



**PORTLAND
PARKS & RECREATION**

Healthy Parks, Healthy Portland



Urban Forest Action Plan 2019 Implementation Update

September 2020

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Cover photo:

Bigleaf Maple in Fernhill Park

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BACKGROUND

In 2007, a City of Portland inter-bureau team created the *Urban Forest Action Plan* to meet the goals established in the 2004 *Portland Urban Forest Management Plan*. The *Urban Forest Action Plan*, accepted by City Council on March 15, 2007, contains the major goals and desired outcomes of the management plan, along with 63 action items to attain those goals. Each action item was initially assigned a priority and time frame (current, early, 5-year, and 10-year).

This report summarizes annual fiscal year progress and accomplishments for the *Urban Forest Action Plan*, with efforts led by Portland Parks & Recreation Urban Forestry as well as other City bureaus. This report covers fiscal year 2018-2019, which extends from July 1, 2018 to June 30, 2019.

URBAN FOREST ACTION PLAN

GOALS AND OUTCOMES

GOAL 1: PROTECT, PRESERVE, RESTORE, AND EXPAND PORTLAND'S URBAN FOREST.

- Outcome A: Enhanced Canopy
The tree canopy is optimized, meeting stocking and canopy targets.
- Outcome B: Regulatory Program
The City has a comprehensive, consistent, and clear regulatory program for trees.
- Outcome C: Development
The urban forest is enhanced through development and redevelopment.

GOAL 2: DEVELOP AND MAINTAIN SUPPORT FOR THE URBAN FOREST.

- Outcome A: Shared Stewardship
Stewardship of the urban forest is shared by residents, agencies, non-governmental organizations, and businesses.
- Outcome B: Public Education
The public has a strong awareness of tree benefits and ecosystem health issues; education opportunities are abundant.
- Outcome C: Stable Resources
Stable resources support the urban forest.

GOAL 3: MANAGE THE URBAN FOREST TO MAXIMIZE COMMUNITY BENEFITS FOR ALL RESIDENTS

- Outcome A: Street Tree Distribution
Street trees are equitably distributed throughout the City.
- Outcome B: Livability
The urban forest contributes to the health and well-being of Portlanders.
- Outcome C: Watershed Health
The urban forest contributes to improved watershed health, including water quality, stream flow, floodplain function, habitat, and biological communities.

PLANTING PROGRAMS

Urban Forest Action Plans Goals and Outcomes Impacted:

- *Goal 1, Outcome A: Enhanced Canopy*
- *Goal 2, Outcome A: Shared Stewardship*
- *Goal 2, Outcome B: Public Education*
- *Goal 3, Outcome A: Street Tree Distribution*
- *Goal 3, Outcome B: Livability*

PP&R Developed Parks

PP&R Urban Forestry planted 181 trees in parks during the 2018-19 fiscal year. These trees are primarily replacements for trees lost in past years due age, structural failures, and storm damage. Many of the planted trees were natives, including Oregon white oak, Willamette Valley ponderosa pine, western hemlock, and Douglas-fir.

Learning Landscapes

A Learning Landscape is a dynamic collection of trees that are planted and cared for by students and Portland Parks & Recreation (PP&R) Urban Forestry staff and volunteers. The Learning Landscapes program provides an outdoor educational experience for students, as well as environmental and aesthetic benefits for a school or other public place. The program is designed to connect youth and community members to places they live, work, and play, and to promote responsible stewardship of our shared spaces.

Number of trees planted: 80

Percentage of large-form, evergreen or native trees planted: 60%

Number of student volunteers: 222

Number of community volunteers: 80

Percentage of trees planted in low canopy neighborhoods: 40%

PP&R Natural Areas

PP&R Land Stewardship staff planted more than 3,400 trees through the City’s many natural areas, including Marquam Nature Park, Forest Park, Powell Butte, and Oaks Bottom Wildlife Refuge. The Land Stewardship division conducts tree planting activities under a programmatic permit from PP&R Urban Forestry.



Students from Grant High School planted trees at the Marshall Campus with the Learning Landscapes program.

Environmental Services Tree Program

The Environmental Services Tree program planted 1,978 street trees and 980 yard trees this year. This planting program operates under a PP&R Urban Forestry programmatic permit, and in partnership with Friends of Trees, other planting contractors, public partners, and Portland residents.

Of the 980 yard trees, 125 were the recipient of Treebate credits. The Treebate program offers an incentive in the form of a utility bill credit for stormwater fee ratepayers in Portland who plant trees on their residential private properties. Because larger trees manage more stormwater, Treebate credits 50% of the tree's purchase price up to \$50, \$25, or \$15, depending on mature tree size and stormwater management potential.

Treebate trees must be at least 1 inch caliper and 6 feet tall (4 feet for conifers) at time of planting and may not be otherwise subsidized by the City (e.g., trees planted through Friends of Trees), required by a condition of mitigation or development, or on the City's Nuisance Plants List. The program relies on local retail nursery partners, utility bill inserts, Treebate web pages, media coverage, and word of mouth to get the word out about the offer.

Yard Tree Giveaways

PP&R Urban Forestry continued to offer free yard trees for Portland residents, focused on low-canopy and low-income neighborhoods in East Portland. Residents received up to two medium or large-species trees at events held in Bloomington, Parklane, and Cathedral Park. In total, 488 trees were given out to be planted in residential yards. This program helps to meet the City's goals for more large-form, native, and evergreen trees. In total, 67% of trees given away are large-form, 20% are native to the Willamette Valley, and a third are evergreen species. These trees will be visited by UF staff regularly as part of long-term monitoring efforts to track tree survival and to ensure that trees were planted correctly and in suitable locations.



Portlanders received free trees at Yard Tree Giveaways in October and November 2018.

TABLE 1: INSPECTIONS AND PERMITS ISSUED BY PP&R URBAN FORESTRY IN FY2018-2019

STREET TREES			
	INSPECTIONS COMPLETED	PERMITS ISSUED	TREES PERMITTED
<i>Planting, Total Street Trees</i>	5,668	1,621	4,009
Planting, Non-Development*	210	178	1,402
Planting, Development**	3,894	568	1,155
Planting, Environmental Services	1,564	875	1,452
Pruning	1,066	2,713	6,494
<i>Removal, Total Street Trees</i>	1,118	1,014	1,658
Removal, Non-Development	1,118	914	1,424
Removal, Development	n/a	100	234
Root Pruning	1,019	921	1,673
Other***	391	106	2,151
PARK TREES			
Planting	0	0	98
Pruning	77	32	88
Removal	102	56	167
Root pruning	4	2	7
Other	81	14	25
PRIVATE TREES			
Planting, mitigation	n/a	n/a	3,196
Removals	2,867	2,568	3,693
Other	42	3	10
EMERGENCY			
Emergency response	1311	n/a	n/a
TOTALS			
Planting	5,668	1,621	7,303
Pruning	1,143	2,745	6,582
Removals	4,087	3,638	5,518
Root pruning	1,023	923	1,680
Other	514	123	2,186
Emergency	1,311	n/a	n/a
Totals	13,746	9,050	23,269

*Number of trees permitted includes trees required to be planted as part of other permits

**Includes RS, CO, FP, and SD street tree reviews as well as OTC street tree reviews. Does not include Land Use

***Does not include Code Compliance Inspections

REGULATORY PROGRAMS

Urban Forest Action Plans Goals and Outcomes Impacted:

- *Goal 1, Outcome B: Regulatory Program*
- *Goal 1, Outcome C: Development*
- *Goal 3, Outcome A: Street Tree Distribution*
- *Goal 3, Outcome B: Livability*

Development Permits: Urban Forestry's primary role in development situations is to regulate Street and City Trees. The Bureau of Development Services (BDS) regulates privately owned trees in development situations. Urban Forestry assists BDS when requested by conducting tree preservation inspections and providing peer reviews of arborist reports for private trees. Here is a summary of typical permit types:

Early Assistance (EA): Early Assistance reviews are optional reviews that allow the applicant to receive documentation of City requirements for a proposed development.

Pre-Application (EA): Pre-Application conferences occur prior to submittal of a land use review, and are required for all Type III and IV land use reviews.

Land Use: Land Use reviews are required when the zoning code triggers a review for a specific use or development project.

Building Permit: The Building Permit is where on site work is reviewed and approved. Work within the Right-of-Way is attached to the building permit when there is not an associated Public Works Permit.

Public Works: The Public Work Permit is where work within the Right-of-Way is reviewed and permitted.

In FY 2019, PP&R Urban Forestry Tree Inspectors and Tree Techs processed more than 3894 development permits.

Non-Development Permits: PP&R Urban Forestry issued 3,482 permits for tree removal in non-development situations, 2,156 street tree planting permits, 2,713 street tree pruning permits, and 921 root pruning inspections in FY 2019.

Programmatic Permits: Programmatic Permits are issued to public agencies and utilities conducting routine tree work in the City of Portland. These permits are not subject to normal Type A or B permit review factors, and are instead intended to prevent cumulative adverse impacts to the urban forest, including no net reduction in canopy coverage over time, and to support the goals of the Urban Management Plan. PP&R Urban Forestry administered 19 programmatic permits in FY 2019.



PP&R Urban Forestry regulates street tree pruning in the city, encouraging best practices in tree care.

EDUCATION & POLICY

Urban Forest Action Plans Goals and Outcomes Impacted:

- *Goal 1, Outcome A: Enhanced Canopy*
- *Goal 2, Outcome A: Shared Stewardship*
- *Goal 2, Outcome B: Public Education*
- *Goal 3, Outcome B: Livability*

Tree Care Providers Workshops

PP&R Urban Forestry staff offer a Local Tree Care Provider Workshop for local tree care professionals. The program consists of free workshops offered on a semi-annual basis, providing training on City regulations involving trees and approved pruning standards. After completing the workshop and providing proof of a valid business license and arborist certification, workshop participants are listed on the PP&R Urban Forestry website. In FY19, two workshops were offered, with 52 professionals from 32 different landscape, consulting, and tree care companies participating.



Volunteers for the Tree Inventory Project measure the height of a tree using a clinometer at Tom McCall Waterfront Park.

Neighborhood Tree Teams

In fiscal year 2019 Urban Forestry helped facilitate 20 workshops. The workshops were directly organized and lead by Urban Forestry staff or lead by Urban Forestry volunteers with assistance from Urban Forestry staff. These included pruning workshops, tree walks, tree plantings, and workshops on Portland's Tree Code. Through all the workshops, a total of 334 volunteers dedicated 776 hours to education and stewardship, including the pruning of 100 young street trees.

Arbor Day

Portland's Arbor Day moved seasons this year to encourage community stewardship and proper tree planting methods. This is demonstrated by celebrating Arbor Day as a kickoff for Portland's tree planting season in the fall, rather than the spring. Due to this shift to fall, Arbor Day was not celebrated during FY19.

Neighborhood Tree Stewards

Twenty-nine community members representing 22 different neighborhoods participated in the Fall 2018 Neighborhood Tree Steward (NTS) Program. Classes were held primarily in East Portland neighborhoods in an effort to make the classes more accessible to residents of this part of the city. Four students represented neighborhoods east of 82nd Avenue. Over the course of five class sessions (24 hours), students learned about the importance of addressing inequities in the distribution of urban canopy. Class topics included an introduction to the concept of equity and how it applies to urban forestry, tree biology and identification, the benefits of trees, environmental justice, pests and pathogens, city tree code, wildlife habitats, tree pruning and maintenance, the history of Portland’s urban forest, Portland’s heritage tree program, and a capstone tree planting event at North Powellhurst Park. Our 2018 graduates join over 300 NTS alumni helping care for our city’s trees since the program began in 1997.

Tree Inventory Project

PP&R Urban Forestry and volunteers continued the park Tree Inventory Project in Portland this year. Together, staff and volunteers collected information about the species, location, size, and condition of nearly 10,000 trees in 19 parks across the city. More than 300 individuals donated 2,700 hours to the inventory. In Spring of 2019, PP&R Urban Forestry partnered with Neighborhood Tree Teams to use inventory data and install additional “Pop-up Arboreta” in Laurelhurst and Penninsula parks, educating the public about some of the most noteworthy trees in each park.



UF and Jade Greening Partners distributed tree seedlings at the New Year in the Park cultural festival at Glenhaven Park.

CITYWIDE TREE CARE AND MAINTENANCE PROGRAMS

Urban Forest Action Plans Goals and Outcomes Impacted:

- *Goal 1, Outcome A: Enhanced Canopy*
- *Goal 2, Outcome A: Shared Stewardship*
- *Goal 2, Outcome B: Public Education*
- *Goal 3, Outcome A: Street Tree Distribution*
- *Goal 3, Outcome B: Livability*
- *Goal 3, Outcome C: Watershed Health*



Youth Conservation Crew members work to maintain trees in parks, schools, and other public spaces.

PP&R Urban Forestry oversees tree maintenance for parks and many City-owned properties through inter-agency agreements. In FY 2019, maintenance activities included establishment care and watering, pruning, canopy raising, removals, and hazard abatement.

Dutch Elm Disease (DED) Management

As part of the PP&R Urban Forestry Elm Protection Program, 41 public, private, and park elms were removed due to DED in FY 2019. The program includes vigilant monitoring, timely diagnosis of DED, and preventative maintenance of elms, as well as public education on symptom recognition, proper pruning, enforcing the elm pruning moratorium from April 15 to October 15, and elm wood disposal.

Staff arborists worked with neighborhood associations and friends' groups to select healthy right-of-way elm candidates for inoculation, as well as permit inoculation activity. Neighborhood groups inoculated 52 right-of-way elms and 124 park trees were inoculated by Urban Forestry staff.

Youth Conservation Crew Tree Crew

In the summer of 2018, PP&R staff hired six high-school students plus one adult crew leader to conduct much needed maintenance and establishment tree work. The Youth Conservation Crew (YCC) Tree Crew weeded and mulched over 310 young trees and pruned 246 trees at parks, schools, and public spaces throughout Portland. In addition, the YCC Tree Crew participated in the Park Tree Inventory, inventorying 321 park trees.

Protect the Best

PP&R Land Stewardship Division's Protect the Best (PTB) program is designed to remove small populations of invasive, non-native plants from spreading in otherwise ecologically healthy or ecologically sensitive natural areas. In FY19, the crew performed treatments in Big Four

Corners, Buttes NA, Columbia Children’s Arboretum, Elk Rock Cliff, Erroll Heights, Forest Park, George Himes Park, Maricara Park, Marshall Park, Mitchell Creek NA, Mt. Tabor Park, Oaks Bottom WR, Oaks Crossing, Powell Butte, Powers Marine NA, Riverview NA, Ross Island, and Whitaker Ponds. The total acreage treated was 316.1 acres. The majority of invasive trees removed were English holly (*Ilex aquifolium*), common hawthorn (*Crataegus monogyna*), and English laurel (*Prunus laurocerasus*). Trees are removed to prevent further spread by eliminating seed sources. Tree removal, planting, and mitigation in PP&R natural areas is managed under a PP&R Urban Forestry programmatic permit.

Watershed Revegetation Program

In FY19 BES’ Watershed Revegetation Program (WRP) managed 775 acres of natural area projects on private and public property throughout Portland. Management by WRP includes the removal of invasive vegetation and the planting and maintenance of native plants. WRP planted 7,296 native trees and 11,810 native shrubs on 45 acres in natural areas and stormwater maintenance facilities. BES Watershed Revegetation Program tree removals, planting, and mitigation are managed under a PP&R Urban Forestry programmatic permit.

Volunteer work hours

86,708 volunteer hours valued at \$1,037,027 were provided to the urban forest in FY 2018-2019, as reported by PP&R. Volunteers planted, pruned, and maintained trees in parks, natural areas, and rights-of-way; removed invasive species; and worked at environmental education events, among other activities.

Community Tree Care Program

The Community Tree Care Program, a partnership between Friends of Trees and PP&R Urban Forestry with funding from the Bureau of Environmental Services, works with volunteers to structurally prune young street trees to aid their long-term growth. The sixth season of this program kicked off with a pruning event in the Boise neighborhood at Unthank Park. Events were then held in the Parkrose, Kenton, Eliot, Brentwood-Darlington, Montavilla, Irvington, Overlook, and Roseway neighborhoods, run concurrently with FOT planting events. Approximately 1,300 young street trees were pruned for clearance, health, and structure this season with the help of about 191 trained volunteer pruners and arborist partners who worked approximately 837 volunteer hours. About 739 properties were reached and given additional education on the importance of follow-up street tree care.



UF Operations Arborist Alec Amacher demonstrates use of an aerial lift at Peninsula Park.

PERFORMANCE MEASURES

The Urban Forest Action Plan Performance Measures Task Force established performance measures for the *Urban Forest Action Plan* to gauge progress in meeting the goals and objectives of the plan.

TABLE 2: MEASUREMENTS AND INDICATORS OF PROGRESS IN ACHIEVING URBAN FOREST ACTION PLAN GOALS

PROTECT, PRESERVE, RESTORE, AND EXPAND PORTLAND'S URBAN FOREST					
	FY08	FY09	FY10	FY11	FY12
Urban forest canopy cover* % of total city	26*	-	-	29.9	-
Urban forest canopy coverage* % of public property	27*	-	-	-	-
Urban forest canopy coverage* % of private property	26*	-	-	-	-
Ratio of street tree plantings to removals	-	6.6	11.1	5.9	3.6
DEVELOP AND MAINTAIN SUPPORT FOR THE URBAN FOREST					
Volunteer hours, PP&R		67,049	68,439	63,277	66,548
Volunteer hours, Friends of Trees (FOT)	17,860	17,003	18,307	22,482	25,518
Neighborhood Tree Stewards trained	0	0	23	11	29
Website visits, PP&R Urban Forestry and www.portlandoregon.gov/trees	32,440	46,959	90,831	70,844	118,292
Arboreta developed at Portland schools (total trees planted)	2 (54)	5 (185)	9 (152)	5 (160)	6 (78)
Total budget, PP&R Urban Forestry (\$)	2.52M	2.42M	2.47M	3.06M	3.01M
MANAGE THE URBAN FOREST TO MAXIMIZE COMMUNITY BENEFITS FOR ALL					
Trees planted in low-income and low-canopy neighborhoods by FOT	962	1,510	1,261	1,597	2,044
Carbon sequestration, lbs**	24.8M	-	-	-	-
Air pollutants removed, lbs**	599,023	-	-	-	-
Stormwater retained, gallons**	413.7M	-	-	-	-
Canopy cover in riparian areas	-	66.6%	-	-	-

*Canopy data uses imagery for year 2002 as a baseline, but were reported in FY08.

**Baseline data derived from 2002 conditions and reported in FY08.

PERFORMANCE MEASURES CONT.

TABLE 2 CONT.: MEASUREMENTS AND INDICATORS OF PROGRESS IN ACHIEVING URBAN FOREST ACTION PLAN GOALS

PROTECT, PRESERVE, RESTORE, AND EXPAND PORTLAND'S URBAN FOREST							
	FY13	FY14	FY15	FY16	FY17	FY18	FY19
Urban forest canopy cover* % of total city	-	-	-	30.7	-	-	-
Urban forest canopy coverage* % of public property	-	-	-	-	-	-	-
Urban forest canopy coverage* % of private property	-	-	-	-	-	-	-
Ratio of street tree plantings to removals	3.6	3.3	3.5	3.0	3.1	2.8	2.4
DEVELOP AND MAINTAIN SUPPORT FOR THE URBAN FOREST							
Volunteer hours, PP&R	61,082	65,448	71,682	68,024	63,294	65,367	86,708
Volunteer hours, Friends of Trees (FOT)	29,002	20,713	21,279	20,770	18,750	19,755	17,425
Neighborhood Tree Stewards trained	32	30	20	30	30	29	29
Website visits, PP&R Urban Forestry and www.portlandoregon.gov/trees	152,345	374,206	442,839	680,440	1,330,000	1,248,721	1,018,491
Arboreta developed at Portland schools (total trees planted)	9 (57)	8 (91)	9 (95)	8 (69)	11 (61)	9 (83)	3 (80)
Total budget, PP&R Urban Forestry (\$)	3.38M	3.34M	3.93M	4.06M	\$4.6M	\$5.7M	\$7.1M
MANAGE THE URBAN FOREST TO MAXIMIZE COMMUNITY BENEFITS FOR ALL							
Trees planted in low-income and low-canopy neighborhoods by FOT	1,843	2,016	2,061	1,666	1,780	1,781	898
Carbon sequestration, lbs**	-	-	-	-	-	-	-
Air pollutants removed, lbs**	-	-	-	-	-	-	-
Stormwater retained, gallons**	-	-	-	-	-	-	-
Canopy cover in riparian areas	-	-	-	-	-	-	-

*Canopy data uses imagery for year 2002 as a baseline, but were reported in FY08.

**Baseline data derived from 2002 conditions and reported in FY08. Updated data expected in FY20.