

# TREE CODE: Implementation phase shows progress and pitfalls

September 2017



Portland City Auditor  
Audit Services Division

**Cover Photo**  
Elizabeth Pape



**Production / Design**  
Robert Cowan  
Public Information Coordinator



September 6, 2017

TO: Mayor Ted Wheeler  
Commissioner Chloe Eudaly  
Commissioner Nick Fish  
Commissioner Amanda Fritz  
Commissioner Dan Saltzman  
Mike Abbate, Director, Bureau of Parks and Recreation  
Rebecca Esau, Interim Director, Bureau of Development Services

SUBJECT: Audit Report - Tree Code: Implementation phase shows progress and pitfalls

This report makes recommendations to improve implementation of the City's Tree Code. The Bureau of Parks and Recreation and Bureau of Development Services should continue to monitor outcomes; address workload and compliance issues; update the City's forestry plan; and, along with City Council, address equity, affordability and other City priorities.

Response letters from the Commissioner and Director of the Bureau of Parks and Recreation and the Interim Director of Development Services are included at the end of the report.

We will follow up in one year with the Commissioners-in-Charge and Bureau Directors for a status report detailing steps taken to address our audit recommendations.

We appreciate the assistance we received from the Bureau of Parks and Recreation and the Bureau of Development Services as we conducted this audit.

Mary Hull Caballero  
City Auditor

Audit Team: Drummond Kahn  
Martha Prinz  
Elizabeth Pape

Attachment



# TREE CODE:

## Implementation phase shows progress and pitfalls

### Summary

Like many cities, Portland has rules governing trees. Portland's rules, known as the Tree Code, went into effect in 2015 and apply to many more trees than previous regulations. Its goals were to establish a clear, consistent, and comprehensive approach to trees which was equitable and cost-effective; protect existing trees and increase the number of trees within city limits; and improve customer service for people with questions about tree regulations. The Tree Code covers planting, preserving, pruning, and removing trees.

We conducted this audit to determine whether the City is on track to both effectively implement the Tree Code and to measure how well it works. We focused our work to trees on private property and street trees.

The first two years of implementation showed some positive trends and highlighted some challenges. Our audit found that:

- Tree protection improved in some areas;
- Workload increased beyond the capacity of current staffing levels, leaving some areas of the Tree Code unenforced;
- Outdated permitting software slowed implementation and diminished outcome tracking;
- The Urban Forestry Management Plan is outdated;
- Other City goals are in conflict with tree protection, such as equity and housing affordability.

While it takes time for a new, complex area of City Code to work as intended – and the Tree Code is less than three years old – this audit makes recommendations to improve Tree Code implementation and continue measuring its progress.

## Background

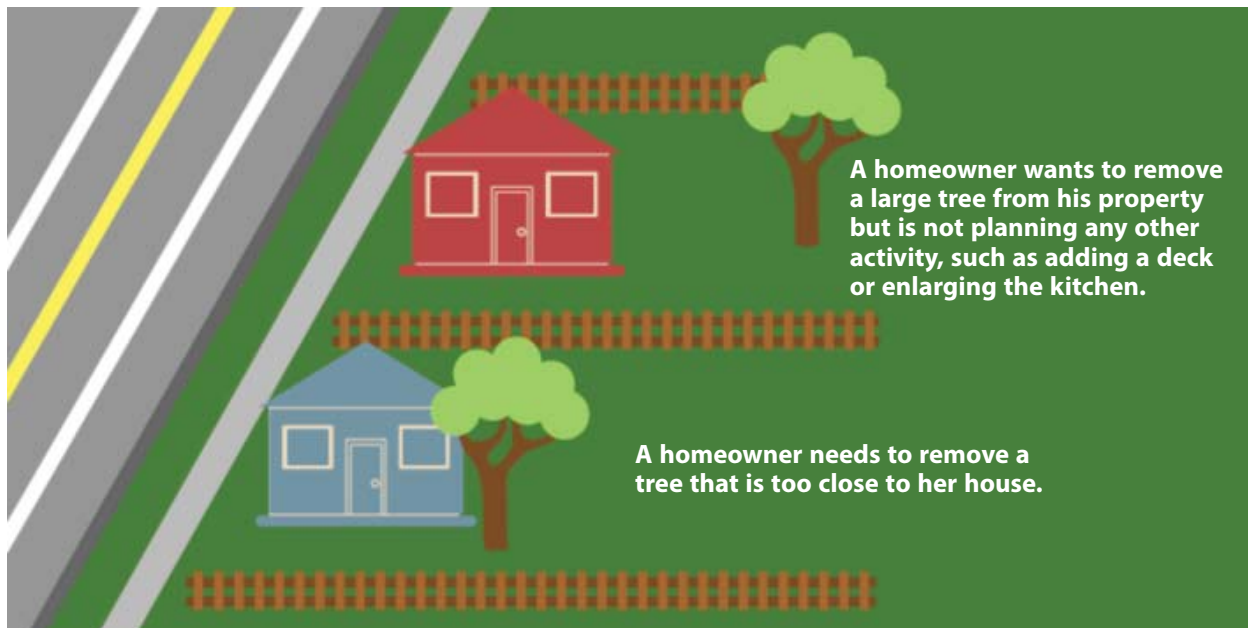
Trees are important for many reasons, including providing habitat for birds and other wildlife, maintaining property values and the natural heritage of the City, and providing oxygen. The Tree Code is primarily implemented by the Bureau of Parks and Recreation's Urban Forestry division and the Bureau of Development Services. In addition, tree-related aspects of the City's Planning and Zoning Code are the responsibility of Development Services, in consultation with Urban Forestry.

The City's approach to trees depends on both the location of the tree or property and the actions planned for the tree or property. With the exception of City-owned trees, the differences are described below for two categories of trees:

- Non-development situations,
- Development situations.

In a **non-development situation**, a property owner wants to remove or replace a tree on private property and does not plan any additional activity that would disturb the ground. If the tree is greater than 12 inches in diameter, a permit is required. There are more restrictive rules in some areas, such as in City-designated environmental zones. The property owner can usually plant any tree species and prune trees without a permit. Sometimes, the property owner can pay a fee instead of replanting. There are also fines for not following the rules.

### Non-development examples



In a **development situation**, the property owner wants to take action on private property in a way that disturbs the ground. Although there are many types of development situations, common ones include building or demolishing a house; constructing an apartment building; adding a new, detached accessory dwelling unit; or renovating a house in a way that extends outside the confines of the house as currently configured. In development situations, trees of a certain size need to be protected, replaced, or planted. There are additional rules if the property is in an environmental zone. Sometimes, the property owner can pay a fee instead of preserving or planting as many trees as the rules require. There are also fines for not following the rules.

#### ***Development examples***



**Street trees**, in both development and non-development situations, are subject to more regulations than private trees. Street trees are trees next to a sidewalk or street, for example, in a parking strip. All sizes of street trees are subject to regulation. A permit is required to remove, prune, or plant a street tree, unless the pruning is of very small branches.

**Portlanders also interact with the Tree Code in the context of street trees.**

A property owner may be required to plant new street trees with new construction or renovations. Only certain tree species can be planted as street trees. In some cases, the property owner can pay a fee rather than preserve or plant some of the required trees. There are also fines for not following the rules.

Urban Forestry handles all trees in non-development situations. Development Services takes the lead on trees in development situations, with Urban Forestry's involvement as needed. Urban Forestry is responsible for all street trees in development and non-development.

The Tree Code applies to all properties, including residential, commercial, and publicly-owned. We did not review the activities of or related to other City bureaus for this audit. City Council approved the Tree Code in 2011, but implementation was delayed until 2015 for budgetary reasons.

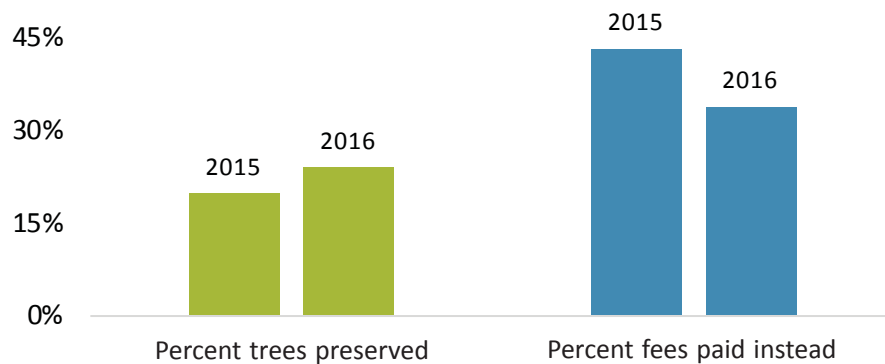
## Audit Results

### Some data point to improved tree protection, but other results reveal challenges

Evidence since 2015, while limited, suggests that in development situations, more trees have been protected. Little information is available about how well tree-related rules worked before 2015. Urban Forestry and Development Services jointly produced a report that included data for the first year of Tree Code implementation, and worked together to prepare for implementation. Urban Forestry said they continue to collect data and will update the report after about five years have passed. The City will need continued analysis to determine how well the Tree Code is working.

Figures 1 through 5 below pertain to private trees rather than street trees.

**Figure 1 Residential demolitions: percent trees preserved went up from 2015 to 2016. Percent fees paid instead of preservation went down.**

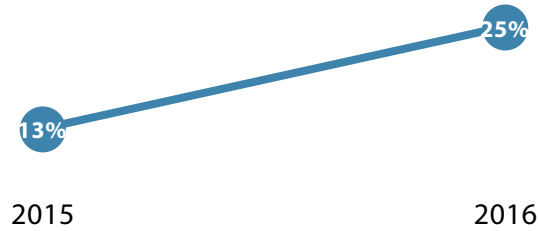


Source: Bureau of Development Services

As desired, the percentage of trees preserved in residential demolitions increased, while the percentage of fees paid instead of preservation decreased. Property owners can avoid preserving a portion of trees subject to Tree Code requirements by paying a fee instead, which is used by the City to fund planting and preserving other trees as mitigation for the trees that were not preserved.



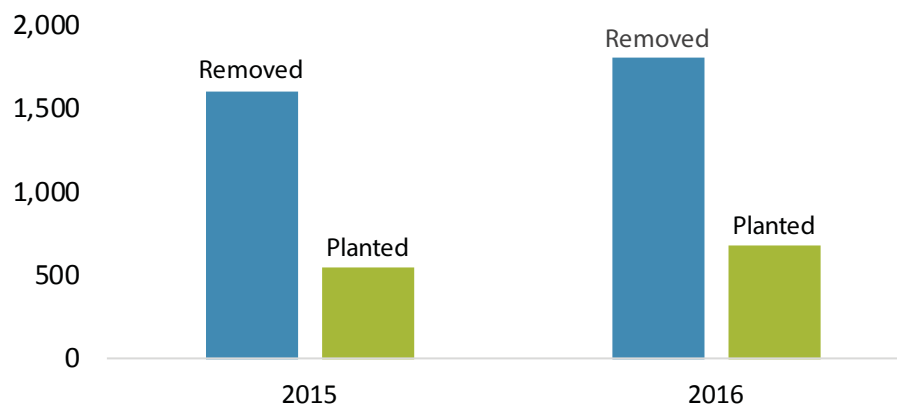
**Figure 2** In development situations, a greater percentage of trees planted were large-species trees in 2016 than in 2015



Source: Bureau of Development Services

According to permitting data for development situations in 2015, 13 percent of trees planted were large-species trees. In 2016, 25 percent were large trees. Urban Forestry said that large trees are valuable because they provide more benefits over the trees' lifetime than smaller, shorter-lived trees.

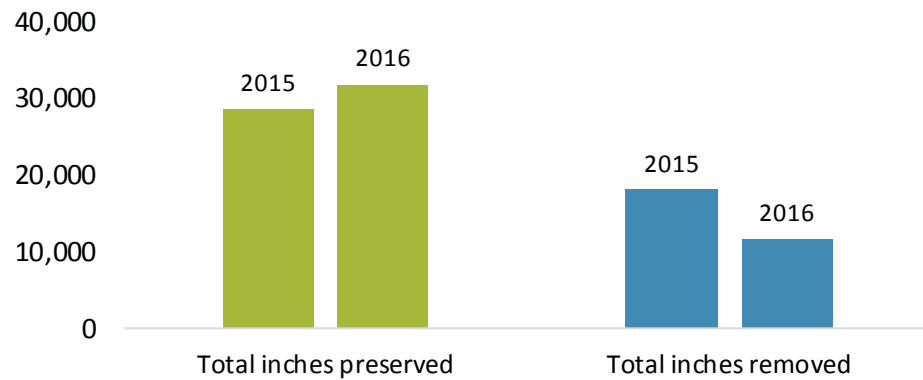
**Figure 3** In non-development situations, three times as many large-species trees were removed than were planted in both 2015 and 2016



Source: Bureau of Parks and Recreation

Urban Forestry data show that in non-development situations, almost three times as many large-species trees were removed than were planted in both 2015 and 2016. This result is undesirable.

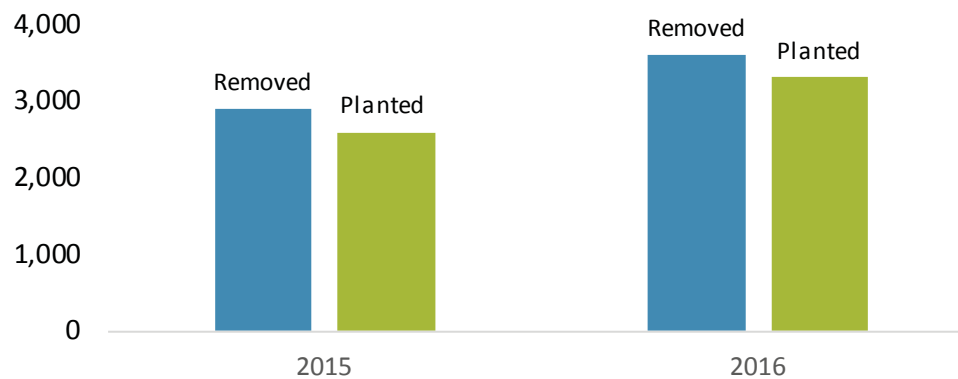
**Figure 4** Trees in development situations: in 2016, more inches of trees were **preserved** and fewer inches were **removed**



Source: Bureau of Development Services

More inches of trees in development situations were preserved in 2016, and fewer inches of trees were removed. Tree size is measured as the diameter of the tree at 4.5 feet off the ground. City Council amended the Tree Code in 2016 to make removing very large trees in development situations more expensive. Two trees subject to regulation that were larger than 36 inches have been removed since the amendment, and two were preserved.

**Figure 5** Trees in non-development situations: 10 trees were **removed** for every nine trees **planted** in both 2015 and 2016



Source: Bureau of Parks and Recreation

In non-development situations, more trees were removed than were planted in 2015 and 2016, with a ratio slightly less than 1:1. This ratio and data do not reflect cases where property owners plant trees without removing a tree.

These results only cover a short period of time and are only a few examples of Tree Code results. They show improved outcomes for development situations and no improvement for non-development situations from the first to the second year of Code implementation.

**Increased responsibilities bring greater workload for City staff**

Appropriate staffing is an ongoing challenge for any agency providing development-related services. Swings in the real estate cycle make it hard to plan for the number of staff needed to process permits. Staffing challenges are particularly acute for Urban Forestry. Urban Forestry staffing is more dependent than Development Services on the City's General Fund, which does not quickly adjust to increased workload. Although Development Services staff said they also struggle to keep up with workload, it is easier for Development Services to hire additional staff when workload increases, because Development Services is funded through fees and the bureau collects more fees when it has more work.

**Figure 6**

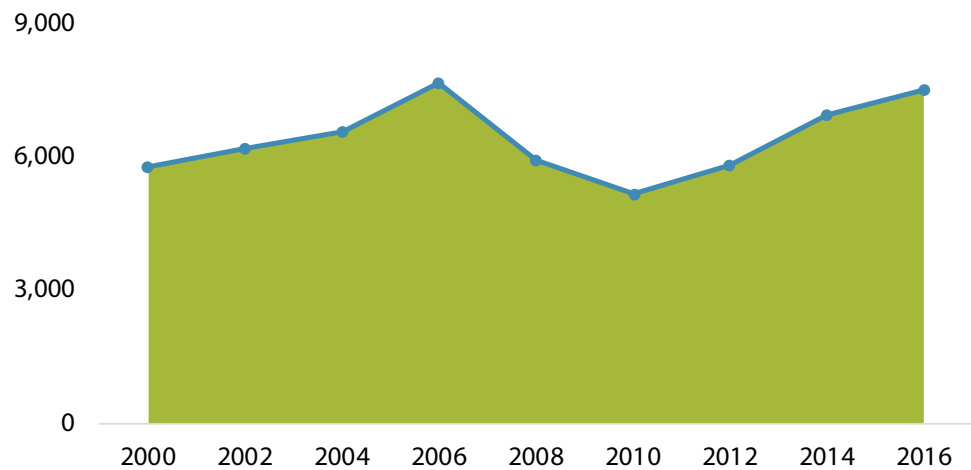


Source: Audit Services Division

Urban Forestry staff respond to tree emergencies, such as the toppled tree in Figure 6. The staff also has duties implementing the Tree Code. This can make staffing capacity problems worse, especially during unexpected weather events.

The number of development permits of all types, not just those that trigger tree-related requirements, has been increasing since a low point in 2010, as shown in Figure 7.

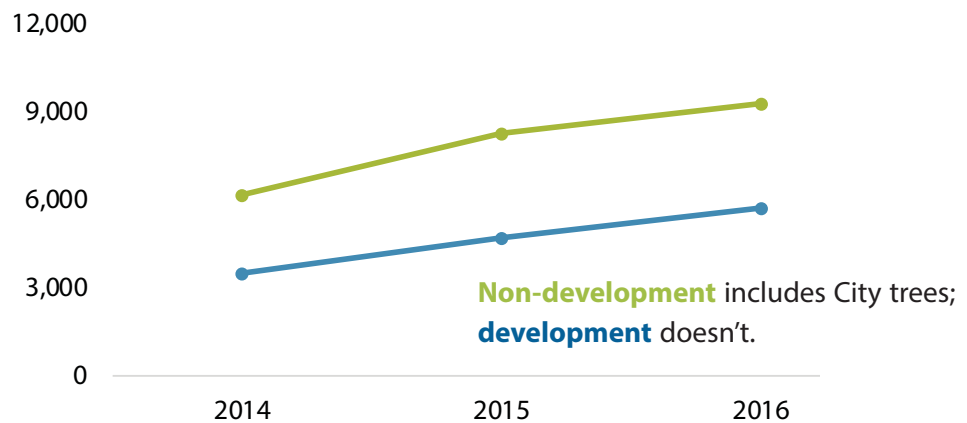
**Figure 7** There were 31 percent more development-related permits in 2016 than the 2010 low point



Source: Bureau of Development Services

Staff in both Development Services and Urban Forestry said that Urban Forestry's increased workload is an impediment to optimal implementation of the Tree Code. From 2014 to 2016, development permit reviews by Urban Forestry increased by 64 percent, and non-development permit applications increased by 51 percent, as seen in Figure 8.

**Figure 8** Urban Forestry's workload has increased for both non-development and development permits



Source: Bureau of Parks and Recreation

Before the Tree Code became City policy, Urban Forestry had eight tree inspectors to review and approve plans, inspect properties for compliance with plans, and handle complaints. There are now 10 tree inspectors. Although there are more staff in the division, Urban Forestry managers say they are still understaffed and do not have the resources to routinely ensure compliance with some aspects of the Tree Code. For example, the City may tell a property owner to plant a street tree, but there is no routine compliance check for smaller projects in development situations and no routine check in non-development situations. The City does follow up on complaints, however.

Urban Forestry recently studied a sample of properties to measure compliance with different types of planting requirements in the Tree Code, including street trees. The results showed that in 2015 in non-development situations, required street tree planting occurred in 82 percent of street tree permits and 50 percent of private tree removal permits. In development situations, required street tree planting occurred in 63 percent of new construction permits and 51 percent of remodeling permits. Although the rules were different then, overall planting compliance was down from 2012 in all categories except for remodels, which increased slightly from 47 percent to 51 percent.

**Outdated permitting software impairs implementation and outcome tracking**

With the Tree Code increasing both the number of trees subject to permits as well as staff workload, having good tools to implement the Code is important. Development Services and Urban Forestry use an old permitting system that does not provide access to real-time, detailed information in the field about trees or development projects. A better permitting system has been in the works since 2010, but is not yet complete, despite Development Services spending \$11 million so far. Development Services and the Bureau of Technology Services recently re-launched the update project. City Council would need to authorize additional funding to complete the upgrade.

The permitting system is set up for building development rather than requirements in the Tree Code. That distinction is important: Urban Forestry's sole interest is trees, while Development Services uses the system for other functions, such as permitting electrical, plumbing, and other regulated City functions. As a result, Urban Forestry and Development Services use the system differently, which poses challenges

in assessing the effects of the Tree Code. While Urban Forestry would like more tree data to be entered into the permitting system; Development Services has other priorities in addition to trees, and its staff are less knowledgeable about trees.

Urban Forestry managers want to track trees individually as assets. Asset information would include details such as tree size, species, and health; past and current permit information; and past and current maintenance of the tree. Urban Forestry could more easily keep track of trees if its inventory did not need to be updated manually, as it does now. According to Technology Services, asset management may be part of the new system. If not, Urban Forestry may need to track tree assets some other way.

Urban Forestry faces other limitations based on using outdated systems. For example, it uses a paper-based system to record and respond to tree emergencies, in the process, gathering and generating information later entered into the permitting system. Because many of the same Urban Forestry staff who respond to tree emergencies are also responsible for Tree Code implementation, having an outdated permitting system is an additional drain on efficiency.

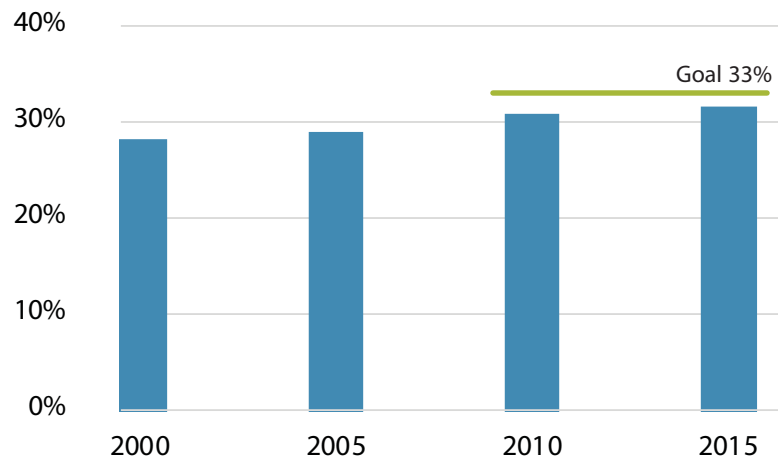
The new system is expected to allow access to real-time information in the field about individual trees and construction projects, which would help both bureaus better implement the Tree Code.

**The City's Urban Forestry Management Plan needs updating and aligning with other plans and priorities**

The Urban Forestry Management Plan, prepared by Parks and other stakeholders, was described as the vision for trees in Portland, as well as Urban Forestry's marching orders. It was first completed in 1995 and updated in 2004. It was meant to be updated every 10 years. It may not adequately address current issues, such as development pressures or trade-offs between tree canopy goals, affordable housing goals, and other City priorities.

The City's tree canopy goal of 33 percent is spelled out in the 2009 version of a long-term planning document called the Portland Plan. Tree canopy measures the percentage of land in a city covered by trees as seen from the air. Determining how well the Tree Code is working should be closely tied to whether the City is meeting its tree canopy goal. As shown in Figure 9, tree canopy coverage in 2015 was 30.7 percent, and while increasing, is below the City's goal of 33 percent.

**Figure 9 The City's tree canopy coverage has increased every year since 2000**



Source: Bureau of Parks and Recreation; Portland Plan, 2009

The tree canopy is generally measured every five years, and more time will be needed to assess whether the Tree Code has had an impact on it. Urban Forestry managers said they may want to reconsider the methodology used to set the tree canopy goal and that the goal might be increased in an effort to give more weight to the benefits provided by trees, such as reduced energy consumption by homeowners, summer heat mitigation, improved stormwater retention, and cleaner air.

The City will need to decide how to balance tree canopy goals with other City goals. For example, emphasizing more tree canopy may conflict with developing more affordable housing. The Urban Forestry Management Plan canopy goals should align with the goals in the Portland Plan, as well as other City plans.

During our audit, elected officials and others expressed an interest in revisiting aspects of the Tree Code. Making substantial changes to the Tree Code may be easier once the Urban Forestry Management Plan is up-to-date.



**Issues of equity and affordability highlight the City's need to prioritize its goals**

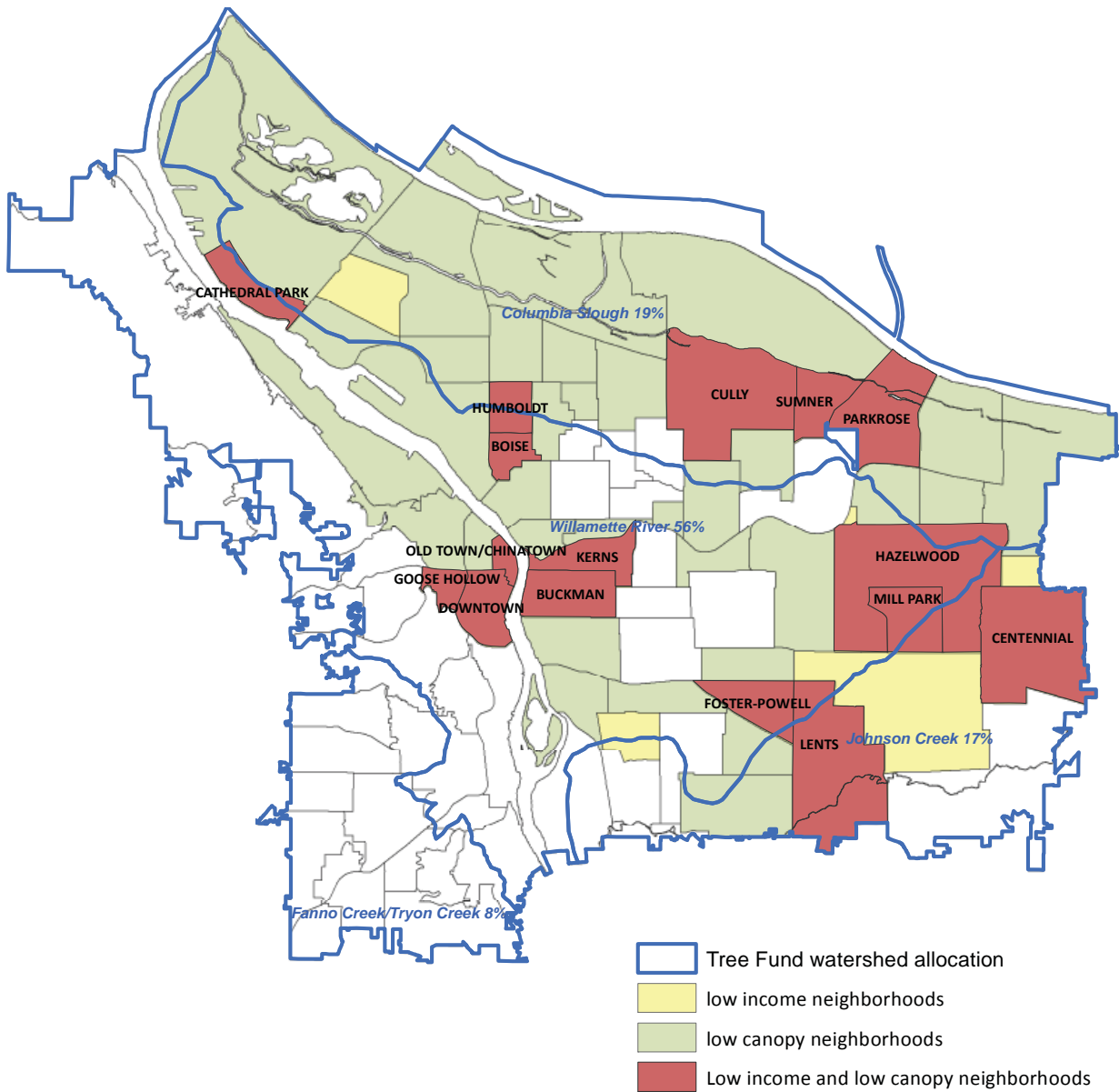
In interviews with a variety of stakeholders, we heard contrasting concerns. Some said that the Tree Code did not protect enough trees, and others said that the Tree Code disproportionately impeded development. There were also concerns raised about equity, the costs to both individuals and developers to comply with the Tree Code, and Tree Code alignment with other City priorities.

***Equity***

Urban Forestry and Development Services both acknowledged equity challenges in the Tree Code. A few examples include:

- Most Tree Code enforcement actions are triggered by complaints, meaning enforcement is more likely to occur in neighborhoods where residents have the time and knowledge to make complaints.
- Affordable housing is often in areas with smaller planting strips, which can only accommodate smaller trees, limiting access to the same canopy quality as more affluent areas with larger planting strips and larger trees.
- A property owner's responsibility to plant and maintain street trees may impact housing affordability and may be a larger financial burden for some homeowners.
- Higher income areas tend to have greater tree canopy coverage, and Urban Forestry managers said they want to reduce this inequity by concentrating planting in areas that lack trees. Fees paid instead of planting and preserving trees go into the City's Tree Planting and Preservation Fund, which contains \$1.4 million and is growing. However, the Tree Code dictates that Fund money must be spent in the same watershed area where it was collected. This requirement could perpetuate existing tree canopy inequities, as seen in Figure 10.

**Figure 10 Portland Urban Forestry - low income and low canopy neighborhood and Tree Fund watersheds**



Low income neighborhoods are those where 50% or more of the population earn 80% or less than Portland's median family income (ACS, 2012).

Low canopy neighborhoods have less than 25% canopy cover (Metro, 2014)

Source: Bureau of Parks and Recreation

### ***Affordability***

Examples of affordability issues in the Tree Code include:

- Developers said that following the Tree Code can add thousands of dollars to project costs. Urban Forestry managers expressed a concern that people will simply find ways not to comply with the Tree Code if the cost to comply is too high, while others are concerned that the costs of Tree Code compliance can contribute to higher housing costs.
- Owners may want to make changes to their property to achieve a goal other than tree preservation, such as allowing more light to enter their home or creating an open space for a play area. They may find that because of the way trees are distributed on the property they cannot achieve their goal without incurring unaffordable costs, given requirements in the Tree Code.

### **Recommendations**

To ensure the City is on track to both effectively implement the Tree Code and to measure how well it works, we recommend that:

1. Urban Forestry and Development Services continue to produce and analyze data to assess the effects of the Tree Code, as well as workload. Report results to the community and to City Council and use the data to help evaluate effectiveness of the Tree Code.
2. Parks, including the Urban Forestry division, develop ways to better address workload challenges, including determining whether some work should be more fee-based or to seek more General Fund support. Determine if goals and expectations should be better matched with service capacity.
3. Parks, including the Urban Forestry division, continue involvement in the transition to the new permitting system, with a focus on ensuring that asset management is a component. If that is not possible, explore options to track trees as assets.

4. Parks and Development Services develop additional measures to ensure street tree, tree planting, and other regulations are followed.
5. Parks prioritize updating the Urban Forestry Management Plan and include a variety of stakeholders. The Tree Code should not be substantially changed until the Urban Forestry Management Plan has been updated.
6. Parks, Development Services, and City Council address equity and affordability conflicts and other stakeholder concerns when considering changes to the Tree Code. Ensure that the Tree Code is aligned with other City priorities.

### **Objective, scope and methodology**

We conducted this audit to determine if the City is on track to both effectively implement the Tree Code and to measure how well it's working. Our audit scope focused on Parks and Recreation's Urban Forestry division and the Bureau of Development Services and did not include customer service, programmatic permits, capital projects, trees on City-owned property, or non-Parks tree planting programs. We did not independently verify data provided by Urban Forestry and Development Services.

To accomplish our audit objective, we:

- Interviewed Parks and Development Services managers and staff, City commissioners and staff, Bureau of Technology Services managers and staff; and Bureau of Planning and Sustainability staff;
- Interviewed a range of stakeholders, including Friends of Trees, neighborhood groups, an architect, a developer; a homebuilders' association member, a member of the Development Review Advisory Committee, and a member of the Urban Forestry Commission;
- Reviewed the City's Tree Code;
- Analyzed documents and data associated with the Tree Code, related policies and studies, City budgets and fund information, other City plans; and other city policies;

- Reviewed transcripts of City Council proceedings related to the Tree Code and related issues;
- Observed activities in the City's Development Services Center and at the Urban Forestry East Delta Park facility; and
- Reviewed other audits and media reports.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

# RESPONSE TO THE AUDIT



CITY OF  
**PORTLAND, OREGON**

**Amanda Fritz, Commissioner**  
1221 SW Fourth Avenue, Suite 220  
(503) 823-3008  
amanda@portlandoregon.gov

August 30, 2017

Dear Auditor Hull Caballero,

Thanks to you and your team for performing the Audit of the "Tree Code" (Title 11) implementation, and for the opportunity to respond. This Audit is the first analysis of the City's implementation of Title 11, and we appreciate the opportunity to assess and improve upon how the City addresses trees as a crucial component of City infrastructure providing many health, environmental, and economic benefits. We are pleased to see the Audit's conclusion that Title 11 has been successful in many ways since implementation began in 2015. We agree that there is room for improvement in both the policies and operational implementation.

### **Equity & Affordability**

An overarching goal of Title 11 is to protect and enhance the urban tree canopy. As our city grows and climate changes, this goal becomes increasingly important to both residents' health and Portland's livability. As the Audit affirms, there are clear opportunities to improve how residents who live in areas where there is less tree canopy can be better served. Portland Parks & Recreation (PP&R) leaders and the Commissioner's office particularly appreciate the Audit noting that currently, the Code directs expenditure of tree permit mitigation payments to the watershed in which the fees were generated, and the finding that this directive is being followed. Given the patterns of development across Portland, we are evaluating whether this Code provision contributes to inequitable distribution of Tree Planting and Preservation Fund resources, and if this provision should be amended when a comprehensive Code amendment project is undertaken. We are working on a Citywide Tree Planting Strategy that will address how to use the Tree Planting and Preservation Fund equitably, with input from diverse communities.

The Tree Code is sometimes perceived as driving up the cost of housing, particularly affordable housing, and the burden of responsibility for planting, maintaining and removing large street trees can be overwhelming for many families. Several months ago, the Urban Forestry Commission asked Council to establish a Right of Way Tree Task Force, to evaluate options for effective and equitable management of street trees, and for efficient coordination between bureaus. Currently, maintenance responsibility for trees in the right of way is the burden of the adjacent property owner. This fall, Council will have a work session devoted in part to the exploration of changing maintenance responsibility for street trees. Any shift of this maintenance responsibility from property owners to a government entity would need to be considered in conjunction with allocation of additional resources to pay for the new workload. We look forward to further discussion with the Council at the work session.

### **Urban Forestry Management Plan**

We concur with the finding that there is a wide variety of opinions about whether the Tree Code does enough to protect trees. PP&R leadership and the Commissioner's office have been advocating for a comprehensive set of amendments to the Tree Code since early 2016. Urban Forestry staff have compiled a running list of Code issues with room for improvement, including issues flagged by other bureaus, the Urban Forestry Commission, and the Tree Code Oversight Committee. Our staff worked

with other Council offices and bureaus to propose an amendment package that would begin to address the most urgent issues, some of which are alluded to in the Audit report. These include improvements for tree protection; establishing a hardship waiver policy for people who are required to replace or remove trees beyond their means; clarifying code responsibilities; and dozens of other issues. The Bureau of Planning and Sustainability, which leads typically leads large-scale code amendment projects, did not have capacity to address the Tree Code in 2016 given other Council priorities such as the Comprehensive Plan and Inclusionary Housing.

In lieu of a comprehensive amendment package, a few Tree Code-related amendments were included in the Regulatory Improvement Code Amendment Package 8 (RICAP) earlier this year. The rationale for making code amendments prior to the Urban Forestry Management Plan update reflects the urgency that community members have expressed about the issues they would like to see addressed as soon as possible. The Urban Forestry Management Plan update is certainly a crucial guiding document for improving the City's tree canopy. Updating it will require a substantial allocation of time and resources in an intensive process that will provide fewer short-term benefits to Portlanders in underserved neighborhoods. At this time, we are prioritizing work for the Street Tree Task Force called for by Council as noted above. Council will decide via the City Budget process when to begin an Urban Forestry Management Plan update, either in Fiscal Year (FY) 2017-18 or FY 2018-19. When this Plan update process is funded, the PP&R Racial Equity Plan specifies that community engagement with diverse communities, specifically immigrant and refugee communities, will inform the plan.

### **Data**

We appreciate that the Audit found the data provided by PP&R useful for evaluating implementation and absolutely intend to continue data collection for continuous improvement. We note that available software systems were not able to track and analyze some data needed in the initial Citywide Tree Project Data Report, a challenge that persists today.

### **Workload Challenges**

The Audit identifies several workload challenges that our staff have been facing, exacerbated by recent extreme weather. We appreciate this recognition. More permanent General Fund staffing would improve code compliance. We have streamlined administrative processes, reorganized the Urban Forestry Division to more efficiently maximize the staffing we do have, and have set priorities to manage the work. Some tree permit fees have been increased with Council's approval to recover more service costs. Addressing PP&R staffing issues through General Fund contributions continues to be a choice made by the Council. When the Mayor's direction for the FY 2017-18 budget required cuts, Council chose to adopt a budget that allocated enhanced tree fee revenue - which could have added staff to Urban Forestry - towards PP&R General Fund reductions.

PP&R continues to seek realignment opportunities, and plans to increase cost recovery for some tree permit services in future fiscal years - as well requesting new General Funds. These funding choices rely on Council support and prioritization.

### **Code Compliance**

While current Urban Forestry staffing levels are insufficient to inspect for compliance on individual permit requirements, two compliance studies focused on tree planting were designed and conducted to see if regulations are being followed. The two studies showed that compliance with tree planting requirements is lower than desired. Urban Forestry has implemented new, low-cost tools intended to increase compliance rates.



Urban Forestry responds to all reported Tree Code violations. When warranted, violations of regulations are pursued to the extent provided by City Code.

Urban Forestry plans to continue evaluating compliance through studies, adjusting processes to improve compliance using existing resources, and addressing reported Tree Code violations. Tree Code amendments would also facilitate improved compliance and enforcement.

### **Permitting System**

The Portland Online Permitting System (POPS) is a project led by the Bureau of Development Services, and Urban Forestry staff are participating in the software development team. Urban Forestry business needs requested in the new system include mobile system access, Internet permitting and payment, tree asset management, migration of existing data, and interface with other current City software systems used by Urban Forestry.

Given the POPS timeline and expectations, PP&R is also currently developing an interim Urban Forestry Operations work order and tracking system to replace the current paper-based structure, exploring opportunities to move ahead with on-line tree permit payment, and investigating software options for managing tree assets.

PP&R intends to continue the close partnership with the Bureau of Development Services (BDS) to facilitate Tree Code implementation and results. Significant effort and resources were invested in inter-bureau coordination, process development, communications and general preparation for implementation prior to the Tree Code effective date.

A key goal in developing the new Tree Code was improved protection and expansion of the City's forest assets. Trees are essential infrastructure in urban areas, just like roads, water supply, or waste management. Trees serve City residents in crucial ways - improving public health, mitigating climate change effects, buffering vehicle traffic, reducing energy costs, reducing input to the waste water management system, and making more livable and beautiful communities, among many other benefits. While PP&R and BDS have successfully implemented Title 11, to date some outcomes of the Tree Code and subsequent Administrative Rules are cause for concern. Required tree planting compliance rates are low. Large-species trees are often replaced by small-species trees. Tree canopy growth has slowed and is still below target. Perhaps of most concern, inequities in providing tree services and benefits to all Portland residents persist.

Once again, thank you for this Audit, which confirms independently and objectively the concerns we have relayed to the City Council. We are committed to addressing the identified challenges to ensure that all future Portland residents are well served by trees, and acknowledge that achieving these goals relies on support, direction, and prioritization from the full Council.

Sincerely,



Amanda Fritz  
Commissioner-in-Charge, PP&R



Mike Abbaté  
Director, PP&R



Jenn Cairo  
City Forester, PP&R



**City of  
Portland, Oregon**  
**Bureau of Development Services**  
FROM CONCEPT TO CONSTRUCTION

Chloe Eudaly, Commissioner  
Rebecca Esau, Interim Director  
Phone: (503) 823-7300  
Fax: (503) 823-6983  
TTY: (503) 823-6868  
[www.portlandoregon.gov/bds](http://www.portlandoregon.gov/bds)

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## Memorandum

**Date:** September 1, 2017  
**To:** Mary Hull Caballero, Auditor  
**From:** Rebecca Esau, Interim Director Bureau of Development Services *RE*  
**Re:** **BDS Response to Tree Code Audit**

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Thank you for your interest in the City's implementation of the "Tree Code" (Title 11) and your team's work on this audit with our staff and our Parks Urban Forestry partners. We have been working closely with Parks Urban Forestry staff for years now, first in partnership with BPS in the development of the Tree Code, the preparation done prior to implementation, and the coordination and problem-solving since the regulations went into effect. It continues to be a very collaborative process, with daily communication and coordination between Urban Forestry and BDS staff, and we are all committed to successful implementation of the Tree Code and the other regulations we administer.

We appreciate the opportunity to review the audit, and your use of the Bureau of Development Services and Portland Parks & Recreation as resources for data and clarifications during the development of this audit.

The Bureau of Development Services (BDS) offers the following comments on the audit recommendations.

**Recommendation 1 – Data Collection and Reporting:** BDS recognizes that data collection is essential in order to evaluate the effectiveness of the Tree Code and prepare for future changes through a legislative process. BDS is committed to the collection of data that is reflective of the requirements of the current Tree Code. Staff training is held during on-boarding and periodically thereafter to ensure that information is gathered and entered correctly, and consistently. Our current computer system provides some very useful data, but it has limitations. Further reporting could occur if the effort is prioritized and resources are allocated.

**Recommendation 2 – Parks Staff Resources and Funding:** BDS supports efforts by Portland Parks & Recreation's Urban Forestry Division (UF) to resolve workload challenges and better match expectations with service capacity or vice versa. Decisions to increase financial support through fee increases and/or general fund support should be evaluated for impacts on equity, and on voluntary compliance with the permitting requirements. Specifically, they should take into consideration the public benefit of trees, systems to adjust fees for low income property owners and non-profits, the effect on other priorities such as financial impacts to homeowners and other property owners, and impacts on housing affordability.

**Recommendation 3 – Parks and POPS:** The Portland Online Permitting System (POPS), led by BDS continues to make progress. An asset management component of the new permitting system is available.

That component could benefit not only UF, but other infrastructure bureaus as well. There is also an opportunity for BDS to use the component to track non-parcel based qualities such as floor by floor data on buildings that could speed up the permit review process. In short, the asset management component of the new permitting system is being actively explored. BDS will continue to work with UF and other end users to identify business needs, including asset management.

In addition, part of the POPS program includes making the transition from review of paper building permit plans, to reviewing plans digitally. This will provide the ability for each reviewer to see the comments entered by other reviewers into the system, resulting in a more coordinated review, and the opportunity to identify conflicts. The electronic plan review system will also provide greater efficiency by making the plans available to each reviewer at any time, as compared to the current system of the review groups sharing and taking turns to review the four sets of paper plans for each building permit.

**Recommendation 4 – Measures to ensure compliance:** A large part of gaining voluntary compliance from the community is to make them aware of the requirements. BDS is committed to partnering with UF on continuing public education about the Tree Code, including using the BDS Lunch and Learn speaker series, continuing to update website content to answer frequently asked questions about the Tree Code, and updating the Portland Tree and Landscaping Manual to better align the suggested plant lists with UF priorities. In addition, BDS has recently added an outreach specialist with a focus on equity, and is building a new, more robust Communications Team, both of which will further efforts to engage groups that are not traditionally engaged in the development process.

Any changes or improvements to additional services such as additional inspections will need to be evaluated for impacts on staffing, fees, effects on the development process, and prioritization of other service improvements.

**Recommendation 5 – Parks Urban Forestry Management Plan:** BDS supports the recommendation that the Urban Forest Management Plan update should be updated prior to any substantive changes to the Tree Code. Changes to the Tree Code should be based in a framework of goals expressed in an updated Urban Forest Management Plan developed through a well-rounded and well-informed process.

BDS also supports that the process include and consider the perspectives of a wide variety of stakeholders. Ideally, stakeholders would include historically underserved populations based on income, race, and physical location, other city infrastructure bureaus, homeowners and other property owners, and the development community. BDS will support UF in development of that plan as necessary.

**Recommendation 6 – Equity, Affordability, Stakeholder Concerns, and Alignment with other City Priorities:** Similarly, BDS agrees that changes to the Tree Code should consider other City priorities such as housing affordability, the challenges of developing small infill lots, infrastructure needs, equity issues and other stakeholder concerns. Any proposed changes to the Tree Code should be weighed against other City goals and priorities, and considered holistically.

Thank you for this audit. We are committed to administering and implementing the Tree Code to the best of our ability, working with our Parks Urban Forestry partners and our customers to be solution-oriented and continue to make improvements to our processes and services.

**Audit Services Division  
Office of the City Auditor  
1221 SW 4th Avenue, Room 310  
Portland, Oregon 97204  
503-823-4005  
[www.portlandoregon.gov/auditservices](http://www.portlandoregon.gov/auditservices)**

*Tree Code: Implementation phase shows progress  
and pitfalls*

Report #495, September 2017

Audit Team: Martha Prinz, Elizabeth Pape

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Mary Hull Caballero, City Auditor  
Drummond Kahn, Director of Audit Services

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