



Annual Urban Forest Report

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-Annual Report

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Urban Forest Program Overview: Goals

- ▶ Maintain and improve the urban forest canopy: More canopy = more benefits
 - ▶ Cools the environment
 - ▶ Lowers energy bills
 - ▶ Intercepts and absorbs stormwater
 - ▶ Cleans the air
 - ▶ Improves mental health for our residents
 - ▶ Improves aesthetic character of the City
- ▶ Maintain a safe urban forest
 - ▶ Ensure that hazardous tree conditions are addressed promptly

Urban Forest Program Overview: Methods

- ▶ Maintain and improve the urban forest canopy:
 - ▶ Tree Removal Permit Program: Incentivize tree retention on private property
 - ▶ Tree Impact Assessment and Tree Protection Plant Permit Program: Ensure trees on public and private properties are protected during construction projects.
 - ▶ Review work conducted by utilities, Montgomery County, the State of Maryland, and the City to ensure trees are protected and preserved where possible.
 - ▶ Plant and maintain trees in public space
 - ▶ Incentivize tree planting on private property.
 - ▶ Educate the public about the importance of planting and maintaining trees for a robust urban forest
 - ▶ Code Enforcement: Enforce private property tree regulations to ensure trees are not removed or damaged illegally
 - ▶ Monitor concerning pest and disease outbreaks that may impact the urban forest

Urban Forest Program Overview: Methods

- ▶ Ensure that hazardous trees are dealt with:
 - ▶ Inspect and manage trees in public space
 - ▶ Contract or deploy crew for removal of hazardous trees or branches
 - ▶ Conduct clearance pruning to maintain safe passage for road and sidewalk users
 - ▶ Coordinate with Pepco, Montgomery Parks, and State Highway Administration when applicable to ensure hazardous tree are addressed promptly
 - ▶ Administer the Hazard Tree Assistance Fund to support low and moderate income residents with the removal of hazardous trees on their properties
 - ▶ Educate the public about proper tree management for safety
 - ▶ Respond to emergency tree failure events
 - ▶ Code enforcement: Conduct inspections and issue violations for hazardous trees on private property

Urban Forest Program Overview:

- ▶ Other responsibilities of the Urban Forest Manager:
 - ▶ Provide Urban Forest programmatic updates to the Tree Commission
 - ▶ Respond to inquiries and provide general tree guidance to residents
 - ▶ Maintain Urban Forest program webpages
- ▶ Things the Urban Forest Program does not offer:
 - ▶ Consultations for private property trees, other than what is entailed in a permit inspection.
 - ▶ Mediation for tree disputes between two property owners.

Urban Forest Annual Report

- ▶ City Code section 12.12.140 directs the Urban Forest Manager to report on certain aspects of the Urban Forest program. The following is a summary of the items covered in the report.

1. Urban Forest Condition and Planting Numbers

- ▶ The City has a robust tree canopy.
- ▶ Oak decline is still a problem affecting some trees, though a glance at our tree removal permit numbers suggests the rate of loss is slowing considerably.
- ▶ We are monitoring the spotted lanternfly and beech leaf disease. We have not seen these in Takoma Park. Notices will be published to the Urban Forest web page as necessary as updates occur.
- ▶ Tree planting, preservation of existing trees, and maximizing tree and soil health to increase canopy growth are important as ever.

1. Tree Planting Numbers: Totals

Tree Planting Totals	
	FY23
Public Space Trees Planted	24
Tree Takoma Trees Planted	279
Removal Permit Replacement Trees	53

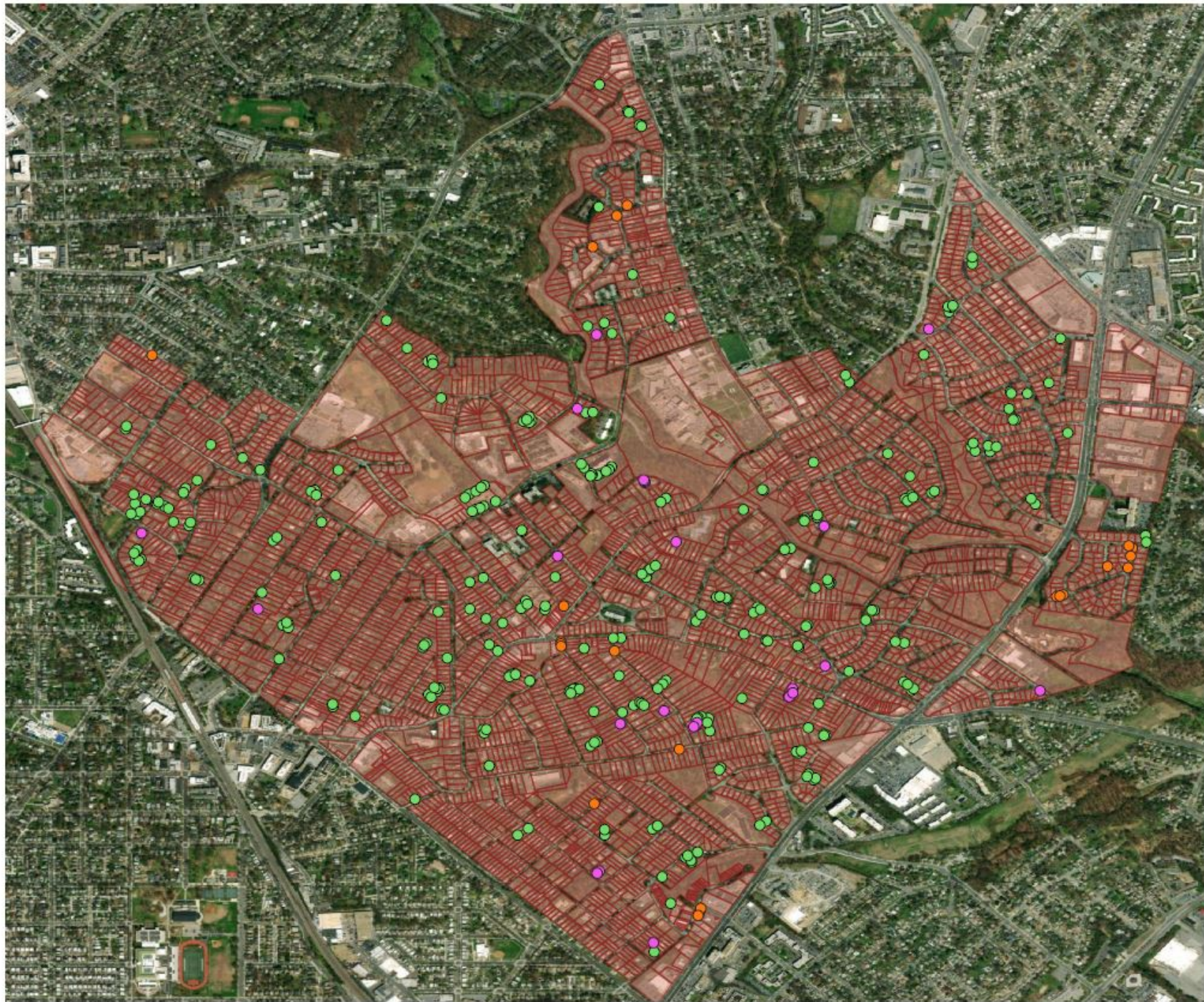
1. Tree Plantings Numbers: Species

Tree Species: Public Space	
Species	FY23
American Hornbeam	1
American Sycamore	1
Bald Cypress	3
Flowering Dogwood	1
Hackberry	8
Blackgum	3
Willow Oak	7

Tree Species: Tree Takoma	
Species	FY23
American Beech	26
American Linden	13
American Sycamore	7
Freeman Maple	1
Bald Cypress	12
Blackgum	11
Southern Magnolia	11
River Birch	22
American Holly	9
Hackberry	26
Sweetgum	19
Northern Catalpa	20
Nuttall Oak	21
Red Maple	1
Overcup Oak	18
Red Maple	4
River Birch	1
Scarlet Oak	4
Honeylocust	4
Swamp White Oak	13
Tulip Poplar	8
White Oak	8
Blackgum	4
Willow Oak	8
Yellowwood	8

Tree Plantings

- Replacement Tree Plantings
- Public Space Trees
- Tree Takoma Trees



2. Permits

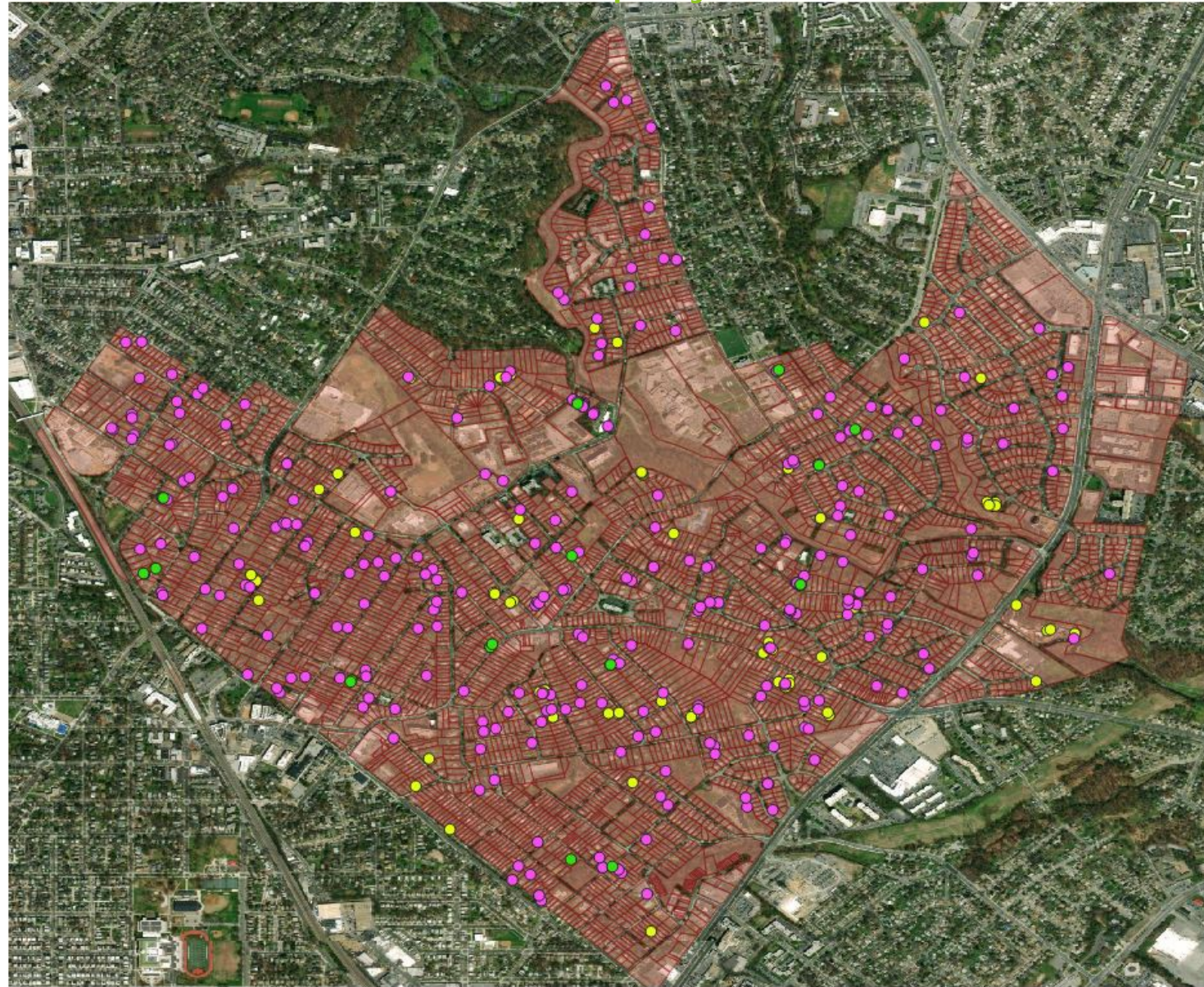
Tree Removal Permits	FY23	FY22	FY21
Dead/Hazardous Permitted	308	380	538
Not Dead/Hazardous, Desirable Species: Permit Issued	59	92	76
Not Dead/Hazardous, Undesirable Species: Permit Issued	12	14	14
Eligible for Permit / In Progress	33	50	28
Denied	4	3	15
No Permit Required	19	23	28
Withdrawn	28	23	35
Total	463	585	740

TIA and TPP	FY23	FY22	FY21
Tree Impact Assessments	112	144	152
Tree Protection Plan Permit Applications	26	41	70*

*Revisions were previously counted as new permit applications

Permitted Private Property Removals

- No Permit Required
- Dead or Hazardous
- Alive and Non-Hazardous

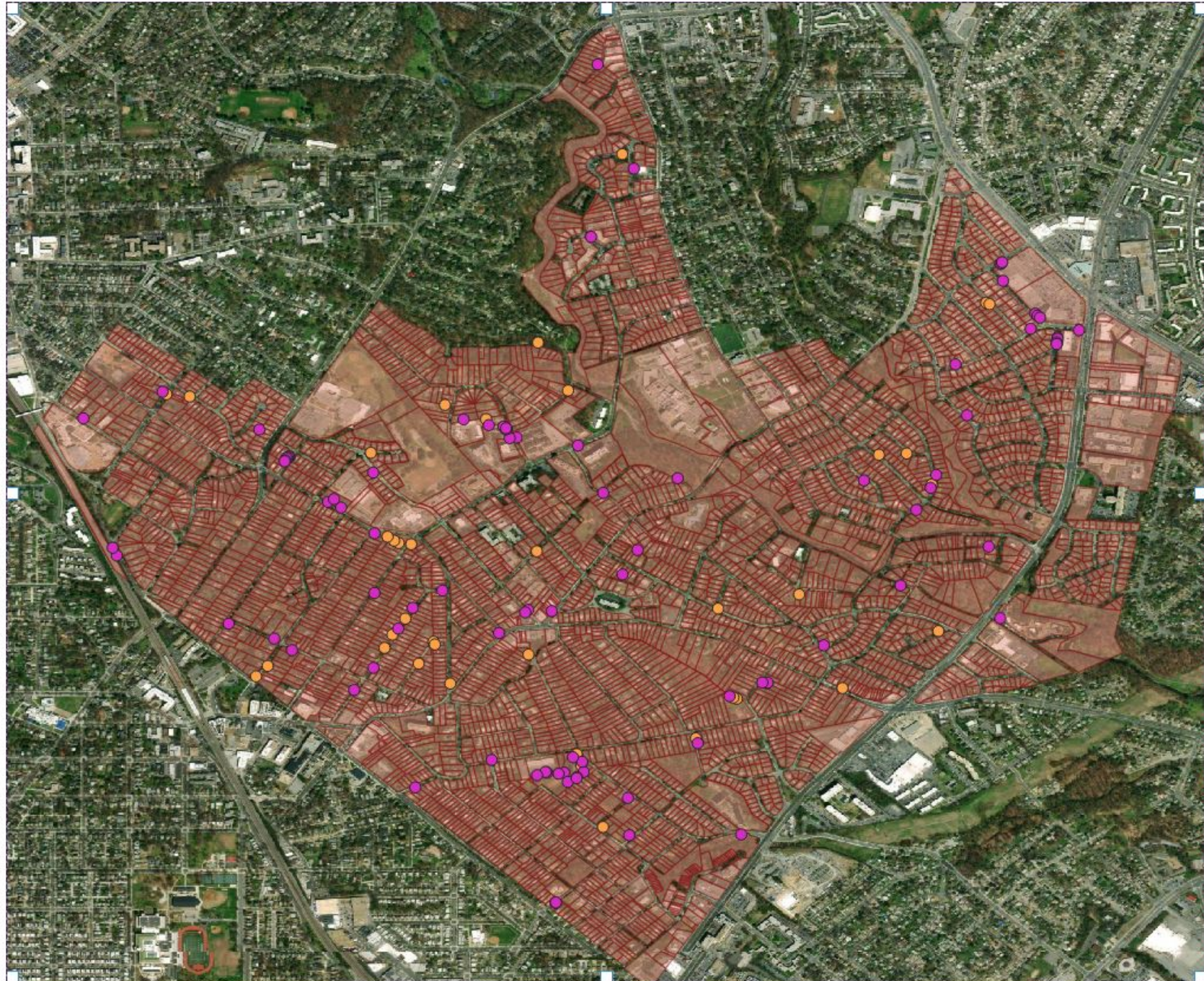


2. City Removals and Pruning

City Tree Work	FY23
City Trees Removed	94
City Trees Pruned	200

Public Space Removals and Contractor Pruning

- Public Space Removals
- Public Space Contractor Pruning



2. Tree Commission Permit Appeals

- ▶ There were no permit appeal hearings in FY23.

3. City Efforts to Achieve Canopy Goal

- ▶ The City's canopy goal is to achieve no net loss and maintain 60% cover.
- ▶ Strategies to achieve this goal:
 - ▶ Plant trees in public space
 - ▶ Plant trees on private property
 - ▶ Minimize impact to trees during construction projects
- ▶ Status:
 - ▶ Our most recent data from 2020 indicated a 57.8% canopy cover for the City
 - ▶ Compared to the 2018 data, which indicated a 58% cover, this is a .2% decline
 - ▶ Given the elevated rate of loss of mature oaks in this period, this small decline is actually relatively good news, though we would like to reverse the decline.

3. City Efforts: Tree Takoma Origins

- ▶ The vast majority of trees dying in Takoma Park are on private property.
- ▶ The vast majority of plantable locations are on private property.
- ▶ Private property locations are typically superior to street locations in terms of soil rooting volume available and come with the benefit of extra care provided by the owner.
- ▶ Trees planted on private property serve the entire City in the cumulative environmental benefits they provide.
- ▶ However, not enough property owners are choosing to plant canopy trees due to:
 - ▶ Cost
 - ▶ Lack of knowledge of how or why to plant a canopy tree
 - ▶ Choosing small ornamental trees instead of long-lived canopy trees

3. City Efforts: Tree Takoma

- ▶ Program Design:
 - ▶ Provide free medium to large canopy trees to private properties in the City.
 - ▶ Provide free tree planting consultations to private properties in the City.
 - ▶ Conduct direct outreach to apartment buildings, condominiums, commercial, and institutional properties.
- ▶ First Year's Results:
 - ▶ 279 trees planted
 - ▶ Resident reports of very positive experiences with the program
 - ▶ 22 multi-family properties signed up, with 6 properties receiving a total of 27 trees planting, 7 properties still in process, and the other 9 electing not to plant trees.

4. Urban Forest Manager Recommendations

- ▶ Continue to support the Urban Forest Program tree planting efforts.
- ▶ Continue to support the adoption of modern software for tree asset and workflow management.

5. Education and Outreach

Key activities and updates

- ▶ Major overhaul of Urban Forestry webpage completed, with new pages covering Tree Risk Management, Hiring an Arborist, City Tree Regulations, Public Space Tree Management, Tree Takoma, and more.
- ▶ Tree planting web map created to better inform residents of past and future tree plantings.
- ▶ Arbor Day event at Circle Woods.
- ▶ Tree Care 101 class hosted in partnership with Conservation Montgomery.

6. Fees, Fines, and Tree Fund

Payments	FY23
Citation Payments	\$3,000
Tree Removal Permit Fee-in-Lieu Payments	\$70,799
Forfeited Security Bonds	\$0
TOTAL	\$73,799

Tree Fund Allocation and Status	FY23
Tree Fund Amount Allocated	\$73,000
Tree Fund Revenue Available at End of Year	\$205,705

6. Tree Fund

- ▶ The expected rate of accumulation from fee-in-lieu payments and citations is at least \$55,000 per year. This is a conservative estimate based on recent years.
- ▶ For FY23, we are increasing allocation from the Tree Fund to \$95,500 to better take advantage of current interest in the Tree Takoma program, while continuing to plant trees in public space.
- ▶ We will reassess recommended annual Tree Fund allocation and planting levels as we complete more years of the Tree Takoma Program.

7. Native and Climate Adapted Tree Percentage

- ▶ 100% of trees planted were of native and climate adapted species.

A word on the City's approach to selecting species for the Approved Tree Species List

▶ Goals

- ▶ Maximize urban forest resiliency to climate change
- ▶ Maximize tree success in the urbanized growing conditions of Takoma Park (urban heat island, compacted soils, saturated soils, history of land use change, limited soil volume)
- ▶ Maximize urban forest tree species diversity
- ▶ Eliminate risk of introducing noxious and invasive species
- ▶ Maximize potential benefits to wildlife.

▶ Strategy

- ▶ Focus primarily on trees historically native to Maryland that accomplish some or all of the above goals.
- ▶ Include a limited selection of species historically native a few hundred miles to the south or west of Maryland, and as far as the Mississippi river if deemed appropriate, that are especially well-suited to accomplishing some or all of the above goals.

63 Medium and Large Species Historically Native to Maryland

<i>Acer rubrum</i>	Red Maple	<i>Gymnocladus dioicus</i>	Kentucky Coffee Tree	<i>Populus grandidentata</i>	Bigtooth Aspen	<i>Quercus muehlenbergii</i>	Chinquapin Oak	<i>Betula lenta</i>	Sweet Birch	<i>Pinus virginiana</i>	Virginia Pine
<i>Acer saccharinum</i>	Silver Maple	<i>Juglans nigra</i>	Black Walnut	<i>Prunus serotina</i>	Black Cherry	<i>Quercus nigra</i>	Water Oak	<i>Betula nigra</i>	River Birch	<i>Quercus marilandica</i>	Blackjack Oak
<i>Acer saccharum</i>	Sugar Maple	<i>Liquidambar styraciflua</i>	Sweet Gum	<i>Quercus alba</i>	White Oak	<i>Quercus palustris</i>	Pin Oak	<i>Catalpa Speciosa</i>	Northern Catalpa	<i>Quercus shumardii</i>	Shumard Oak
<i>Carya cordiformis</i>	Bitternut Hickory	<i>Liriodendron tulipifera</i>	Tulip Poplar	<i>Quercus bicolor</i>	Swamp White Oak	<i>Quercus phellos</i>	Willow Oak	<i>Chamaecyparis thyoides</i>	Atlantic White Cedar	<i>Robinia pseudoacacia</i>	Black Locust
<i>Carya glabra</i>	Pignut Hickory	<i>Magnolia acuminata</i>	Cucumber Magnolia	<i>Quercus coccinea</i>	Scarlet Oak	<i>Quercus rubra</i>	Northern Red Oak	<i>Diospyros virginiana</i>	Common Persimmon	<i>Salix nigra</i>	Black Willow
<i>Carya ovata</i>	Shagbark Hickory	<i>Pinus echinata</i>	Shortleaf Pine	<i>Quercus falcata</i>	Southern Red Oak	<i>Quercus stellata</i>	Post Oak	<i>Ilex opaca</i>	American Holly	<i>Sassafras albidum</i>	Sassafras
<i>Carya tomentosa</i>	Mockernut Hickory	<i>Pinus rigida</i>	Pitch Pine	<i>Quercus imbricaria</i>	Shingle Oak	<i>Quercus velutina</i>	Black Oak	<i>Juniperus virginiana</i>	Eastern Red Cedar	<i>Taxodium distichum</i>	Bald Cypress
<i>Celtis laevigata</i>	Sugarberry	<i>Pinus strobus</i>	Eastern White Pine	<i>Quercus lyrata</i>	Overcup Oak	<i>Tilia americana</i>	American Linden	<i>Morus rubra</i>	Red Mulberry	<i>Ulmus rubra</i>	Slippery Elm
<i>Celtis occidentalis</i>	Hackberry	<i>Pinus taeda</i>	Loblolly Pine	<i>Quercus macrocarpa</i>	Burr Oak	<i>Tsuga canadensis</i>	Eastern Hemlock	<i>Nyssa sylvatica</i>	Black Gum		
<i>Fagus grandifolia</i>	American Beech	<i>Platanus occidentalis</i>	American Sycamore	<i>Quercus michauxii</i>	Swamp Chestnut Oak	<i>Ulmus americana</i>	American Elm	<i>Ostrya virginiana</i>	Hop Hornbeam		
<i>Gleditsia triacanthos</i>	Honey Locust	<i>Populus deltoides</i>	Eastern Cottonwood	<i>Quercus montana</i>	Chestnut Oak	<i>Acer negundo</i>	Box elder	<i>Pinus serotina</i>	Pond Pine		

11 Additional Medium and Large species

Scientific Name	Common Name	Nearest Native State	Comments
<i>Aesculus flava</i>	Yellow Buckeye	Virginia	Native in adjacent state, improves diversity of planting palette, proactive adaptation to warming climate
<i>Carya illinoensis</i>	Pecan	Virginia	Native in adjacent state, proactive adaptation to warming climate, improves diversity of planting palette, edible nut production desirable to some residents
<i>Magnolia grandiflora</i>	Southern Magnolia	Virginia	Native in adjacent state, proactive adaptation to warming climate, improves diversity of planting palette; large canopy, evergreen, flowering species fills unique niche
<i>Quercus texana</i>	Nuttall Oak	Kentucky	Previously considered by some to be a sub-species of Maryland native <i>Quercus shumardii</i> , with better tolerance of compacted and saturated soils. Proactive adaption to warming climate. Improves diversity of planting palette
<i>Aesculus glabra</i>	Ohio Buckeye	Virginia	Native in adjacent state, improves diversity of planting palette. proactive adaptation to warming climate
<i>Cladrastis kentukea</i>	American Yellowwood	Virginia	Native in adjacent state, improves diversity of planting palette. proactive adaptation to warming climate
<i>Halesia carolina</i>	Carolina Silverbell	West Virginia	Native in adjacent state, improves diversity of planting palette.
<i>Maclura pomifera</i>	Osage Orange	Virginia	Native in adjacent state, improves diversity of planting palette, proactive adaptation to warming climate
<i>Magnolia macrophylla</i>	Bigleaf Magnolia	Virginia	Native in adjacent state, improves diversity of planting palette. proactive adaptation to warming climate
<i>Nyssa aquatica</i>	Water Tupelo	Virginia	Native in adjacent state, improves diversity of planting palette. proactive adpation to warming climate
<i>Taxodium ascendens</i>	Pond Cypress	Virginia	Native in adjacent state, improves diversity of planting palette, especially tolerant of urban and saturated soils. proactive adaptation to warming climate

Thank You!

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