



**PORTLAND
PARKS & RECREATION**

Healthy Parks, Healthy Portland



Urban Forest Action Plan

2020 Implementation Update

March 2021

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Cover photo:

Heritage Tree 258, Smoothleaf elm, *Ulmus minor*. Photo by Steve
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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 2019-2020, which extends from July 1, 2019 to June 30, 2020.

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 Plan 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 189 trees in parks during the 2019-20 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: 94

Percentage of large-form, evergreen or native trees planted: 76%

Number of student volunteers: 68

Number of community volunteers: 65

Percentage of trees planted in low-canopy neighborhoods: 65%

PP&R Natural Areas

PP&R Land Stewardship staff planted more than 4,500 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 Sitton Elementary plant new trees outside of their school.

Environmental Services Tree Program

The Environmental Services Tree Program planted 1,885 street trees and 1,100 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 1,100 yard trees, 70 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. To qualify for a Treebate credit, trees must be at least four feet tall 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.

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 Gateway Discovery Park, Parklane Park, and Cathedral Park.

In total, 760 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, 60% of trees given away were large-form, 39% native to the Willamette Valley, and half were 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 2019.

TABLE 1: INSPECTIONS AND PERMITS ISSUED BY PP&R URBAN FORESTRY IN FY2019-2020

STREET TREES			
	INSPECTIONS COMPLETED	PERMITS ISSUED	TREES PERMITTED
<i>Planting, Total Street Trees</i>	<i>4,571</i>	<i>1,284</i>	<i>3,638</i>
Planting, Non-Development*	178	143	1,373
Planting, Development**	3,287	400	939
Planting, Environmental Services	1,106	741	1,326
Pruning	1,028	3,464	7,693
<i>Removal, Total Street Trees</i>	<i>1,189</i>	<i>904</i>	<i>1,376</i>
Removal, Non-Development	1,189	839	1,254
Removal, Development	n/a	65	122
Root Pruning	459	396	655
Other***	149	79	1,266
PARK TREES			
Planting	0	0	230
Pruning	72	39	174
Removal	97	67	190
Root pruning	1	1	2
Other	76	0	0
PRIVATE TREES			
Planting, mitigation	n/a	n/a	3,398
Removals	3,052	2,480	3,684
Other	51	37	39
EMERGENCY			
Emergency response	1,237	n/a	n/a
TOTALS			
Planting	4,571	1,284	7,266
Pruning	1,100	3,503	7,867
Removals	4,338	3,451	5,250
Root pruning	460	397	657
Other	276	116	1,305
Emergency	1,237	n/a	n/a
Totals	11,982	8,751	22,345

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

** Includes RS, CO, SD, and DR street tree reviews. Does not include Land Use, Public Works, or Capital Improvement Projects.

*** 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: PP&R 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: A 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: A Public Works Permit is where work within the Right-of-Way is reviewed and permitted.

In FY 2020, PP&R Urban Forestry Tree Inspectors and Tree Techs processed more than 3,287 development permits.

Non-Development Permits: PP&R Urban Forestry issued 839 permits for tree removal in non-development situations, 143 street tree planting permits, 1,284 street tree pruning permits, and 396 root pruning inspections in FY 2020.

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 Forest Management Plan. PP&R Urban Forestry administered 19 Programmatic Permits in FY 2020.



PP&R Urban Forestry regulates the removal of trees and protection of existing trees on private property during development.

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 FY20, two workshops were offered, with 42 professionals from 38 different landscape, consulting, and tree care companies participating.

Arbor Day

Portland's 2019 Arbor Day celebration took place on October 12, 2019 at East Holladay Park. Neighbors gathered to learn about the new expansion of tree plantings coming to the park and to kick-off tree planting season in our region with the addition of nine new trees.

Community Forestry

In FY20 PP&R Urban Forestry hosted 17 hands-on workshops. These free public workshops included fruit tree pruning, species selection for yards, tree plantings, and an introduction to the pests and pathogens that threaten our trees.

New online workshops became available in Spring 2020 in an effort to continue providing learning opportunities for the community following the cancellation of in-person activities due to COVID-19. Free webinars included both introductory and advanced pruning, young tree care, and the beginning of an "Ask an Arborist" series to connect Portlanders with tree experts during this period of distance learning. These first four live webinars had a total of 180 viewers. The pruning videos were made available online by PP&R Graphics in order to remain a resource for all Portlanders to access.



Volunteers prepare a tree to be planted at East Holladay Park during the 2019 Arbor Day celebration.

More than 100 neighbors strolled together in one of 6 themed tree walks held. Through all workshops, stewardship, and other participation with PP&R Urban Forestry, a total of 1,998 adult and youth volunteers dedicated 6,224 hours to our community's trees.

The 2019 Pop-Up Arboreta season ended after hosting interpretive installations in Midland Park, Holladay Park, and Arbor Lodge Park. The Arbor Lodge Tree Team hosted multilingual guided tree walks during the installation. The 2020 season began with a large expansion, hosting installations in four parks each month May - September. Volunteers worked with PP&R Urban Forestry staff to develop, promote, and share creative activities for Arboreta visitors of all ages to further engage with their parks.

Neighborhood Tree Stewards

Twenty-five community members representing 21 different neighborhoods participated in the Fall 2019 Neighborhood Tree Steward (NTS) Program. Classes were held at the East Portland Community Office in an effort to make the classes more accessible to residents of this part of the city and to reduce the cost of the program, making it free-of-charge to all participants. Five students represented neighborhoods east of 82nd Avenue.

Over the course of three class sessions (20+ hours), students learned about urban forestry in the City of Portland and the importance of addressing inequities in the distribution of urban canopy. Classes were spent sharing their passion for trees by designing park tree plantings, learning about Portland's Tree Code - Title 11, and planting six new trees at Ventura Park.

Taking a stronger focus on building community, participants canvassed neighbors near East Holladay Park to invite them to the Arbor Day celebration. Our 2019 graduates join over 300 NTS alumni helping care for our city's trees since the program began in 1997.

Tree Inventory Project

In 2019, PP&R Urban Forestry staff and over 200 volunteers collected information about the species, location, size, and condition of nearly 10,000 trees in 71 parks across the city, completing Portland's first comprehensive park tree inventory. Over three summers, 800 individuals gave 6,600 hours to this project, working with staff to inventory over 25,000 trees.



Neighborhood Tree Stewards present their park design to other program participants.

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 learn from the UF Operations Supervisor how to launch a throw bag by hand.

PP&R Urban Forestry oversees tree maintenance for parks and many City-owned properties through inter-agency agreements. In FY 2020, maintenance activities included establishment care and watering, structural pruning, canopy raising, removals, and hazard abatement.

Dutch Elm Disease (DED) Management

As part of the PP&R Urban Forestry Elm Protection Program, 43 public, private, and park elms were removed due to DED in FY 2020. 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 groups to select healthy right-of-way elm candidates for inoculation, as well as permit inoculation activity. Neighborhood groups inoculated 60 right-of-way elms and 139 park trees were inoculated by Urban Forestry staff.

Youth Conservation Crew Tree Crew

In the summer of 2019, PP&R staff hired six high-school students and one adult crew leader to conduct much needed maintenance and establishment tree work. The Youth Conservation Crew (YCC) Tree Crew visited 15 parks, schools, and other City-owned properties where they weeded and mulched over 239 trees, pruned another 201, and removed 10 trees.

In addition to providing care to many of Portland's trees, participants enhanced their knowledge of the urban forest during the 10 enrichment activities that connected them with professionals and new experiences. During the season, the tree crew engaged with 15 community partners, working together to provide and promote the tree care needed throughout the urban forest. Another successful year of the YCC Tree Crew ended with their completion of an informational and educational video to share.

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. The total acreage treated was 316.1 acres. The crew also spent time this year on several other sites planting plants that had been intended for volunteer groups at the beginning of the COVID-19 pandemic. 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

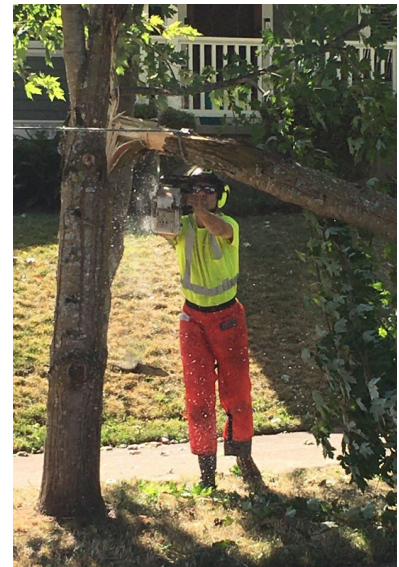
In FY20 BES Watershed Revegetation Program (WRP) managed 758 acres of natural area projects on private and public property throughout Portland. Management by WRP includes the removal of invasive vegetation and the planting and maintenance of native plants. WRP planted 10,173 native trees and 27,124 native shrubs on 54 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

71,831 volunteer hours valued at \$859,098 were provided to the urban forest in FY20. 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 BES, works with volunteers to structurally prune young street trees to aid their long-term growth. 1,232 young street trees were pruned for clearance, health, and structure this season with the help of 222 trained volunteer pruners and arborist partners who worked approximately 1000 volunteer hours. About 800 properties were reached and given additional education on the importance of follow-up street tree care.



UF Operations Arborist Dan Birkholz clearing a down branch from a right of way tree.

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. Updated data expected in FY21.

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
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
DEVELOP AND MAINTAIN SUPPORT FOR THE URBAN FOREST					
Volunteer hours, PP&R	61,082	65,448	71,682	68,024	63,294
Volunteer hours, Friends of Trees (FOT)	29,002	20,713	21,279	20,770	18,750
Neighborhood Tree Stewards trained	32	30	20	30	30
Website visits, PP&R Urban Forestry and www. portlandoregon.gov/trees	152,345	374,206	442,839	680,440	1,330,000
Arboreta developed at Portland schools (total trees planted)	9 (57)	8 (91)	9 (95)	8 (69)	11 (61)
Total budget, PP&R Urban Forestry (\$)	3.38M	3.34M	3.93M	4.06M	\$4.6M
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
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 FY21.

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					
	FY18	FY19	FY20	FY21	FY22
Urban forest canopy cover % of total city	-	-	-	-	-
Urban forest canopy coverage % of public property	-	-	-	-	-
Urban forest canopy coverage % of private property	-	-	-	-	-
Ratio of street tree plantings to removals	2.8	2.4	2.6	-	-
DEVELOP AND MAINTAIN SUPPORT FOR THE URBAN FOREST					
Volunteer hours, PP&R	65,367	86,708	50,993	-	-
Volunteer hours, Friends of Trees (FOT)	19,755	17,425	16,413	-	-
Neighborhood Tree Stewards trained	29	29	25	-	-
Website visits, PP&R Urban Forestry and www. portlandoregon.gov/trees	1,248,721	1,018,491	989,160	-	-
Arboreta developed at Portland schools (total trees planted)	9 (83)	3 (80)	2 (94)	-	-
Total budget, PP&R Urban Forestry (\$)	\$5.7M	\$7.1M	\$6.0M	-	-
MANAGE THE URBAN FOREST TO MAXIMIZE COMMUNITY BENEFITS FOR ALL					
Trees planted in low-income and low-canopy neighborhoods by FOT	1,781	898	748	-	-
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 FY21.