



Washington, D.C.

QUICK FACTS

WHO

District Department of Transportation
Urban Forestry Administration

STAFF

42 staff members

CANOPY

35 percent canopy, including more than 130,000 street trees; plus right-of-way trees

KEY FORESTRY TASKS

Tree pruning and maintenance, tree planting and removals, permitting, reviewing development and construction site plans that impact rights of way, and other duties

.C.

KEY TOPICS

- Citywide Greening Initiative
- Long-term Maintenance Plan
- Neighborhood Improvement Projects
- Public-Private Partnership
- Public-Public Partnership
- Stormwater and Watershed Management
- Tree-care Training Program
- Urban Forest Management Plan

FROM its tree-lined streets to the National Mall, Washington, D.C., is well-known for its greenspaces. There are more than 7,000 acres of parkland and a tree canopy of around 35 percent. These greenspaces, though, are spread across city, federal and private land, which means maintaining a healthy forest in the District is the responsibility of a variety of entities.



TREE-LINED AVENUES

In July 2011, Mayor Vincent Gray announced his Sustainable D.C. initiative, which outlines a series of sustainability goals — from energy consumption to green jobs — that the city wishes to reach by 2032. This new initiative is “crafted for and by the city’s diverse and knowledgeable community with the ultimate goal of making D.C. more socially equitable, environmentally responsible and economically competitive.” Since the 2011 announcement, a number of working groups, involving more than 700 people, were created to offer recommendations for the District’s sustainability plan, and in April 2012, the city unveiled its “A Vision for a Sustainable D.C.”¹

This vision contained very specific goals for the District’s tree canopy and parkland: a tree canopy of 40 percent, which was set as a goal a few years earlier, and a natural space within a 10-minute walk of every resident by 2032.² With approximately 130,000 street trees and other public trees — about nine percent of the city’s total canopy — under its purview, the District Department of Transportation’s Urban Forestry Administration (UFA) will play an important role in helping the city reach this goal.

“One thing we find as a common thread is everyone loves the trees on their street, no matter what neighborhood you go to,” says John Thomas, associate director of UFA. “We’ve had people say, ‘We’ll give up our street being paved to protect the trees.’ More and more people seem to be looking at what it would take to keep the trees around.”

The District’s street tree program dates back to 1860 when the city established its unique “public parking” — city-owned green strips along the front of every lawn. Unlike many other cities that maintain rights of way, which are often greenspaces between a roadway and a sidewalk, the District’s parking strips may not have a sidewalk differentiating them from a person’s yard. These strips resulted from a combination of Pierre Charles L’Enfant’s vision of a capital with tree-lined streets and a superintendent of streets who wanted a buffer between the dust of the streets and his house. The city planted thousands

of street trees in these spaces in the late 1800s, and for more than a century, maintaining the District’s street trees was the responsibility of the Department of Public Works. Then, in 2000, that responsibility shifted to the newly formed District Department of Transportation (DDOT).

Moving to DDOT was a good move, Thomas says. “It allows us to put more emphasis on the importance of street trees and protection of trees in projects,” such as road widening or development projects, he relates. “We’re part of the team that’s making those decisions, and there usually seems to be funding available to do street maintenance projects.” As part of DDOT, a portion of UFA’s funding comes from the city’s fees to use public spaces, such as when restaurants rent sidewalk space or parking space costs.

UFA operates on a seven to 10-year pruning cycle and plants 4,500 new trees each year. Thomas relates that having constant maintenance as a result of consistent funding is better than having a huge influx of funding one year with minimal funding a year or two later.

In D.C., many partners work together to maintain the city’s canopy, from UFA to others that include Casey Trees, the Council of Governments, Earth Conservation Corporation, Trees for Capital Hill, Trees for Georgetown and Washington Parks and People.

→ KEY POINT

Consistent funding is better than having a huge influx of funding one year with minimal funding a year or two later.

4,500

new trees planted each year by the District’s Urban Forestry Administration



Trees shade historic homes in Georgetown

CANOPY CONCERNS

In 2002 — after reading an article about the alarming decline in the District’s tree canopy — longtime area resident Betty Brown Casey founded Casey Trees “to restore, enhance and protect the tree canopy of the nation’s capital.”³

“When the city’s taking care of its street trees, then the nonprofits and other groups can work on private lots,” says Mark Buscaino, executive director of Casey Trees. “That’s where we’ve really focused our energy.”

A healthy urban forest depends on good collaboration among all of the different entities that play a role in the management of the city’s trees, he adds. “I’ve always firmly believed that it takes a balance to protect and create an urban forest,” Buscaino says. “Nonprofits can’t do it all, but the city can’t do it all either.”

Casey Trees helps the District’s urban forest through a number of different programs focused on themes such as tree education, tree planting, tree care and policy and advocacy:

- The organization’s Citizen Forester program trains its volunteers to become tree planting experts to assist in Casey Trees’ planting, tree care and other events.
- Its Community Tree Planting program provides individuals and groups with the opportunity to plant trees to revitalize their neighborhoods by planting trees in parks, yards and other spaces both public and private throughout the city.

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MARK BUSCAINO
Executive Director
Casey Trees



→ KEY POINT

The unique Water By-Cycle Program uses bikes to water trees in hard-to-access areas.

Tree planting event at Bruce-Monroe Elementary School hosted by Casey Trees

“By land-use type, Washington’s residents control the largest percentage of Possible UTC [Urban Tree Canopy]. Programs that educate residents on tree stewardship and provide incentives for tree planting are essential if Washington is to sustain its tree canopy in the long term.”

UNIVERSITY OF VERMONT
Spatial Analysis
Laboratory report
2010

- The Water By-Cycle program uses bicycle power to water trees throughout the District, especially in areas where more traditional watering methods, such as trucks, cannot easily navigate.
- Summer Crew — a high school summer job and training program that is partly funded by UFA through U.S. Forest Service grants— engages 10 high school students every summer to weed, water and mulch trees to improve their chances to survive the first few critical years of their life.
- The organization’s advocacy team is currently working with the Council of the District of Columbia on the city’s tree protection measures.
- Casey Trees’ annual Tree Report Card provides updates on the state of the District’s canopy.

Engaging the city’s residents in urban forestry will be a key to ensuring long-term success for the District’s trees and greenspaces. A 2010

University of Vermont Spatial Analysis Laboratory analysis of the District’s canopy reveals that “by land-use type, Washington’s residents control the largest percentage of Possible UTC [Urban Tree Canopy]. Programs that educate residents on tree stewardship and provide incentives for tree planting are essential if Washington is to sustain its tree canopy in the long term.”⁴

UFA’s Thomas relates that working with neighborhood groups is very beneficial because you’re engaging with people who are already invested in the health and vitality of their communities. UFA also connects with individual homeowners through its Canopy Keepers program. With this program, residents apply to adopt a tree near their property, and UFA delivers a free, slow-drip watering tub, which the adopter is responsible for filling with 10 gallons of water every week “from spring bloom until winter freeze.”⁵ With the District’s warm, humid summers, these extra helping hands help ensure a healthy canopy.

Beyond city-owned and private land, the other primary manager of greenspace in the city is the federal government. Approximately 8,500 acres of the District are administered by the National Park Service (NPS), which is responsible for well-known greenspaces, such as the National Mall and America's first and largest urban park, Rock Creek Park.⁶ The Monumental Core — which includes the National Mall, the Washington Monument, the Lincoln and Jefferson Memorials, the Vietnam Veterans Memorial, the Korean War Veterans Memorial and the World War II Memorial — contains approximately 17,000 trees.⁷ These trees provide comfort, beauty and environmental benefits to the tens of millions of individuals that visit the Monumental Core every year.⁸ These visits can often take their toll on the area's

trees, though, by compacting the soil, among other ill effects. As a result, the NPS is currently reconstructing the National Mall's turf and soil.

Construction is underway on three of the eight main lawn panels in the National Mall in order to make them more sustainable in the future. Some of this work involves using engineered soil to resist soil compaction and using durable varieties of turf. Other work revolves around enhancing the National Mall's function as green infrastructure, such as installing underground cisterns to collect stormwater alongside a new irrigation system. By using stormwater for irrigation purposes, planners hope to help improve the regional water quality⁹ — a major concern for many in the city.

**2.35
BILLION**

gallons of combined sewage overflow enter the Anacostia and Potomac Rivers each year.

PROTECTING THE CHESAPEAKE WATERSHED

In 2008, 39 percent of the District was covered with impervious surface.¹⁰ This plays a role in the combined sewage overflows of 1.5 billion gallons into the city's Anacostia River and 850 million gallons into the Potomac River each year.¹¹ Taking the lead on addressing this issue is the District Department of the Environment (DDOE).

DDOE is responsible for administering the District's National Pollution Discharge Elimination System (NPDES) Permit — more commonly referred to as a Municipal Separate

Storm Sewer System (MS4) Permit.¹² This permit regulates what kind of and how much discharge is allowable into the District's various waterways. To stay in compliance with the permit and

View of the Washington Monument from the Lincoln Memorial Reflecting Pool



→ KEY POINT

Decreasing impervious surface is where the District and other cities will see major gains in canopy coverage over time.

improve the health of the city's waterways, DDOE has implemented a number of incentive programs to encourage green infrastructure and stormwater reduction.

In fall 2007, DDOE launched its RiverSmart Homes program to involve District homeowners in stormwater management. Through RiverSmart Homes, DDOE covers up to \$1,200 in green infrastructure enhancements — rain barrels, rain gardens, large shade trees, impervious surface replacements and native landscaping — for approved homes to reduce stormwater runoff.¹³ The program has been readily adopted by city residents, as the wait time for an initial audit by a DDOE inspector to see if your home qualifies and which improvements are recommended is between three and four months.¹⁴ The

program has also expanded to the District's schools, with RiverSmart Schools offering school-yard greening projects that teach gardening skills while improving a school's green areas.¹⁵

For those spaces where yard adaptations may not be possible, DDOE is encouraging homeowners and building owners to install green infrastructure on their roofs with its Green Roof Rebate Program. In 2012, the rebate program offered \$5 per square foot capped at 5,000 square feet. The program began in 2007, and the District estimates that the city now has 75 green roofs covering approximately 350,000 square feet.¹⁶

Anacostia River



TIMOTHY VOLLNER



DBKING



F. DELVENTHAL

View of the U.S. Capitol from the Potomac River

Another aspect of the city's MS4 permit is a focus on functional landscaping. "The District encourages developers through training sessions and preliminary design review to incorporate functional landscaping techniques in their site development plans."¹⁷ As part of this work, the District Department of Transportation reviews all development and construction site plans that impact rights of way to look for ways to reduce impervious surfaces, increase space for trees and reduce stormwater runoff. Through the American Recovery and Reinvestment Act, UFA received more than \$4 million to remove paving, expand tree boxes and create new tree planting sites. Decreasing impervious surface is where the District and other cities will see major gains in canopy coverage over time.

With all of these various programs in place to help support urban forest work, the District is headed in the right direction for a healthy, sustainable

forest well into the future. But in a city where different entities control different tracts of land, coordination will be the key to continuing success.

"We have streets where UFA has trees on one side of the street, and on other side, they're managed by the Architect of the Capitol," says UFA's Thomas. "We're constantly looking at boundaries and where the lines are. Who maintains what? And everyone seems to have a different strategy. It just means we have to have open communication and constant communication with the other entities."

Cooperation and open dialogue are essential to the city's continued fight to protect and restore its urban forest because while district, federal and private partners have been converging for years to build and maintain the city's urban forest, this work will continue for years to come: "Change happens over generations," says Casey Trees' Buscaino.

350,000

square feet of green roofs have been installed in the District.

SPECIAL THANKS TO:

Mark Buscaino,
executive director,
Casey Trees

John Thomas,
associate director,
District of Columbia
Department of
Transportation
Urban Forestry
Administration

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