the fact that the BOS recognizes that our urban forest provides numerous ecosystem benefits to our residents, and as such deserves the expenditure of resources needed to preserve, protect and expand it.

Section I explains the TC's statutory basis and its mission.

Section II describes the three reporting requirements, enumerates the TC's key activities during the 2021-2022 reporting period, and outlines planned actions for the 2022-2023 reporting period.

Section III reports on how the county is working to meet the five goals of the 2019 Tree Action Plan (TAP): 1. Know what we have; 2. Protect and improve what we have; 3. Expand what we have; 4. Improve urban forest policies and processes; and 5. Communicate and build partnerships. A highlight of this Section is the TC's successful establishment of the Community of Practice (COP) as required by the TAP. The COP consists of nonprofit organizations such as Casey Trees, Earth Sangha and Plant NOVA Natives, as well as several county agencies, and some of its members were responsible for more than 15,000 trees and tree seedlings sold at low cost, or provided at no cost, for residents to plant and maintain.

Section IV.A lists recommendations for Action 5a of the Fairfax Green Initiatives Board Matter asking the TC to advise "low-cost and no cost options" for citizen tree plantings in the county.

Section IV.B lists recommendations that implement the 2019 TAP as adopted by the BOS. This includes advice sent via letter to the BOS on September 9, 2021 on how it might prioritize the preservation of mature trees in the land development process.

Section IV.C repeats the TC's suggested priorities for the Office of Environmental and Energy Coordination team that the BOS has asked to develop the implementation of the Community-wide Energy and Climate Action Plan, originally sent via letter on May 19, 2022.

In summary, although much is being done to preserve and expand the county's tree canopy, there is so much more that can and should be done. Trees provide effective and low-cost tangible environmental and economic benefits to residents, and mitigate the effects of climate change. Currently, however, trees appear to be undervalued and underutilized as part of the solution to many of these worsening problems. For example, two critical needs are to update tree canopy data and to provide additional, stable funding for management of tree planting, preservation and education programs across various county agencies. The TC will continue to seek actions that will elevate the critical importance of our urban forest, and urges the BOS to read and adopt this report's recommendations.

SECTION I: INTRODUCTION

This 2021-2022 Annual Report of the Tree Commission describes activities that characterize, preserve and expand our urban forest, and makes recommendations on these matters. This information is available to the public and to all stakeholders, many of whose actions to maintain and increase our urban forest are celebrated herein. It includes information responding to reporting requirements as defined in its charter's purpose, in the Fairfax Green Initiatives Action Item #5a, and in the 2019 Tree Action Plan (TAP). The reporting period is July 1, 2021 to June 30, 2022, with the report to be submitted in the fall of 2022. The Tree Commission (TC) would be pleased to provide any additional information at the request of the Board of Supervisors (BOS).

The BOS devotes considerable resources to tree and tree-related activities and has set a goal of maintaining a net of 57% tree canopy by 2025 — a figure established with state-of-the-art surveying in 2015. The resources expended to achieve that goal are well worth it, as trees provide extraordinary value and ecosystem benefits to Fairfax County residents. These include reduced urban heat island effects, improved health and well-being, reduced energy costs, fewer air pollutants, improved stormwater absorption and filtration, better erosion control, noise buffering, increased biodiversity, and more. For these reasons, trees are critically important to our residents' current quality of life and that of future generations. Trees also help attract new residents and businesses to our increasingly urbanized area. To achieve these benefits, the county's Community-wide Energy and Climate Action Plan (CECAP) has adopted a more aggressive goal of striving toward 60% tree canopy, with a minimum of 40% in all census tracts by 2030.

We are in an era of a worldwide focus on the benefits of trees, including in the design of urban spaces. Incorporating trees into our county planning will sequester greenhouse gases and help protect us from the impacts of climate change, as well as support a healthier living experience that all county residents deserve.

The Tree Commission eagerly awaits an updated tree canopy survey and analysis in 2023. Data from the survey will guide the county's work to improve, protect, and expand the county's urban forest. The commission looks forward to working with the BOS on ways to increase the preservation, planting and maintenance of trees on public and private lands through policy changes, public education and community action.



Section II: ABOUT THE TREE COMMISSION

A. BACKGROUND

The Tree Commission was created in 1973 when the BOS approved its original charter pursuant to Fairfax County Code Chapter 122, which is in turn based on Virginia Code Section 15.2-961.1.¹ The TC's responsibilities are laid out in its charter, the 2019 Fairfax Green Initiatives Board Matter and the 2019 TAP that the BOS approved in 2020. Additionally, the TC is guided by the goals of One Fairfax, which leads the way in determining what vulnerable populations and communities need attention first and foremost. As with other county programs, urban forest canopy programming and management activities should be analyzed through a sharp equity lens and the county's Vulnerability Index² to determine priorities.

The charter specifies that in each District the Supervisor is charged with selecting one member, and the Chair chooses an at-large member. The charter also states the Tree Commission must include a representative from each of five organizations: Fairfax County Environmental Quality Advisory Council (EQAC), Northern Virginia Soil and Water Conservation District (NVSWCD), Fairfax County Park Authority (FCPA), Fairfax County Office of Virginia Cooperative Extension (VCE) and Virginia Department of Forestry (VDOF).



¹ Virginia Code Section 15, <https://law.lis.virginia.gov/vacode/title15.2/chapter9/section15.2-961.1/>.

² Vulnerability Index, <https://fairfaxcountygis.maps.arcgis.com/apps/webappviewer/index.html?id=4b93c4fb7998471fb218bd98d2a767fb>.

B. GUIDING POLICIES AND INITIATIVES

The following policies and initiatives frame the TC’s agenda, discussions, and recommendations to the BOS:

1. Chapter 122. Tree Conservation Ordinance Establishes Tree Commission Charter³

In 1973, the BOS approved its original charter, which states that the purpose is to:

“Provide advice to the Board of Supervisors, based on an annual reevaluation of the administration and implementation of the provisions set forth in this Ordinance and the landscaping and screening requirements contained in the Zoning Ordinance; to provide leadership in developing an understanding of the objectives and methods of tree conservation; and to assist the Urban Forest Management Division (UFMD) of the Department of Public Works and Environmental Services (DPWES) and Land Development Services (LDS) in the development and maintenance of technical specifications and guidelines.”

The charter also requires the TC to submit a report annually to the BOS. See Sections II.B and C for that report.

2. Fairfax Green Initiatives Board Matter⁴

On February 5, 2019, the BOS unanimously approved the Fairfax Green Initiatives Board Matter (Fairfax Green Initiatives). Action 5 charged the TC to recommend “low-cost and no cost options” for citizen tree planting in Fairfax County and to report annually to the BOS on progress and accomplishments. See Section IV.A for recommendations on meeting the Fairfax Green Initiatives.



³ Fairfax County Code, Chapter 122, https://library.municode.com/va/fairfax_county/codes/code_of_ordinances?nodeld=THCOC_OFAVI1976_CH122TRCOOR_ART9TRCO.

⁴ Fairfax Green Initiatives Board Matters #1 and #2, <https://www.fairfaxcounty.gov/environment-energy-coordination/fairfax-green-initiatives>.

3. 2019 Tree Action Plan⁵

The Tree Commission updated the TAP in 2019, and the BOS approved it in 2020. The TAP describes the stewardship necessary to maintain our urban forest, which includes five core goals:

- a. Know What We Have (Section III.A);
- b. Protect and Improve What We Have (Section III.B);
- c. Expand What We Have (Section III.C);
- d. Improve Urban Forestry Policies and Processes (Section III.D); and
- e. Communicate and Build Partnerships (Section III.E).

Through the TAP's Community of Practice (COP), public and private stakeholders are working in partnership to achieve these goals. See Section IV.B for recommendations on actions that will help to meet the TAP goals.



⁵ 2019 Tree Action Plan, <https://www.fairfaxcounty.gov/publicworks/sites/publicworks/files/assets/documents/treecationplan.pdf>.

4. One Fairfax⁶

Critically, One Fairfax leads the way in determining which vulnerable populations and communities need attention first and foremost. All urban forest canopy programming and management activities should be analyzed through the county's Vulnerability Index⁷, an important equity lens. This analysis helps guide the work of the Tree Commission, such as our recommendations on how to better manage our urban forest. (See Section IV).



⁶ One Fairfax, <https://www.fairfaxcounty.gov/topics/one-fairfax>.

⁷ Vulnerability Index, <https://fairfaxcountygis.maps.arcgis.com/apps/webappviewer/index.html?id=4b93c4fb7998471fb218bd98d2a767fb>.

C. ACTIVITY IN REPORTING PERIOD JULY 1, 2021 TO JUNE 30, 2022

1. Meetings

The Tree Commission met virtually 11 times (no meeting in August 2021) with a quorum of members present at all 11 meetings. In order to gain more insight into tree planting and preservation issues, meeting agendas typically included a presentation from a county agency or a nonprofit, as well as updates from UFMD.

2. Friends of Trees Awards

This award program began in 1999, and was an outgrowth of the Land and Conservation Awards established in the 1970s that was focused on developers. Winners are chosen for their exceptional, outstanding and innovative tree actions and programs and include individuals, groups, businesses, and the development community. The nominated projects must be either protecting and preserving existing trees and associated habitats; increasing the county tree canopy; or educating and inspiring others to plant more trees, maintain them and learn about their value and benefits. Those in the development community are asked to go above and beyond county requirements for tree canopy conservation. The goal of the recognition program is to inspire individuals, organizations and businesses to protect, maintain and expand the county's tree canopy.

Winners selected by the Tree Commission, Spring 2022

- Taylor Beach, Executive Director of ReLeaf Fairfax
- Will Friedman, rising high school senior in Mt. Vernon District
- Monica Perz-Waddington, Fairfax Master Naturalist
- George Mason University Engineers for International Development
- Fairfax County Public Schools – Crestwood Elementary School, Westlawn Elementary School, Chantilly High School
- Hickory Farms Community Association

3. Mission Critical Letters of Advice to the Board of Supervisors

The primary way that the Tree Commission communicates with the BOS is through formal letters. During this reporting period the Tree Commission issued two such letters:

a. Land Use recommendations, September 2, 2021.⁸ This letter recommended that the BOS prioritize the preservation of healthy, mature trees in the land development process, and provided six specific recommendations on how that could be done.

b. Community-wide Energy and Climate Action Plan recommendations, May 19, 2022.⁹ This letter advised the BOS to share the Tree Commission’s letter with the OEEC staff preparing the CECAP implementation plan. The Tree Commission letter reflected the results of a survey of Tree Commission members on which of the numerous recommendations in CECAP should be given priority. Categorized in the same manner as the CECAP report, the Tree Commission provided its top five priority items for Education Actions, County Actions for Implementation Now, and Future County Implementation.

4. Community of Practice Meeting

The Community of Practice is a group the TC established pursuant to the 2019 TAP. Its purpose is to bring together relevant, interested organizations to collaborate on meeting the TAP goals. The third meeting was held virtually on February 9, 2022.

5. Charter Review

In 2022 the Tree Commission began the formal process of updating its charter found in Chapter 122, Tree Conservation, to reflect current duties and obligations. Subsequent to that process, the commission will seek to update its operating policies/bylaws.

6. Consolidated Annual Report

The Tree Commission submitted its first consolidated Annual Report (Annual Report) covering the period July 1, 2020 to June 30, 2021 in the fall of 2021.¹⁰ Any other future reports requested annually of the Tree Commission will, where possible, be incorporated into the TC’s Annual Report.

⁸ Improving Land Development Process by Prioritizing Trees – September 2, 2021, https://www.fairfaxcounty.gov/publicworks/sites/publicworks/files/assets/documents/20210902_tree_commission_policyrecommendations.pdf.

⁹ CECAP Recommendations – May 19, 2022, <https://www.fairfaxcounty.gov/publicworks/sites/publicworks/files/assets/documents/tc-letter-on-cecav-to-bos-final-4-21-22.pdf>

¹⁰ 2020-2021 Consolidated Annual Report – November 17, 2021, <https://www.fairfaxcounty.gov/publicworks/sites/publicworks/files/assets/documents/11-16-21-tc-ltr-annual-report-submission-and-cecav-recommendations.pdf>

D. PLANS FOR FISCAL YEAR JULY 1, 2022 TO JUNE 30, 2023

The Tree Commission plans to:

- Continue monitoring proposed policy and ordinance changes in Fairfax County and make recommendations to the BOS on ways to reduce impacts to trees and improve tree preservation. This may include recommendations for the BOS's state and federal legislative agenda.
- Convene a 4th and 5th meeting of the COP to continue the Tree Commission's community engagement and technical assistance to members. That will include expanding invitations to new members to join, establishing a two-year workplan as suggested in the TAP, and helping to design a simple survey where COP members can easily report tree-related accomplishments and data for inclusion in the Tree Commission's Annual Report.
- Evaluate and improve the Tree Commission's main community outreach program, the Friends of Trees Awards.
- Establish an outreach program to highlight the Commission's upcoming 50th Anniversary year.
- Continue the process of updating the Tree Commission's charter and operating policies/bylaws to reflect the BOS and Fairfax County's current needs.
- Evaluate and consider scheduling an update to the 2019 TAP.
- Review and update, in conjunction with the UFMD, the Fairfax County *Tree Basics* booklet distributed countywide and at the NVSWCD's annual seedling sale.
- Review and make recommendations on upcoming approval and implementation of the Resilient Fairfax, Active Fairfax and Parking Reimagined plans and others as needed.
- Begin preparations in March 2023 for the next edition of the consolidated Annual Report for submission to the Board of Supervisors in the fall of 2023.

SECTION III: REPORT ON TREE ACTION PLAN GOALS

A. KNOW WHAT WE HAVE

The first goal of the 2019 Tree Action Plan is to know what we have. To do this we must assess the trees, forests, and non-forest vegetative cover by conducting inventories to determine vegetative cover types and condition, monitoring to measure forest change, and evaluating the success of management efforts. The county efforts include periodic assessments such as land cover change analysis and i-Tree ecosystem analysis, as well as ongoing programs such as those conducted by the Fairfax County Park Authority (FCPA), Urban Forest Management Division (UFMD), and other members of the COP. Because the county did not conduct any assessments during the reporting period, we have relied on the most recent available data from 2018 provided by Casey Trees. Casey Trees' recent assessment is that in 2018 the tree canopy in Fairfax County stood at 53.6 percent, with a 0.3 percent loss from 2014 to 2018.¹¹ This analysis relied on open data from the 1-meter resolution land cover and land use/land cover datasets for the Chesapeake Bay watershed regional area.¹² The data for Fairfax County are publicly viewable and available.¹³ Casey Trees used this analysis to evaluate drivers for canopy changes such as land development within Washington, D.C.

The last land cover change analysis that Fairfax County conducted was in 2017. The 2017 analysis looked at changes from 2011 to 2015 and included both the county proper and Fairfax City in the analysis.¹⁴ The analysis, which used comparable resolution to the Chesapeake Bay watershed regional area study, determined that in 2015, 57% of the total area was covered by tree canopy. Like the Casey Trees study, it proposed that future assessments be used to understand what factors (e.g., development) may be impacting the tree canopy.

¹¹ Tree Report Card: The State of DC's Trees 2021, <https://caseytreesdc.github.io/treereportcard2021/>.

¹² Chesapeake Bay Program's One-meter Resolution Land Use/Land Cover Data: Overview and Production, https://cicwebresources.blob.core.windows.net/docs/LU_Classification_Methods_2017_2018.pdf.

¹³ Chesapeake Conservancy, <https://www.chesapeakeconservancy.org/conservation-innovation-center/high-resolution-data/lulc-data-project-2022/>.

¹⁴ 2015 Tree Canopy Report, <https://www.fairfaxcounty.gov/publicworks/sites/publicworks/files/assets/documents/tree-canopy-report-2015.pdf> and 2017 Analysis, https://www.fairfaxcounty.gov/publicworks/sites/publicworks/files/assets/documents/ffcounty_ecoreport_1.pdf.

Importantly, the county is seeking to update both the i-Tree ecosystem analysis as well as the tree canopy cover and impervious surface study. Because the county will use the measured tree canopy data to determine actions to meet CECAP's strategic goals for natural resources,¹⁵ it is important that UFMD analyzes and reports canopy values only for the county proper in its study updates in order to properly assess best management practices.

Because it is uncertain when the county will complete its update to the tree canopy cover study, UFMD and FCPA use existing inventory programs to characterize how the county's forests are growing and changing. County agencies and other entities rely heavily on these data to design evolving management and maintenance strategies to preserve the benefits of Fairfax's forests, open spaces, and natural landscapes.



Visual map of Fairfax County tree canopy by Casey Trees, 2018 data.



¹⁵ Community-wide Energy and Climate Action Plan (CECAP), [https://www.fairfaxcounty.gov/environment-energy-coordination/sites/environment-energy-coordination/files/assets/images/cecap%20report%20release/cecap%20draft designed%20report sept%202021 release 508.pdf](https://www.fairfaxcounty.gov/environment-energy-coordination/sites/environment-energy-coordination/files/assets/images/cecap%20report%20release/cecap%20draft%20designed%20report%20sept%202021%20release%20508.pdf).

FCPA continues to conduct extensive inventory work on vegetation on its roughly 25,000 acres of property. The Non-Native Invasive Assessment Prioritization (NNIAP) program maps the severity of invasive plants in forested areas of FCPA property. The field data collection for this effort occurs in the summer, and FCPA properties are completely assessed on a rolling basis once every six years. The NNIAP program resumed at full staff capacity following a one-year hiatus due to the impact of COVID-19. Natural community type and condition is also assessed as part of FCPA’s series of regional natural resources management plans. Field work and writing were completed for the Western Area Natural Resources Management Plan in fiscal year 2022 (FY22), and new work began on the Northern Area Natural Resources Management Plan. This data on plant species (including trees) is used to assign park areas to a specific Virginia Department of Conservation and Recreation (DCR) defined Natural Community of Virginia.

In FY22, survey work on natural communities and rare wildlife occurrences began in the northern portion of Fairfax County. The findings of these surveys will be summarized in the forthcoming Northern Area Natural Resources Management Plan. All the surveys and Plans inform site selection and management decisions for FCPA’s ecological restoration program, “Helping our Land Heal”. See Section III.B.5 for a list of projects from the reporting period. In addition, FCPA continues to survey for rare plants and communities on Park Authority parcels slated for development in an attempt to avoid damage to these valuable natural resources.

Overall, the combined work of UFMD and FCPA’s Natural Resources Bureau and others represent significant efforts to inventory, monitor, protect, and restore forests and natural landscapes in FY22. These efforts will expand in coming years once county programs succeed in the challenging task of recruiting appropriately credentialed staff to meet staffing goals.



A screenshot of a webpage titled "Urban Forest Management". The top half of the page features a background image of dense green foliage with the word "Trees" overlaid in white. Below the image, the title "Urban Forest Management" is displayed in a large, bold, black font. To the right of the title, there is a short paragraph of text: "Trees provide significant levels of environmental, social and economic benefits to our community. For over 30 years, Fairfax County has been proactive in raising awareness about the importance of trees and forests in our community. Learn More about Urban Forest Management in Fairfax County →". Below the main content, there is a section titled "ON THIS PAGE" with four links: "Who To Call, News, Tree Benefits Partners and Friends", "Tree Care", "Identify and Select", and "Resources, Outreach, Volunteer". A small speech bubble icon is located in the bottom right corner of the screenshot.

B. PROTECT AND IMPROVE WHAT WE HAVE

Urban forest resources, including meadows and edge ecosystems as well as forests and individual trees, need to be managed to protect and improve what we have. We must reduce or minimize stressors and maintain the health of the trees and other species to ensure they continue to provide valuable environmental services. Existing county and state policies improve protections for our tree canopy, but there are continuing challenges such as how to manage stormwater, preserve trees during land disturbance, reduce deer incursion, control pests, and control invasive plants. We can also improve forest ecology with natural landscaping efforts.

1. Protecting and Restoring Trees and Natural Areas during County Projects

Fairfax County's watershed management plans, developed and implemented by the Stormwater Management Program (SMP), address problems of declining water quality and environmental degradation. The plans include proposed actions that preserve stream habitats from disturbance, and in some cases, include preserving trees and replanting where trees are lost. Projects are identified through the Stormwater Capital Improvement Program, which is updated annually.

Construction and maintenance of stormwater projects can result in unavoidable tree and vegetation loss. To offset these losses, restoration planting is done for all projects located in riparian corridors at densities equal to or greater than those required under the county's Chesapeake Bay Ordinance requirements and the Public Facilities Manual. Those density requirements include 300 trees and 654 shrubs per acre plus native plant seeding. In addition, along most restored stream banks planting of live tree and shrub cuttings called "live stakes" are installed at densities of about one live stake per linear foot of bank and are planted on both stream banks.

SMP staff participated in multiple efforts to revise county policy to improve restoration planting requirements that will help protect trees. One project was the Fairfax County Seeding Guidelines issued by Land Development Services on July 6, 2022¹⁶, which require use of native species in seeding for all county projects and on all Fairfax County lands (i.e. schools, parks, libraries, district government centers.) This effort promotes the use of native plant species and limits the use of invasive plant species in seeding applications for soil stabilization, restoration, agriculture, turf, and landscaping. Another agency promoting these new guidelines is the Building Design and Construction Division (BDCD) within Capital Facilities. BDCD pursues continuing education efforts on these natural landscaping methods and practices for new and current project team staff.

¹⁶ Seeding requirements, <https://www.fairfaxcounty.gov/landdevelopment/sites/landdevelopment/files/assets/documents/22-04-fairfax-county-seeding-guidelines.pdf>.

2. Protecting Tree Canopy During Construction & Other Land Disturbance Projects

Land use changes on both public and private property, such as construction disturbances, can cause environmental degradation. There is a great deal of opportunity in this area to improve policies to reduce the negative impacts of construction and improve and preserve our urban forest. The Tree Commission has proposed several options for elevating trees as an essential element in all land use decisions (See Appendix 2). Our built and natural environments are interconnected and interdependent. Properly siting buildings and gray infrastructure (e.g., stormwater pipes, parking lots, utility corridors) around sensitive urban forest areas involves both due consideration for preserving mature trees and provision of adequate space for planting new trees. New approaches to planning, design and construction can result in greater benefits from both the built and natural environment. The Tree Commission will continue to actively advise the BOS in this area. (See Section IV: Recommendations)

3. Protecting the Urban Forest from Deer Over-Browsing

Another major threat to the health of Fairfax County's forests is the overabundant population of white-tailed deer. Hunting deer is legal across the county and resulted in 1,532 harvests during the fall 2021 through winter 2022 hunting season. The Animal Control Division's Deer Management Program in many Fairfax County parks, and other participating properties, saw 605 volunteer archers achieve 726 harvests. In addition, 49 deer were taken during sharpshooting operations in six selected county parks. Thus, the program's 775 total harvests accounted for 50% of the total by all hunters across the county on private as well as public lands during the specified seasons.

4. Protecting the Urban Forest from Pests

The Forest Pest Management Branch (Forest Pest) is a county office cooperating with the United States Department of Agriculture Forest Service and the Virginia Department of Agriculture and Consumer Services (VDACS). Fairfax County has one of the largest and most active forest pest protection staffs in the country. As the threat from gypsy moth (re-named "spongy moth") has waned, staff has diligently worked to protect the urban forest from other forest pests and pest-borne diseases.

VDACS maintains a list of pests currently eligible for control by Forest Pest: the spongy moth, cankerworm, emerald ash borer, hemlock woolly adelgid, Asian longhorned beetle, spotted lanternfly (SLF), sudden oak death, and thousand cankers disease. Staff implements the monitoring and treatment for the listed forest pests, and partners with other government agencies to assist with monitoring and treatment programs for emerald ash borer and SLF. Due to the ongoing SLF threat, county staff has inventoried thousands of *Ailanthus altissima* (an invasive tree species that is the SLF's preferred — but not exclusive — host plant, often referred to as tree of heaven) on county land for future contracted treatments. Forest Pest has partnered with FCPA to provide funding for extensive management of tree of heaven at Blake Lane and Laurel Hill parks.

Forest Pest also conducts an active outreach/public education program to promote the benefits of healthy trees and forests. This targets schools, civic groups and the public at large. These efforts include county podcasts, social media events, internal county publications, and write-ups used for various community newsletters. In the fall of 2021, Forest Pest mailed almost 11,000 informational SLF postcards to properties adjacent to areas that are high risk for its introduction. Additionally, Forest Pest has received more funding in the 2023 budget for its SLF mitigation program.

TREE OF HEAVEN - REPORT IT



5. Protecting the Urban Forest from Invasive Plants

Similarly, invasive plants present a pressing threat to the health and abundance of trees in Fairfax County. Over the past year, FCPA's Invasive Management Area (IMA) program continued to work with resident volunteers to control invasive plants on parkland. In FY22, 65 IMA volunteer site leaders led 3000 volunteers logging 16,404 hours to remove nearly 3000 (estimated) trash bags of invasive plants from FCPA property.

The FCPA also has a program to restore natural areas on parklands called "Helping Our Land Heal." This rebuilds, repairs and maintains quality natural areas. Projects underway during 2021-2022 included:

- Ellanor C. Lawrence Forest and Pipeline Restorations
- Elklick Preserve Forest and Grassland Restorations
- Laurel Hill Forest and Meadow Restorations
- Frying Pan Farm Park Forest Restoration
- Huntley Meadows Wetland Restorations
- Lake Fairfax Meadow Restoration
- Green Spring Gardens Magnolia Bog Protection Project
- Old Colchester Park and Preserve Wetland Restoration

Helping our Land Heal: ecological restoration



In the reporting period, Plant Nova Trees initiated a Tree Rescue program¹⁷, which has trained volunteers to recognize and control some of the primary invasive vines and plants that overwhelm trees. Since the program started in September 2021, they have reported rescuing 3,129 trees regionally (including Arlington and Alexandria) as of early June 2022. Volunteers survey neighborhoods for invasive vines and notify landowners on how to remove them.



¹⁷ Tree Rescuers, <https://www.plantnovatrees.org/tree-rescuers-volunteer-program>.

6. Improving the Urban Forest with Natural Landscaping

In June 2020 the BOS amended the county's Comprehensive Plan to apply low-impact development practices and natural landscaping methods in the design, retrofit, and maintenance of public facilities. The goals are to minimize resource consumption, reduce stormwater runoff, decrease life-cycle maintenance requirements, increase the habitat value of each site, and increase soil and plant health. County agencies have made strides in reaching these goals by changing installation practices, improving maintenance such as expanding mulched and planted areas beneath trees as they grow, controlling invasive plants, incorporating new procedures in contracts, and educating their own staff.

Healthy soil is the living foundation for natural landscaping. Urban soils are often compacted by foot and equipment traffic and are deficient in organic matter that is the basis for what is called the "soil food web." Good soil retains moisture and increases permeability to both water and air. In addition to improving soil, reforestation (the planting of layers of native vegetation along with canopy trees or adding to existing canopy trees) is critical to urban forest health. Planting can include a sub-canopy made up of smaller tree species, a shrub layer, and an herb layer made up of herbs, ferns and grasses. This provides habitat for wildlife and reduces stormwater runoff.

Both soil improvement and reforestation techniques were used in the Herrity Building Fountain Treatment Drain, and as part of stream restoration for Hunting Creek at Fairchild/Quander Road. These techniques also were used at the Noman Cole Wastewater Treatment Facility's pilot project to establish a tree nursery to grow saplings for tree planting and reforestation projects countywide. It hopes to provide healthy saplings of oak, hickory and pawpaw.

The Stormwater Management Division seeks to identify and preserve healthy ecosystems prior to construction by grading existing ecosystems for their health and diversity of native species. Efforts are made to leave valuable sections intact and focus instead on improving surrounding areas that are more heavily impacted. In some cases, valuable native plants are rescued and replanted when construction impacts cannot be avoided. An outstanding example of this work is the Hollin Hills – SWM stream restoration project, where 86% of surveyed mature trees were preserved. While awaiting finishing touches, this was substantially completed in the reporting period.

7. Protecting the Urban Forest Through Public Education

A critical component of protecting forests and managing natural landscaping on private properties is landowner education on these practices. COP members contribute greatly to this goal.

Plant NOVA Natives (PNN), a COP member, is the joint marketing campaign of a coalition of nonprofit, governmental, and private groups working to reverse the decline of native plants (including trees) and wildlife in Northern Virginia. Information about native plants, where they

belong in our landscape, and where they can be obtained is offered by Plant NOVA Natives on their website, www.plantnovanatives.org, in a printed guide, and at planned events.

In 2021 Plant NOVA Natives initiated a five-year initiative to encourage planting and preservation of our native trees: Plant NOVA Trees.¹⁸ Its web site reviews the benefits of trees and forests, and provides useful information about selection, acquisition, planting, and care of native trees, a major public education and engagement resource.

Other COP members also continue to participate in county efforts to increase public knowledge about our urban forest. One recent example is Green Spring Gardens' annual Eco Savvy Symposium (via Zoom on February 19, 2022): "Restoring Our Urban Forest One Yard at a Time." Co-sponsored by the Fairfax County Park Authority, Fairfax County's UFMD, Friends of Green Spring Gardens, Green Spring Master Gardeners, Virginia Cooperative Extension Service and Plant Nova Trees, it highlighted causes and effects of our shrinking urban forest, a case study on restoring tree canopy in Washington, DC, and a session by the Virginia Department of Forestry on practical and actionable advice for private yards.

County agencies also participate in education and outreach. One new example of citizen education is Carbon Free Fairfax¹⁹, the first program implemented under CECAP designed to engage county residents in the work of mitigating climate change. This is primarily a public education and outreach initiative to help Fairfax County realize a healthy, sustainable, and economically prosperous future without local greenhouse gas emissions.

The Northern Virginia Soil and Water Conservation District (NVSWCD)²⁰ promotes natural landscaping including invasive plant management, tree conservation, and use of native plants through a variety of educational opportunities:

- **Annual spring sale of native seedlings**²¹ – every purchaser receives the Tree Commission's manual "Fairfax County Tree Basics." Additionally, this year a webinar was offered after the sale to nearly 30 attendees. Led by Tree Commission Vice Chair Jim McGlone from the Virginia Department of Forestry, it addressed questions and concerns from seedling purchasers.
- **Green Breakfasts**²² – NVSWCD hosts a bi-monthly Saturday morning Green Breakfast webinar to discuss environmental topics. Margaret Fisher, Outreach Coordinator with

¹⁸ Plant Nova Trees, <http://www.plantnovatrees.org/>.

¹⁹ Carbon Free Fairfax, <https://www.fairfaxcounty.gov/environment-energy-coordination/carbon-free-fairfax>.

²⁰ NVSWCD, <https://www.fairfaxcounty.gov/soil-water-conservation/>.

²¹ Seedling Sale, <https://www.fairfaxcounty.gov/soil-water-conservation/native-seedling-sale>.

²² Green Breakfasts, <https://www.fairfaxcounty.gov/soil-water-conservation/green-breakfast>.

Plant NOVA Natives, presented “Plant NOVA Trees” in September 2021 to promote the new tree planting campaign. This webinar had 47 attendees.

- **New Invasive Species webpage**²³ – NVSWCD partnered with county agencies to develop a new webpage on the Fairfax County website that features information, volunteer opportunities, and resources, many of which were provided by NVSWCD. Of particular note is an informational flyer on running bamboo²⁴ that explains a new Fairfax County ordinance stating that, as of January 1, 2023 invasive running bamboo, which is destructive to the environment, must be contained on an owner’s property or the owner runs the risk of fines.
- **Invasive species awareness campaign** – NVSWCD developed a brochure entitled “Plant This, Not That”²⁵ in partnership with the FCPA Invasive Management Area program to promote native alternatives to common invasive landscaping plants, including trees. To support this effort, NVSWCD developed and released a series of social media posts on invasive plant species with a reach of 5,281 from May – June 2022 on Facebook.
- **Ongoing publications** – NVSWCD has promoted invasive plant management and use of native plants for years. Publications available on its website demonstrate support for these pillars of landscape management, such as the “Residential Low Impact Landscaping Guide”²⁶ downloaded 815 times, and “Rain Garden Design and Construction Guide for Homeowners”²⁷ downloaded 5,985 times during the reporting period.

In summary, efforts to protect and improve our urban forest during the past year are extensive and ongoing. They are important for the continued regeneration and expansion of our existing canopy and other natural resources. Long term protection and expansion requires not only careful land development and new plantings, but also attention to the threats from invasive plants, forest pests and diseases. Overall, county agencies are leading a cultural shift away from expansive lawns to more diverse natural landscapes, including trees, serving as a model for residents. We must have ongoing and continued education and outreach to the public about actions that can be taken to protect and improve what we have.

²³ Invasives information, <https://www.fairfaxcounty.gov/publicworks/invasive-species>.

²⁴ Running Bamboo, <https://www.fairfaxcounty.gov/topics/running-bamboo>.

²⁵ Plant This, Not That, <https://www.fairfaxcounty.gov/soil-water-conservation/sites/soil-water-conservation/files/assets/documents/plantthisnotthat.pdf>.

²⁶ Residential Low Impact Landscaping Guide, <https://www.fairfaxcounty.gov/soil-water-conservation/sites/soil-water-conservation/files/assets/documents/lidbooklet.pdf>.

²⁷ Rain Garden Design and Construction Guide for Homeowners, <https://www.fairfaxcounty.gov/soil-water-conservation/sites/soil-water-conservation/files/assets/documents/raingardenbk.pdf>.

C. EXPAND WHAT WE HAVE

The county and the Tree Commission continue to rely on Community of Practice partners to ensure that new trees will be planted, to engage and encourage land owners with open space areas (homeowners, HOAs, faith communities, businesses, county facilities) to plant trees and to increase the tree canopy in underserved parts of the county.

As we did last year, the TC sent a survey to COP members seeking the following information:

- Number of tree planting events
- Number of trees planted
- Source for seedlings/trees
- Type of follow up for maintaining new trees (brief description)
- Special challenges encountered, and possible ideas for improvement (i.e., not having adequate supply of seedlings, not enough volunteers, high fail rates, etc.)
- Planting projects for the upcoming year

Special recognition goes to Plant NOVA Natives (PNN), a collaborative social media, marketing and communications partnership of many organizations mentioned on p. 21. Their continuously updated website has an abundance of easy-to-find and understand information about trees and resources on how to obtain trees at no, or low, cost. Their focus on trees and communicating information to the public using various marketing strategies has resulted in more tree planting on private property. The efforts of the organizations reporting below are magnified and spread by PNN's work. The table below is a snapshot of information the TC has received as of June 30, 2022. Please note that some of the numbers may have been double counted due to the participation of multiple organizations. This list also includes three programs not reporting tree planting numbers but whose missions include elevating the importance of tree planting efforts.



Organization	# Trees and Shrubs Planted
Casey Trees (Pilot Project). Partners: UFMD and Audubon Naturalist Society (ANS)	139 trees
<p>Through a partnership with UFMD and ANS, Casey Trees planted 139 trees that were paid for by the Tree Fund. ANS provided the outreach in vulnerable neighborhoods along the Route 1 corridor to seek homeowners willing to help plant and take care of the trees. Almost 90% of the trees planted were medium-to-large in stature (e.g., oaks, maples); 11% were small (e.g., redbuds, hornbeams). These trees will provide shading, cooling, stormwater control, and related benefits, to the properties where the trees are planted and to the neighborhood at large. The joint project included a “ribbon-cutting” press conference that included Governor Ralph Northam and Tree Commissioner and VDAF staffer Jim McGlone. Since this successful pilot project, future public-private partnerships are anticipated in other areas in 2022-2023.</p>	
Earth Sangha	600 trees 108 shrubs
<p>Trees from Earth Sangha's Wild Plant Nursery were planted at eight events. Plantings were done primarily at Marie Butler Leven Preserve (MBLP), with one large planting at Laurel Hill with FCPA. The Laurel Hill planting (517 trees) was in a large “exclosure” built by FCPA. Other trees were caged with welded wire fencing to protect from deer browse. Cages don't pose wildlife hazards like some commercial tree tubes. Trees are monitored for the threat of invasive vines, particularly at MBLP. Earth Sangha’s efforts are constrained in part by the size of their nursery, since they only install what they grow. The biggest impediments to success are the costs to protect trees from deer overgrazing and pressure from invasive vines damaging or killing young trees. If more effort is focused on removing these two major drivers of forest degradation in our region, it would improve not just planting efforts, but also substantially improve natural forest regeneration. Earth Sangha’s future plans include continuing planting projects at MBLP and potentially at Rutherford Park, exploring a partnership with McLean Trees Foundation on plantings at MBLP and partnering with FCPA to plant more native hickory species. Partnership may include expanding tree planting on parklands and other county land.</p>	
Fairfax ReLeaf and Virginia Department of Forestry (VDOF)	8,070 trees distributed/planted
<p>With seedlings obtained from VDOF, Musser Forests, Inc., residents that donated volunteer seedlings from their yards, and unsold seedlings from the NVSWCD spring sale (see below), Fairfax ReLeaf planted 8,070 trees. Their maintenance includes going to planting sites to remove protective tree tubes and replacing failing seedlings. The plantings that do best do not rely on ReLeaf for maintenance but have interested parties nearby caring for them. Immediate community involvement is critical to success. Anticipated projects in the upcoming year included Fairfax County HOAs, Beth El Hebrew Congregation in Alexandria, Virginia, as well as Fairfax Invasive Management (IMA) sites.</p>	

IMA/Fairfax County Park Authority (FCPA)	758 trees
<p>Earth Sangha and Fairfax ReLeaf provided most of the seedlings, with NVSWCD directing some of its seedling sale leftovers to the effort.</p>	
McLean Trees Foundation (MTF)	21 trees
<p>Held nine events. Trees were obtained from the Colesville Nursery and were 1½ in. diameter. The program includes ongoing monitoring to ensure survival of planted trees. MTF waters all trees planted in the parks for 1-2 years and mulches and weeds them. Trees planted on homeowners' property are inspected once after six months. Some of the challenges encountered include finding more park spaces in which to plant trees and encouraging more private homeowners to plant trees. Watering can be an issue because of a lack of volunteers. The aspirational goal for next year is to plant 15-16 trees in parks and 10-15 trees in homeowners' yards.</p>	
Northern Virginia Soil and Water Conservation District (NVSWCD)	7,560 sold, 229 donated
<p>NVSWCD's spring 2022 event sold a record 7,560 tree seedlings in a few hours, a successful program offering local residents inexpensive trees native to Northern VA. Seedlings were obtained from the Virginia Department of Forestry, Maryland Natural Resources nurseries and two commercial nurseries. Another 189 seedlings were distributed to 10 FCPA parks, Fairfax ReLeaf, and the FCPA IMA Program and 40 hornbeams were donated to the Town of Vienna. NVSWCD also implements the Virginia Conservation Assistance Program (VCAP), funded by the Virginia Association of Soil and Water Conservation Districts. VCAP provides matching grants for a variety of stormwater best management practices (BMPs) primarily on residential properties. NVSWCD also implements the Fairfax County-funded Conservation Assistance Program (CAP) that provides matching grants for stormwater BMPs and energy saving devices on community and church properties. Many funded VCAP and CAP projects involve planting trees and other natural landscaping.</p>	
Tree Preservation and Planting Fund (UFMD)	86 trees
<p>11 tree planting events, with 1.5-2" in diameter trees provided by Merrifield Garden Center, Fair Oaks. Maintenance includes watering through two growing seasons for trees planted in the spring and one growing season for trees planted in fall; structural pruning after establishment; removal of staking and guying at 6-12 months. Special challenges encountered: needs for additional staff/volunteers to supervise during school planting events, more assistance with watering, help with inventorying trees using GPS locate. Proposed planting includes up to 9 sites (8 schools & Government Center).</p>	

Chesapeake Bay Restoration Project	No # reported
<p>Phase III of Virginia’s Watershed Implementation Plan (WIP) sets the Total Daily Maximum Load (TMDL) for nutrients and sediments entering the Chesapeake Bay, minimizes disturbance of soil and vegetation, and has set goals for the total number of trees to be planted (283,567 trees). The Virginia Department of Forestry developed a web form, #MyTreesCount, for recording tree planting data to help meet these new guidelines.</p>	
Stormwater Management Division	No # reported
<p>Converts former mowed turf areas to meadow, tree cover, and forest through a variety of partnership activities at county properties. Examples during the reporting period include: creation of a second meadow area at the Alban Road Division of Vehicle Services site; plantings established at Liberty Middle School (Pope’s Head Creek drainage), Halifax Point Park (Bull Run drainage), and private property adjacent to Lake Windermere (Nichol Run drainage). Ongoing renovations at the Mt. Vernon Government Center campus to improve stormwater facilities by installing extensive native plantings with a focus on trees, shrubs and herbaceous plants native to the Fairfax County coastal plain.</p>	
Virginia Native Plant Society/Potowmack Chapter	No # reported
<p>The Potowmack Chapter continues to salvage native plants from approved building projects prior to any land disturbance. Plants are always offered to the FCPA for park planting for other appropriate public sites where they will thrive. In addition, during local native plant sales, the chapter offers rescued plants to the public for free, especially trees—Plant A Tree for Free.</p>	



D. IMPROVE URBAN FOREST POLICIES AND PROCESSES

In the past year Fairfax County has undertaken or finalized two studies related to climate change mitigation and resiliency: the CECAP and Resilient Fairfax (the County Adaptation and Resiliency Plan). These plans are guided by CECAP's Natural Resources sector specific goal:

Expand the tree canopy to 60 percent with a minimum of 40 percent tree canopy coverage in every census block by 2030 and a minimum of 50 percent tree canopy coverage in every census block by 2050, prioritizing areas of highest socioeconomic need first.²⁸

Regardless of the county's current canopy, there are two fundamental facts that relate to this expressed canopy goal: trees get bigger over time, and trees need plantable space. This means that trees planted today will do more to help reach these goals than trees planted in the future, so canopy expansion efforts should be front loaded and given immediate priority.

The focus on census blocks in the expressed canopy goals is designed to support socially vulnerable populations by addressing tree equity concerns in the county. While there is correlation between canopy coverage and measurable social injustices in vulnerable communities, low canopy can also be driven by lack of plantable space or by resistance to change, either in the community or in the county bureaucracy. Lack of engagement with local communities has doomed many tree planting programs to failure.

Fairfax County currently relies on state code 15.2-961.1 for its Tree Conservation ordinance. The 2022 General Assembly, however, passed legislation that created additional authority for local governments to set and require tree canopy goals. The new code 15.2-961.5 updates and expands 15.2-961.1 by allowing localities to exceed state set goals under certain circumstances. But there is a cost. Section 15.2-961.5 does away with the grandfather clause that allows Fairfax County to set 10-year goals instead of the state mandated 20-year goals, which will reduce the number of trees planted. This section also requires the county to follow the soon to be implemented new recommendations of the State Forester on canopy credits for tree plantings. County staff should carefully consider the effects of this new authority and make recommendations on whether or not to use it.

Although Fairfax County can choose to establish policies that govern its own behavior, to make meaningful progress on its climate change and equity goals it must engage and change the behavior of its citizens. It can do this in part by modeling preferred behaviors, like replacing turf

²⁸ Community-wide Energy and Climate Action Plan (CECAP), https://www.fairfaxcounty.gov/environment-energy-coordination/sites/environment-energy-coordination/files/assets/images/cecap%20report%20release/cecap%20draft_designed%20report_sept%202021_release_508.pdf.

with natural landscaping, but that must be supplemented by providing incentives and outreach on these issues. For example, the Storm Water Management Fund enacted last year provides for cost share grants to homeowners to reduce storm water runoff from their property. This is funding that replaces similar grants through the Environmental Improvement Program (EIP). funding that should also be maintained or expanded.

To improve their effectiveness in reaching the county's goals, the UFMD needs more funding. To meet the canopy goals set out in CECAP, UFMD staff will need to engage vulnerable communities that may be suspicious of government actions in general and specifically may see tree planting as the first step in gentrification. This work requires time and continuous staff and budgetary commitment.

In addition to completing the climate change planning processes started earlier, the county reworked the planting requirements for reforestation Resource Protection Areas (RPAs). The Tree Commission participated in this process, and the end result was a requirement that is more flexible and more reflective of natural forest structure than the old requirements. Unfortunately, there are still only two water quality code enforcement inspectors for the entire county, so many RPA violations go undetected and uncorrected.

Another policy that will set the tone and raise the bar for dealing with invasive species that threaten the urban forest is the new Bamboo Ordinance (Fairfax County Code 119-3-2) that goes into effect on January 1, 2023, to be enforced by the Department of Code Compliance on an individual complaint basis.

Over the coming year, the Tree Commission looks forward to working with UFMD staff to evaluate the new state enabling legislation for its applicability to Fairfax County. We also plan to work with staff on outreach and education about the county's climate and equity goals and how citizens can help reach those goals and other policy changes that may have a positive impact on the urban forest.



E. COMMUNICATE AND BUILD PARTNERSHIPS

The Tree Commission primarily works with partners through the Community of Practice launched in 2021 that the 2019 Tree Action Plan²⁹ required be created. The members are volunteer individuals from county agencies and nonprofits who are dedicated to maintaining, managing and expanding the urban forest.

During the reporting period, the COP met on February 9, 2022 via Zoom due to the COVID pandemic. Participants focused on the TAP's five goals: know what we have, protect and improve what we have, expand what we have, improve urban forestry policies and procedures, and communicate and build partnerships. The attendees shared ideas and activities, and discussed options for partnerships on projects to achieve these objectives. Some of the outcomes included: a mutual recognition that the COP's purpose is to implement the TAP and that the COP is the only place where tree-related groups come together to share experiences and data in order to report to the BOS through the Tree Commission's annual report.

The COP voted to establish the COP steering committee to guide and assist in administering its semi-annual meetings and activities. The steering committee met for the first time in late February and again in June of 2022 to establish its charter, to actively expand the list of invitees to the COP to include more businesses and other county tree champions, to plan the fall COP meeting, and to begin to guide the COP toward establishing a two-year work plan, as suggested in the TAP. The steering committee has six members: two from the Fairfax County Tree Commission; two Fairfax County staffers; and two community (non-governmental or regional commission) representatives; and is aided by a consultant and UFMD staff.

The COP meetings to date have led to some outstanding partnerships and projects:

Audubon Naturalist Society (ANS): The Community Foundation for Northern Virginia gave ANS a grant for watershed education and conservation programs along the Route 1 corridor, to begin with tree planting. It partnered with UFMD and Casey Trees on the project listed below.

Casey Trees: In March 2021, UFMD engaged the nonprofit organization, Casey Trees, to pilot a residential tree planting initiative in the Richmond Highway Commercial Revitalization District. This initiative also included the participation of the Audubon Naturalist Society. See statistics for this successful partnership in Section III.C, page 24.

Fairfax Tree Stewards: An emerging partner in the work of championing the county's urban forest is the Fairfax Tree Stewards (FTS) organization. (Note: Fairfax Tree Stewards is not associated with the former Fairfax County Tree Stewards, which ceased business in 2017.) In

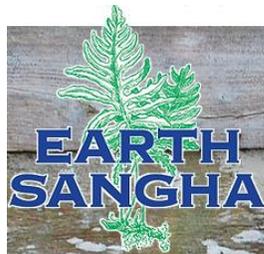
²⁹ 2019 Tree Action Plan, <https://www.fairfaxcounty.gov/publicworks/sites/publicworks/files/assets/documents/treeactionplan.pdf>.

2022, Master Gardeners Brenda Frank and Jeanne Kadet (both members of the Tree Commission) created Fairfax Tree Stewards, a nonprofit, 501(c)(3), Virginia corporation under the auspices of Trees Virginia (Virginia Urban Forest Council). Its mission is:

- a. Preserving, planting, and maintaining trees in Fairfax County, Virginia;
- b. Educating the public on the value and benefits of trees;
- c. Teaching/encouraging the public to actively care for trees using best practices; and
- d. Training volunteers to contribute service hours to implement FTS's purposes.

Community volunteers knowledgeable about best practices regarding tree planting and follow-up maintenance will be trained to assist individuals and groups that want to increase the number of trees in their neighborhoods. It is anticipated that the first training class of the Fairfax Tree Stewards will be held in early 2023. By having a well-trained and motivated group of volunteers, FTS anticipates that more localized tree planting projects can be accomplished throughout the county. In addition, the Tree Stewards will educate and follow up with residents about ongoing good tree care maintenance and how to manage their properties to benefit the urban forest. Trained Tree Stewards will be working with county government agencies and environmental charitable organizations in the county, focusing on areas of greatest need.

Partner communication is a critical part of the COP, and so is communicating with residents of the county through education and outreach activities. TC members actively promote the value and benefits of caring for and expanding our urban forest. There are opportunities to speak, present, promote the Friends of Trees Awards, and volunteer to support ongoing outreach efforts by FCPA, NVSWCD and other COP partners. The TC enjoys an active section of the county website, and continues to provide relevant and interesting content for all residents.



SECTION IV: RECOMMENDATIONS

The Tree Commission looks forward to advising the Board of Supervisors on strategies and actions that will advance the goals of the Fairfax Green Initiatives and the 2019 Tree Action Plan. It will continue to comment on the upcoming CECAP workplan expected by December 2022, and the soon to be published Resilient Fairfax plan, as well as other county reports that affect the health of the urban forest, such as Active Fairfax and Parking Reimagined. We believe the Tree Commission and the COP are uniquely situated to help facilitate the preservation, protection and expansion of the tree canopy and other natural resources in Fairfax County.

A. RECOMMENDATIONS FOR GREEN INITIATIVES ACTION 5

1. Approve a permanent funding source for the Tree Fund to bolster current developer contributions. This Fund pays for tree planting on public property and offers grants to nonprofits planting trees on private property.
2. Approve permanent annual funding for a full-time position in the UFMD to support tree planting on public and private property and manage the Tree Fund.
3. Ensure that no monies in the Tree Fund expire prior to being used.
4. Support Tree Commission and UFMD efforts to gather reports of tree planting in Fairfax County in support of the Watershed Implementation Plan (WIP) III goals by tasking all county agencies to report tree planting as directed by the UFMD and solicited by the Tree Commission.
5. Increase funding to the Northern Virginia Soil and Water Conservation District for additional staff to create and service Virginia Conservation Assistance Program (VCAP) and Fairfax County Conservation Assistance Program (CAP) projects.
6. Increase funding to the NVSWCD for staff and management of the Storm Water Management Fund. (Provide additional support to the Northern Virginia Soil and Water Conservation District to expand capacity to provide technical assistance and oversight of conservation projects on private and common interest properties.)
7. Support new messaging and approaches to persuade citizens who are reluctant to plant trees by asking county agencies to meet with the Tree Commission or the COP to discuss how residents' resistance to tree planting might be overcome. This topic should be added to the Carbon Free Fairfax education and outreach initiative of CECAP, as administered by the Office of Environmental and Energy Coordination (OEEC).

B. RECOMMENDATIONS FOR TREE ACTION PLAN (TAP) REPORT

Some recommendations here actually meet more than one goal, but for purposes of this report, they are sorted individually under primary goals.

Know What We Have	Protect & Improve What We Have	Expand What We Have	Improve Policies and Procedures	Communicate and Build Partnerships
✓				

1. Establish accurate, consistent and updated data reporting measures for the county’s urban forest. At this point we do not have data indicating whether the county is on track to meet its goals of retaining a net 57% tree canopy by 2025, much less the CECAP goal to expand tree canopy to 60% with a minimum of 40% canopy coverage in every census block by 2030.
2. Provide budgetary support where needed to ensure that relevant data is current and useful to BOS leadership and all other stakeholders who are working to maintain, preserve and expand the urban forest.
3. Increase regular budget funding for both long-term ecological maintenance of completed restorations and other FCPA natural resources programs directly, as well as for the Environmental Improvement Program (EIP) under OEEC.

Know What We Have	Protect & Improve What We Have	Expand What We Have	Improve Policies and Procedures	Communicate and Build Partnerships
	✓			

4. Prioritize improvement projects, such as FCPA’s “Helping our Land Heal,” in neighborhoods that score high on the Vulnerability Index, keeping equity in mind.
5. Determine the effectiveness of the 10-year tree canopy requirement—is it properly managed and is canopy retained at projected levels?

Know What We Have	Protect & Improve What We Have	Expand What We Have	Improve Policies and Procedures	Communicate and Build Partnerships
		✓		

6. Expand and maintain no-mow zones throughout the county. Plant trees where possible in those areas.

7. Implement budgetary support for the Tree Fund and encourage other actions to increase tree planting on public and private county land.
8. Identify high priority tree planting areas through an equity lens using the county's Vulnerability Index.

Know What We Have	Protect & Improve What We Have	Expand What We Have	Improve Policies and Procedures	Communicate and Build Partnerships
			✓	

9. Require a Natural Resources and Tree Inventory with a Conceptual Site Plan to be approved prior to preparation of the Site Plan. This would allow UFMD to guide land developers on optimal ways to preserve the site's tree canopy that can be taken into account in preparing and submitting the costly Site Plan.
10. Increase property boundary setbacks for infill development and re-zonings to provide adequate space for preservation of mature trees and planting of large shade trees.
11. Provide developers the option to build higher in areas with current building height limitations, thereby achieving more density, with a concurrent development condition that the building footprint must be reduced to allow for tree preservation or large shade tree planting and not for accessory construction.
12. Raise the *fee in lieu* developers pay when removed trees cannot be replaced on site to reflect the appraised value of removed trees instead of the arbitrarily-set fee of \$900, much lower than that of neighboring Virginia jurisdictions. In order to incentivize developers to preserve trees, increase the fee to reflect appraised value, to encourage more tree conservation and to reflect better the lost benefits of removed trees.
13. Continue to seek policy opportunities that elevate the importance of trees as an essential element in all land use decisions. Our built and natural environments are interconnected and interdependent, and a land use approach that recognizes that fact will result in greater benefits from both the built and natural environments.
14. Support UFMD in analyzing the 2022 General Assembly's new tree canopy goals. Because the new code Section 15.2-961.5 does away with the grandfather clause that allows Fairfax County to set 10-year goals instead of the state mandated 20-year goals, adopting this new code could in effect reduce tree canopy in the county. Staff should carefully consider the effects of this new authority and make recommendations on whether or not to adopt it.
15. Amend the county's ordinances to ban the sale of the most damaging of invasive species in the county, which ultimately requires considerable county resources to remove from

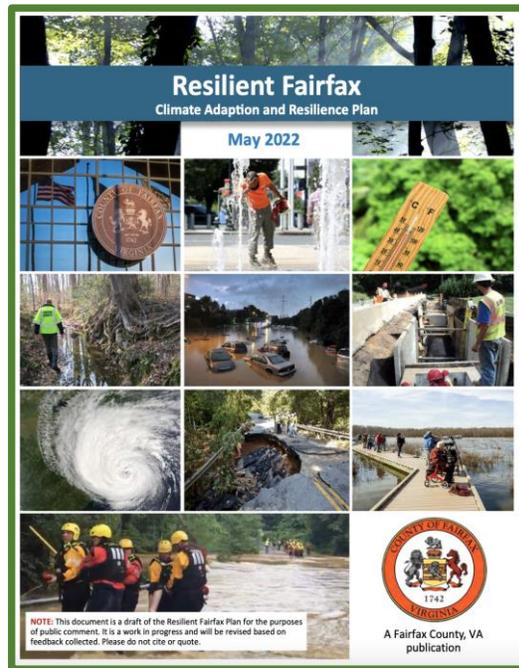
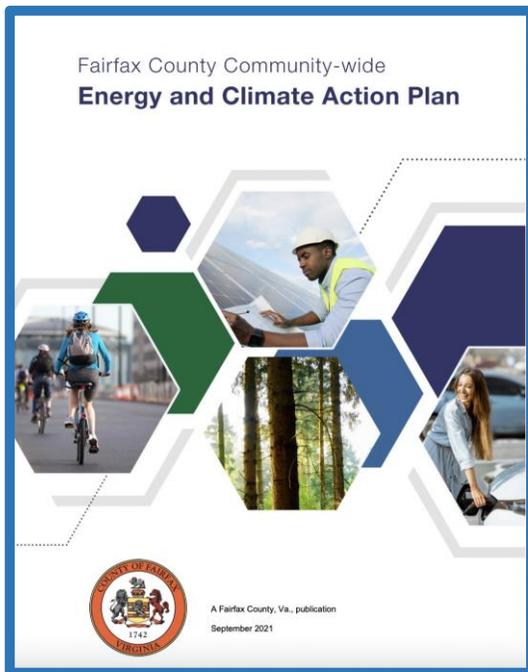
parklands and forested areas. This is a logical next step after the county’s newly enacted ordinance to curtail the spread of invasive running bamboo.

Know What We Have	Protect & Improve What We Have	Expand What We Have	Improve Policies and Procedures	Communicate and Build Partnerships
				✓

16. Encourage COP participation of a volunteer from every county agency and community or business organization that works with and champions the value and benefits of trees.

C. RECOMMENDATIONS FOR CECAP IMPLEMENTATION

The CECAP was approved during the reporting period and includes significant goals that focus on how trees and natural resources can mitigate climate change and reduce greenhouse gas emissions. Its just published sister report, Resilient Fairfax, also includes a focus on trees and natural resources as inexpensive tools for adapting to the effects of climate change, making our lives and futures more resilient. While the Tree Commission has commented on the many suggested actions to meet CECAP’s natural resource goals before, since OEEC will introduce its CECAP work plan for the county in December, the TC believes it is critical to include its prioritization (via survey and discussion) once again here.



PRIORITIZED EDUCATION ACTIONS

1. **Data education:** Monitor tree cover changes (using satellite imagery and urban tree canopy analyses) to assess current conditions and determine how forests and urban tree ecosystems change over time, and regularly report that data to the public.
2. **Land use goal outreach:** Ensure that the broader community understands the importance of green spaces to their quality of life, and that any development project—from redesigning a yard to building a new apartment complex—can choose to minimize impacts to and loss of high-quality trees and natural vegetative communities. **TC comment:** Vegetative communities mean groups of plants from trees to ground cover that ecologically support each other in the food web (fungi, insects, birds, small mammals, etc.). There are important ecological choices every landowner and developer must make.
3. **Educational programming:** Highlight the importance of natural resources and trees in mitigating the effects of climate change, and also in providing environmental, social, economic, health and other benefits to Fairfax County citizens. **TC comment:** This is low hanging fruit. Residents are interested in trees and their benefits. Now is the time to educate about how caring for trees has multiple benefits.

PRIORITIZED COUNTY ACTIONS TO IMPLEMENT NOW

1. Create a cross-disciplinary county staff team to analyze existing programs and policies across the county to evaluate where climate change and natural resources intersect that includes mitigation plus adaptation and resiliency. **TC comment:** This is actually Strategy 12c. It is our understanding that Resilient Fairfax’s Climate Adaptation and Resiliency Plan is likely to suggest and support this critical action.
2. Use research and inventory data to conduct land use reviews that ensure that local policies will prioritize open space [and] better value and preserve natural areas. The county could also use this information to reform how land is sold, and coordinate new and expanded green areas with new or existing trails to create a network of green spaces. **TC comment:** Land use decisions must be reviewed to prioritize preserving and expanding our urban forest. Data is key in these decisions.
3. Require a higher density tree canopy replacement in development projects.
4. Strengthen existing county voluntary programs that conserve and expand green spaces and trees. **TC comment:** We agree with another comment in the CECAP that “The Fairfax County Tree Action Plan provides a guiding structure through which the county can develop programs that conserve existing young and mature trees to help improve soils, filter groundwater, and remove air pollutants [and use] other urban areas as models.”
5. Pursue the expansion of financial tools, such as the Tree Preservation and Planting Fund, to include tree planting in private spaces. **TC comment:** This could include, but not be limited

to, developing public-private partnerships, supporting Green Bank funding, and increasing county funding of Earth Sangha and Fairfax ReLeaf.

PRIORITIZED COUNTY ACTIONS FOR THE FUTURE

1. Require a tree preservation plan first, before the stormwater, utility, and building plans are prepared and before any accessory project, such as a deck, shed, etc. is sited.
2. Incentivize more infill develop[ers] to conserve existing tree canopies and green spaces, and reevaluate the existing Infill Development Review Process to incorporate best practices for preserving mature tree canopy. Specific actions include, but are not limited to those listed below. **TC comment:** This section and the Options for Priority 1 should be relocated to Strategy 8. The TC firmly believes that land use policies should foremost require the preservation of healthy tree canopy to the maximum allowed by Virginia code.
 - Ban the removal of mature trees in resource protection areas, buffers, or flood plains.
 - Change (increase) boundary setback requirements, particularly on smaller lots.
 - Establish stiff penalties for unpermitted removal of trees and/or damaging preserved trees in any building process.
 - Reduce the allowed amount of impermeability on any size of lot.
 - Incentivize or require conservation of tree canopies or green spaces in development projects, such as a regulation that restricts the removal of mature trees, and building designs and construction strategies that incorporate green space protection.
 - Incentivize developers and homeowners to reduce clearing, grading, or otherwise disturbing soils for development because soils provide important carbon sequestration.

Note: These land use recommendations were also included in the Tree Commission’s advisory letter to the BOS on September 9, 2021 and were endorsed in large part by the McLean Citizens Association, the Great Falls Citizens Association and the Environmental Quality Advisory Council. In particular, EQAC’s Annual Report included these suggested policies in its 2021 Annual Report published in December, 2021. The Board then requested OEEC to prepare a response to all EQAC’s recommendations, including these, which EQAC received on May 4. The TC will be replying to this response in the fall of 2022, prior to when OEEC will present its CECAP workplan to the BOS.

CONCLUSION

Trees and landscaping are the only “technology” that can provide carbon sequestration (natural carbon storage) leading to decreased greenhouse gas emissions, and simultaneously remove air pollutants, help to manage storm water runoff, improve our ecosystem, and provide psychological and physiological health benefits to humans. Trees and green resources are the least invasive method for combating heat islands, social vulnerability, and environmental injustice. Tree planting is also a cost-effective way for homeowners to address the energy costs of climate change, while also providing the hope of participating in a promising solution. At the same time, the costs of growing and maintaining trees is far less than the environmental costs associated with the production, deployment and disposal of solar panels, wind turbines, storage batteries and energy efficiency technologies.

Trees may not be the full answer to climate change, but they are an undervalued, underutilized and critically important part of the answer to many climate, environmental, social and health-related questions and concerns.

The Tree Commission looks forward to continuing to advise the Board of Supervisors on how a healthy county tree canopy is essential to address CECAP’s climate concerns and to respond to Resilient Fairfax’s climate adaptation and resiliency recommendations. The 2019 Tree Action Plan outlines an effective, economically feasible and energizing set of goals to achieve and maintain a vibrant urban forest. The Tree Commission hopes that the Board of Supervisors will continue to support this work, which can and will bring measurable benefits to all present and future residents of Fairfax County.

GLOSSARY OF ACRONYMS AND TERMS:

BOS:	Board of Supervisors
CECAP:	Community-wide Energy and Climate Action Plan
COP:	Community of Practice
DPD:	Department of Planning and Development
DPWES:	Department of Public Works and Environmental Services
Forest Pest:	Forest Pest Management Branch of UFMD
OEEC:	Office of Environmental and Energy Coordination
LDS:	Land Development Services
SWM:	Stormwater Management Division of DPWES
TAP:	Tree Action Plan
UFMD:	Urban Forestry Management Division of DPWES

Photos from Jeanne Kadet, John Clewett, Cindy Speas and the Fairfax County website.