



**PORTLAND  
PARKS & RECREATION**

Healthy Parks, Healthy Portland



# Urban Forest Action Plan 2016 Implementation Update

October 2017

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## Cover photo:

Heritage Tree # 298, a Southern catalpa in SE Portland.

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*Top: Tree Inspector, Frank Krawczyk, works with the 2015 Youth Conservation Crew Tree Crew in the field.*

*Below: Muddy hands and big smiles were common themes during the 2015-2016 Learning Landscapes planting season.*

## 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 2015-2016, which extends from July 1, 2015 to June 30, 2016. Over half of the action items are either completed or in progress.

# 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.

# ACCOMPLISHMENTS

## Full Year of Title 11 Implementation

Title 11, Trees, was adopted in April 2011 and became effective January 1, 2015, midway through the city’s fiscal calendar. As a result, FY 2016 marked the first full fiscal year of Title 11 implementation. With this milestone came several new additions to the Urban Forestry program.

*Increase in Staff Capacity:* A third Tree Technician was added to bring this core group up to full staffing level. PP&R Tree Technicians serve as a single point of contact regarding trees and permitting requirements. Being at a full staffing levels allow the Tree Techs to rotate through three essential functions: staffing the the Development Service Center, responding to phone calls and emails from community members, and issuing certain permits which do not require a field visit.

Urban Forestry also added an Outreach and Science Supervisor. This position oversees a staff of primarily Botanic Specialists and Community Service Aides who ensure Urban Forestry’s operations are informed by sound science and policy, and help educate the community on Title 11 requirements and the benefits of the urban forest.

*Programmatic Permits:* Programmatic Permits are issued to public agencies and utilities conducting routine tree work in the City 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.

Seventeen Programmatic Permits were issued in the 15/16 fiscal year to City of Portland bureaus, public utilities, and other governmental entities. While Title 11 allows for these permits to be issued for up to five years, most will be up for renewal in two years as the program is in early stages. All permittees are required to submit scheduled qualitative and quantitative reports to allow for Urban Forest to assess the impact of the activities to the urban forest.



*City of Portland Approved Street Tree Planting Lists.*

### **Expanded the Community Tree Care Program**

The Community Tree Care Program, a partnership between FOT 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 2015-16 pruning season kicked off with a Pruning Leader training held at the Hinson Baptist Church, followed by hands-on field work in the Buckman neighborhood. Thereafter, trained pruners also attended events in St. Johns, Woodstock, Foster-Powell, Lents, and Vernon neighborhoods. The third season of this program included pruning events run concurrently with plantings events. This model was both efficient and brought attention to the program. Approximately 700 young street trees were pruned for clearance, health, and structure this season with the help of about 75 trained volunteer pruners and arborist partners who worked approximately 750 volunteer hours. About 535 properties were reached and given additional education on the importance of follow up street tree care.



*Giant sequoias (Sequoiadendron giganteum) are among the oldest living things on earth, and make a fine addition to an arboretum with adequate space.*

### **Tree Inventory Project Progresses**

The Tree Inventory Project continued in 2015, working with Tree Teams and neighborhood organizers to map, measure, and assess every street tree in 15 neighborhoods. UF staff added to this work by collecting data in an additional 15 neighborhoods, and together staff and volunteers collected information on nearly 60,000 trees! This project would not be possible without the help of our dedicated volunteers: 341 individuals donated over 3,400 hours during the 2015 season.

Data were presented at the annual Tree Summit in November, with more than 100 participants in attendance. Guests heard presentations on inventory findings, new work on measuring Portland's tree canopy and potential, tree maintenance, and the history of Portland's urban forest, "From Stumptown to Treetown." Neighborhood Tree Teams then worked on drafting tree plans which include a vision statement, goals, action items, and recommendations for property owners. Since 2010, UF has worked with volunteers to publish 34 neighborhood tree plans based on inventory data and community input.

In FY2016-2017, UF plans to conduct inventories in all remaining areas of the city, completing Portland's most comprehensive inventory of street trees. This data will continue to inform community-based management strategies and aid in setting citywide management priorities to ensure a healthy, resilient urban forest into the future.

## **Partnership with Confluence Environmental Center**

The City of Portland has partnered with the Confluence Environmental Center for the sixth year to sponsor AmeriCorps members to improve service delivery in low-income communities and communities of color with relatively low tree canopy cover.

AmeriCorps members worked with the Bureau of Environmental Services to develop new strategies for culturally relevant service delivery, table at community events, and strengthen partnerships with East Portland neighborhoods and community benefit organizations in support of tree planting and stewardship.

Confluence AmeriCorps members Matthew Downs and Patrick Key served as Urban Forestry Tree Plan Coordinators from September 2015 through July 2016. In this capacity, they recruited Neighborhood Tree Teams for the 2016 Street Tree Inventory; worked with existing Tree Teams to develop Tree Plans based on Inventory results; and partnered with Tree Teams that had already completed neighborhood inventories, to provide 22 workshops in 16 different neighborhoods. These workshops were offered between October 2015 and June 2016 with the goal of increasing community awareness and support of Tree Plan goals and to encourage greater community interest in urban forest stewardship. Workshop topics included structural pruning of young street trees, tree identification, heritage trees, tree history, a broadleaf evergreen walk, general tree care, invasive species, the tree code, and tree planting. In total, 357 participants attended these events; of them, 141 received hands-on training from certified arborists at pruning workshops in 11 neighborhoods.

BES and PP&R Urban Forestry will partner with Confluence Environmental Center in FY2016-2017 to continue the AmeriCorps service to low-income communities and communities of color in support of reducing inequities in the urban forest.

## **Emergency Response**

PP&R Urban Forestry responded to 1,141 emergency situations in FY 2015-2016. PP&R Urban Forestry is the first responder to all tree-related emergencies within the city, providing immediate response to hazards around the clock. The majority of incidents involve tree failures on City property that pose a hazard to people, traffic, or infrastructure. As with all Urban Forestry services, safety is the number one priority and we are pleased to report zero injuries in 2015-16.



*Outreach materials, including magnets, were produced as part of Title 11 implementation.*

**TABLE 1: INSPECTIONS AND PERMITS ISSUED BY PP&R URBAN FORESTRY IN FY2015-2016**

<b>STREET TREES</b>			
	<b>INSPECTIONS COMPLETED</b>	<b>PERMITS ISSUED</b>	<b>TREES PERMITTED</b>
Planting, Total Street Trees	7,336	3,441	5,226
Planting, Non-Development*	232	421	1,612
Planting, Development**	3,920	1,034	884
Planting, Environmental Services	3,184	1,986	2,730
Pruning	654	2,223	5,411
Removal	1,116	1,070	1,761
Removal, Non-Development	1,116	1,009	1,624
Removal, Development	n/a	61	137
Root Pruning	874	708	1,422
Other****	594	183	1,615
<b>PARK AND SCHOOL TREES</b>			
Planting, Parks	0	19	72
Planting, School Arboreta	8	8	69
Pruning	90	76	230
Removal	118	80	145
Root pruning	1	0	0
Other	83	12	63
<b>PRIVATE TREES</b>			
Removals	2,459	2,259	3,292
Planting, mitigation	n/a	n/a	2,961
Other	74	33	62
<b>EMERGENCY</b>			
Emergency response	1,141	n/a	n/a
<b>TOTALS</b>			
Planting	7,336	3,460	8,259
Pruning	744	2,299	5,641
Removals	3,693	3,409	5,198
Root pruning	875	708	1,422
Other	751	228	1,740
Emergency	1,141	n/a	n/a
<b>Totals</b>	<b>14,540</b>	<b>10,104</b>	<b>22,260</b>

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

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

# ONGOING PROGRAMS AND PROJECTS

## **Planting Programs (Table 1):**

In FY2015-2016, 5,367 street and park trees were planted through the PP&R Urban Forestry permit process by all tree planting partners.

*Property Owner and Development Planting:* Permits to plant 2,496 street trees were issued to property owners and developers by PP&R Urban Forestry in FY2015-16.

*Bureau of Environmental Services Urban Tree Canopy Program (formerly Grey to Green):* 3,046 street trees and 913 yard trees were planted by the Environmental Services Tree Program. Street trees are planted according to permits issued by PP&R Urban Forestry which gives tree species, planting and stock specifications as well as targets for number of large mature-sized trees, native and evergreen species trees, and low-canopy and low-income neighborhoods.

Of the 913 yard trees, 207 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-foot 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.

*Parks Planting:* Seventy-two large-caliper trees were planted by PP&R Urban Forestry in parks in FY2015-2016, predominately as replacements for trees lost due to old age, structural failures, vandalism, and car accidents.

*School and Community Tree Plantings:* Sixty-nine trees were planted at eight sites through the PP&R Urban Forestry Learning Landscapes. Six hundred students and 65 volunteers participated in the tree planting events. Trees were planted in four different watersheds in the Portland Public Schools and Centennial School Districts, as well as in areas benefiting the general public. PP&R Urban Forestry plants trees at Learning Landscapes sites with volunteers, students, and Neighborhood Tree



*Urban Forestry Operations Supervisor, Larry Maginnis, demonstrates young tree structural pruning concepts.*

Stewards, and supports their establishment and maintenance in the years after planting. These Learning Landscapes provide educational opportunities for students, teachers, and neighbors to learn about different tree species and the importance of urban trees.

### **Regulatory Programs**

In January 2015, the City of Portland implemented a new tree code; Title 11 Trees, replacing PCC 20.40 and 20.42. Title 11 was developed to “protect the health, safety, and general welfare of the citizens of Portland” and in doing so “the appearance of the City is enhanced and important ecological, cultural, and economic resources are protected for the benefit of the City’s residents and visitors.”

Title 11 aimed to generate coordinated intra-bureau regulatory efforts and provide a single point of contact for residents to consult with any tree related concerns or questions (503-823-TREE). The implementation of the new tree code resulted in new regulations primarily surrounding private trees over a specific size threshold (12” DBH) while maintaining regulations on all street, park, and City trees.

Additionally, Title 11 set in motion a coordinated effort for permitting trees in development situations between the Bureau of Development Services (BDS) and Urban Forestry. Under Title 11, tree preservation requirements in development situations were expanded beyond land divisions and environmental zones to be more inclusive to all types of development. Tree preservation requirements on private development projects are issued by BDS, while Urban Forestry conducts on-site inspections to ensure compliance. On City development projects Urban Forestry issues and inspects tree preservation requirements.

FY 2015-2016 permitting staff consisted of 3 tree technicians (single point of contact), 10 tree inspectors and one supervisor for approximately 10,000 development and non-development Title 11 tree permits, 180 capital improvement project permits and nearly 1,200 emergency response inspections.

### **Education and Outreach Programs**

*Tree Care Providers Workshops:* PP&R Urban Forestry staff offer Tree Care Provider Workshops 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 ISA Certification, workshop participants are listed on the PP&R Urban Forestry website as a local tree care provider. In 2016, two workshops were offered, with



*Urban Forestry staff and Neighborhood Tree Stewards plant a tree in Floyd Light Park.*

34 professionals from 25 different landscape, consulting, and tree care companies participating.

*Neighborhood Tree Stewards:* Twenty-one community members representing 20 neighborhoods graduated from the fall 2015 Neighborhood Tree Steward program (NTS). Classes were held at the East Portland Community Center and Lynch Wood Elementary School, in an effort to make the classes more accessible to residents in East Portland. Class topics included: introduction to tree biology and tree identification, words of wisdom from NTS alumni, socio-economic/public health benefits of trees, pruning and tree care workshop, community partner presentations on local volunteer opportunities, City Tree Code primer, heritage trees and the history of the urban forest and proper tree planting technique.

*Arbor Day:* Portland celebrated Arbor Day on April 30, 2016 in the South Park Blocks in partnership with Portland Farmers Market. The Arbor Day celebration included the presentation of the 39th Tree City USA Award to Portland, the presentation of the Tree Campus USA Award to Portland State University, and the announcement of the Bill Naito Community Tree Award winners. The award winners were: Jim Labbe, for his community work in advocating for greater tree protection as a member of the Tree Code Implementation Oversight Advisory Committee, providing recommendations to the drafting of Title 11, and educating and inspiring the public in these matters; and the Albina Neighborhood Tree Team, for finding creative solutions and funding through the Urban Forest Stewardship Fund to help low income neighbors remove a monoculture of cherry trees identified as dead, dying or dangerous through Street Tree Inventory results, partnering with Friends of Trees to replant with a diversity of trees with the help of neighbors and bringing the Albina District community together in the process. Additionally, the Maynard Dawson Award (on behalf of Oregon Travel Experience and Oregon Heritage Trees) was presented to Catherine Mushel for her contributions to the health and stewardship of Oregon's trees—including Portland Street Trees and Heritage Trees, through her volunteer work with Friends of Trees, as chair of Eastmoreland Neighborhood Tree Team, Neighborhood Tree Steward, and Urban Forestry Commissioner.

*Volunteer work hours:* 68,024 volunteer hours valued at \$813,567 were provided to the urban forest in FY2015-2016, 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. Volunteers contributed 3,658 fewer hours than the previous fiscal year.



*Heritage Tree #134, a Douglas fir in Lower Macleay Park, is Portland's tallest tree. Estimated to be between 300 and 450 years old, the tree was measured to be 242 feet tall in 1997.*

### **Citywide Tree Care and Maintenance Programs**

PP&R Urban Forestry oversees tree maintenance for parks and many City-owned properties through inter-agency agreements. In FY2015-2016, 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, 65 public, private, and park elms were removed due to DED in 2015-16. 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 98 right-of-way elms and 129 park trees were inoculated by Urban Forestry staff.

*Youth Conservation Crew Tree Crew:* In the summer of 2015, PP&R staff hired six high-school students plus one crew leader to conduct much needed maintenance and establishment tree work. The Youth Conservation Crew (YCC) Tree Crew helped to establishment approximately 650 young trees by performing activities such as watering, mulching, weeding, and pruning at 20 parks, schools, and public spaces throughout Portland.

*Protect the Best:* PP&R's Protect the Best program, with funding from BES, is designed to prevent small patches of invasive, non-native plant species from spreading in ecologically healthy natural areas. In FY2015-2016, the crew performed treatments in for Big Four Corners Natural Area, Forest Park, Maricara Park, Mitchell Creek Natural Area, and Oaks Bottom Wildlife Refuge. In FY 2015-2016, 115 acres received initial treatments and 248 acres were re-treated. The majority of non-native tree species removed were English holly, European hawthorn, and non-native cherry. Removal helps stop the spread by eliminating seed sources. PP&R tree removals, planting, and mitigation in natural areas are managed under a PP&R Urban Forestry programmatic permit.

*Watershed Revegetation Program:* In FY16 BES' Watershed Revegetation Program managed 1,400 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 12,000 native trees and 38,000 native shrubs on 83 acres in both natural areas and stormwater maintenance facilities. BES tree removals, planting, and mitigation are managed under a PP&R UF programmatic permit.



*Urban Forestry staff instruct volunteers on tree pruning techniques in the Roseway neighborhood.*

## PERFORMANCE MEASURES

The Urban Forest Action Plan Performance Measures Task Force formed in 2007 to establish 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	FY13	FY14	FY15	FY16
Urban forest canopy cover* % of total city	26*	-	-	29.9	-	-	-	-	30.7
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	3.6	3.3	3.5	3.0
DEVELOP AND MAINTAIN SUPPORT FOR THE URBAN FOREST									
Volunteer hours, PP&R		67,049	68,439	63,277	66,548	61,082	65,448	71,682	68,024
Volunteer hours, Friends of Trees (FOT)	17,860	17,003	18,307	22,482	25,518	29,002	20,713	21,279	20,770
Neighborhood Tree Stewards trained	0	0	23	11	29	32	30	20	30
Website visits, PP&R Urban Forestry and www.portlandoregon.gov/trees	32,440	46,959	90,831	70,844	118,292	152,345	374,206	442,839	680,440
Arboreta developed at Portland schools (total trees planted)	2 (54)	5 (185)	9 (152)	5 (160)	6 (78)	9 (57)	8 (91)	9 (95)	8 (69)
Total budget, PP&R Urban Forestry (\$)	2.52M	2.42M	2.47M	3.06M	3.01M	3.38M	3.34M	3.93M	4.06M
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	1,843	2,016	2,061	1,666
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 FY2008-2008.

\*\*Baseline data derived from 2002 conditions and reported in FY2007-2008.