

July 16, 2012

City of Seattle  
**Private Property  
Tree Regulations Update  
Director's Report**



City of Seattle  
Department of Planning and Development

## Introduction

The Department of Planning and Development (DPD) is proposing to update Seattle's regulations governing trees on private property. This update would affect the Tree Protection Code and the Land Use Code but would not change the Environmentally Critical Areas Code, which is updated separately through a state-mandated process that last occurred on 2006. The update is intended to advance the goals of the City's Urban Forest Management Plan (UFMP) to maintain and enhance a thriving and diverse urban forest. The plan recognizes the environmental, economic, and social benefits of trees to the city, while acknowledging other city-wide policies for sustainability and growth management as well as property owner needs for solar access, accessory structures, and property access. This proposal is part of a multidepartment effort including DPD, the Department of Transportation and the Office of Sustainability and Environment to update policies and regulations. The update to regulations for private property is being done concurrently with an update of the Urban Forest Management Plan and the Street Tree Ordinance. More information on city-wide efforts can be found at [www.seattle.gov/trees](http://www.seattle.gov/trees).

The intent of the update is to improve existing tree regulations and to add a number of new measures that would expand or improve development standards to better mitigate the impacts of development. The proposed update would:

1. Make permanent interim restrictions on the removal of exceptional trees while clarifying the criteria and removal process to help ensure that they can be easily understood, implemented, and enforced.
2. Apply more rigorous landscaping standards and expand the scope of existing regulations to address institutions and street trees (as required in the Land Use Code) in single-family zones as well as larger retail and commercial uses in industrial zones.
3. Simplify the process for reviewing exceptional trees during development to provide greater incentive to take advantage of voluntary modifications to development standards to save trees.
4. Allow payment in lieu of on-site planting and retention in single family zones for up to 50 percent of the tree requirement.
5. Implement tree requirements for institutions in single-family zones, similar to those proposed for single-family homes.
6. Require street trees during development of new or replaced homes in single-family zones.
7. Add a Green Factor requirement for commercial or retail development over 4,000 square feet (sq. ft.) in size in industrial zones.

Together with education and enhanced incentives, DPD intends that these changes will help to enhance and expand the urban forest in Seattle and advance goals for a more livable and sustainable community.

## Background

Trees are viewed as a critical infrastructure element within the City of Seattle due to their role in promoting social, economic, and environmental health. In particular, trees manage stormwater by capturing and slowing rain; filter air pollution; provide food and habitat; and contribute to the character and aesthetic beauty of our neighborhoods and business districts. Recognizing the value of the urban forest, policies and regulations addressing trees have been developed in order to protect and enhance Seattle's trees .



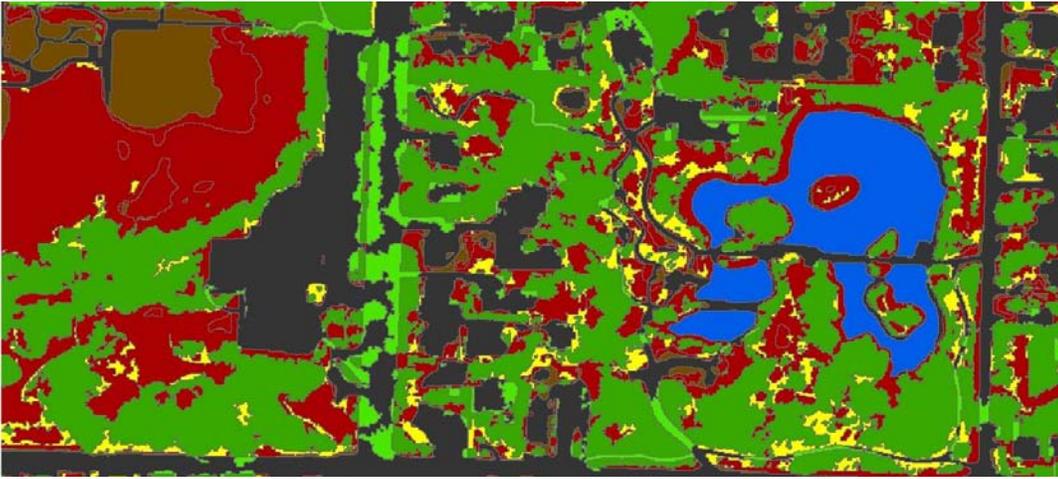
*Dense canopy cover provides important stormwater, habitat, air quality, and aesthetic benefits.*

Seattle has required landscaping on properties in multifamily and commercial zones since the early 1980s. Tree requirements in other zones have been added or updated since that time. Concerned that Seattle's tree canopy was being diminished due to the pace of growth and development, Seattle adopted tree protection regulations in 2001. These regulations, addressing exceptional trees on private property, represented a pioneering effort in the region and were part of a wave of early adopters implementing a variety of innovative approaches to tree retention and planting. In 2002, Seattle created the Urban Forest Coalition (later renamed the Urban Forest Interdepartmental Team or Urban Forest IDT) to begin the process of coordinating responsibilities for trees across City departments and developed a strategic plan for managing Seattle's urban forest. This collaboration culminated in the completion of the Urban Forest Management Plan (UFMP) in April 2007 (available at [www.seattle.gov/trees/management.htm](http://www.seattle.gov/trees/management.htm)). The UFMP established city-wide goals and actions

for implementing a vision of Seattle's urban forest as "a thriving and sustainable mix of tree species and ages that creates a contiguous and healthy ecosystem that is valued and cared for by the City and all of its citizens as an essential environmental, economic, and community asset." The UFMP set a goal of increasing Seattle's tree canopy to 30% by 2037 and established general strategies for accomplishing this goal.

One of the actions recommended by the UFMP was to update Seattle's tree regulations. To begin this process, DPD convened the Emerald City Task Force (ECTF), a ten-member group representing the development, architecture, landscape architecture, real estate, and tree care professions (meeting notes and recommendations available at [www.seattle.gov/dpd/planning/trees](http://www.seattle.gov/dpd/planning/trees)). This group met throughout the second half of 2007 and their recommendations helped to inform this proposal to amend tree protection regulations. DPD also met with tree advocates and their organizations in 2008 to better understand their perspectives (meeting notes and recommendations available at [www.seattle.gov/dpd/planning/trees](http://www.seattle.gov/dpd/planning/trees)). An urban forest workshop facilitated by the Urban Forest IDT and attended by urban forest stakeholders from throughout the region was held in July 2009 and contributed greatly to DPD's proposal (notes available at [www.seattle.gov/trees/peerreview.htm](http://www.seattle.gov/trees/peerreview.htm)).

In 2008, the City Council adopted interim tree protection measures (discussed in the Summary of Existing Regulations section) that were designed to prevent tree removal outside of or prior to the private property development process. These interim regulations became effective in April 2009. Following the interim tree regulations, the City commissioned a canopy cover study to gain a better and more reliable understanding of the extent of Seattle's tree canopy. Overall, the canopy cover study (available at [www.seattle.gov/trees/canopycover.htm](http://www.seattle.gov/trees/canopycover.htm)) found that Seattle's tree canopy was approximately 23%, substantially higher than previously believed based on earlier analysis. The canopy cover study looked at 2002-3 and 2007 data points and found that the recorded canopy cover had actually increased slightly over this period, although the level of uncertainty in the study makes it difficult to understand if this is a long-term trend. Additional



An image from the canopy cover analysis noting area of trees, shrubs, impervious surface, grass, bare soil and water.

analysis of these results suggests that the majority of these gains occurred in the right-of-way rather than on private property and that the recorded yearly increase would still need to double to meet the UFMP goal of 30% by 2037. Redeveloped parcels, which only represented about 1.8% of the city during this 3 year period, showed a substantial loss of trees. The average canopy on lots that were redeveloped between 2003 and 2007 went from 30% to 17.7% in single-family areas, from 17.7% to 5.4% in multifamily areas, and from 6.5% to 4.3% in commercial areas. While existing regulations in each of these zones require new planting that will grow over time, it is unknown to what extent this decline on redeveloped parcels represents a loss of tree canopy potential over time or the replacement of mature trees with newer plantings.

In 2009, the City Council, in anticipation of the pending review of tree regulations, passed Resolution 31138 to provide additional guidance on the review, and adopted Ordinance 123052 that created an Urban Forestry Commission to advise the City on urban forestry issues, including amendments to tree regulations. The records of the Commission are available at [www.seattle.gov/trees/UFcommission.htm](http://www.seattle.gov/trees/UFcommission.htm).

In 2010, the Department of Planning and Development released a proposal for updating Seattle's regulations regarding trees on private property. During July through December of 2010, DPD conducted extensive outreach on this proposal. A summary of comments received during this process as well as the original draft proposal is available on our website at [www.seattle.gov/dpd/planning/trees](http://www.seattle.gov/dpd/planning/trees). After

discussing the results of the public process with the Mayor and Council, DPD updated the original proposal and drafted new legislation for further public discussion. The updated proposal is being put forward as part of a comprehensive update of urban forestry within the City, including an update of the Urban Forest Management Plan and updated regulations for street trees in the Street Tree Ordinance.

## Summary of Existing Regulations

Trees are considered through the City's codes where regulated activities could impact the urban forest. Regulations governing trees on private property are contained primarily in three City codes:

- **Tree Protection Regulations** (Seattle Municipal Code (SMC) Chapter 25.11): regulates tree removal both outside of and during the development process.
- **Land Use Code** (SMC Title 23): requires the planting of trees and vegetation as part of standards governing new development throughout the city.
- **Environmentally Critical Areas** (ECA) (SMC Chapter 25.09): regulations for environmentally critical areas include wetlands, streams, shorelines, landslide-prone areas and associated buffers.

Trees on private property within the city are also addressed in a variety of other regulations summarized below:

- **Platting Requirements** (SMC Chapter 23.24): incorporates standards for the subdivision of land including a requirement to “maximize the retention of trees” as criteria for approval.
- **State Environmental Policy Act (SEPA)** (SMC Chapter 25.05): contains procedures for review and assessment of the environmental impacts of development to limit and mitigate significant impacts not sufficiently addressed by existing codes.
- **Weeds and Vegetation Ordinance** (SMC Chapter 10.52): regulations pertaining to designation and enforcement of vegetation constituting a nuisance.
- **Stormwater Code**, SMC Title 22 Subtitle VIII, gives credit for trees and other green infrastructure in determining requirements for new development.

Trees located in the right-of-way are regulated separately by the Seattle Department of Transportation through the Street Tree Ordinance. Trees on public property, such as parks, are managed by the Department of Parks and Recreation and other departments based on city policy, park plans, and best management practice guides.

Tree Protection regulations and the Land Use Code contain limitations on tree removal during and outside of the development process. The City’s interim tree protection measures, approved in 2009, were intended to provide a degree of enhanced tree protection until a proposal for improving the regulation of trees on private property could be enacted. The following outlines current regulations, including the interim regulations:

### **Regulations Outside of Development**

This category refers to the normal maintenance and upkeep of property in the city. Prior to the interim regulations, tree removal regulations were limited to undeveloped lots. These regulations prohibited the removal of any tree 6 inches or greater in diameter on undeveloped lots in all zones. This broadly applicable limitation was intended to maintain existing conditions on a lot until a development proposal is submitted. The interim tree protection provisions affected lots in lowrise, midrise, and commercial zones and on lots in single-family zones that are 5,000 sq.

ft. or larger. Specifically, the interim regulations prohibit removal of exceptional trees and limit removal of non-exceptional trees to 3 per year. Exceptional trees are defined in Director’s Rule 16-2008. In general, exceptional trees include all trees above a specified diameter threshold based on the species of tree. Individual trees may be disqualified as exceptional if a tree risk assessment determines them to be hazardous based on conditions set out in the Director’s rule.

### **Lots Undergoing Development**

Sites are not considered to be undergoing development until a permit application is submitted. During the development process, exceptional trees in single-family, lowrise, Midrise, and commercial zones must be protected unless doing so would prevent the property owner from realizing the full development potential of their lot. The concept of full development potential varies by zone but is generally based on lot coverage in single-family zones, and floor area or dwelling units in other zones. In order to satisfy this standard, applicants must take advantage of any development standard modifications allowed by the Code or through the Design Review process. Development standard modifications vary by zone but are generally limited to front and rear setbacks in single-family zones and include front and rear setbacks, parking requirements, and height limits in other zones.

In addition to tree retention requirements contained in the Tree Protection Code, the Land Use Code requires landscaping according to specific standards regarding amount of trees, vegetation, and other green infrastructure elements that must be provided as part of a development. These standards vary substantially by zone and address street trees and screening of parking and industrial uses as well as general requirements for landscaped open space. In general, landscaping in single-family zones is limited to the provision of trees through retention or planting, while commercial, Seattle mixed, and multifamily zones contain Green Factor requirements as well as screening and street trees. Green Factor is a flexible alternative to traditional landscaping standards that allows applicants to meet an overall environmental service goal by choosing from a menu of options including tree retention, new planting, green roofs,

green walls, and permeable pavement. Due to freight mobility, industrial infrastructure, and the need for flexible spaces, industrial zones have limited requirements for landscaping other than the screening of certain uses and the provision of street trees on specified arterials. Below is a summary of existing landscaping code requirements.

Zone	Regulation Type and Code Reference
Single-family	Tree Requirements (23.44.008.1)
Multifamily	Screening, Green Factor, and Street Trees (23.45.524)
Seattle Mixed	Screening, Landscaping, and Street Trees (23.48.024)
Commercial	Screening, Green Factor, Street Trees and Trees in Parking Lots (23.47A.016)
Downtown	Screening, Landscaping, and Street Trees (23.49.019, 23.49.046, 23.49.056, 23.49.106, 23.49.162, 23.49.332)
Industrial	Landscaping on designated streets (23.50.016), Landscaping and Screening in Industrial Buffer and Industrial Commercial Areas (23.50.034, 23.50.036, 23.50.038)

## Proposal

DPD is proposing a variety of changes that would better implement the goals of the Urban Forest Management Plan (anticipating the update of the plan).

Comments received during public process in 2010 focused primarily on the extent to which the City should regulate the removal of trees outside development. Opinions on the issue were heavily divided; many argued that trees should be regulated at all times to protect the public benefits they provide; while others argued that the City should not be making decisions for property owners about how to balance the benefits of trees with other goals and issues such as solar access, views, the ability to have accessory structures, hazard risk, and the cost of tree maintenance.

Based on this dialogue and conversations with elected officials, DPD is proposing to make interim exceptional tree regulations permanent, but implement a number of changes to make them easier to understand, implement and enforce. This approach represents a compromise position between many different opinions, which is intended to preserve the most valuable trees in the city while allowing for a reasonable amount of flexibility for property owners.

Page 7 is a summary of the key changes proposed for exceptional tree regulations and the rationale for each.

## Summary of Changes to Existing Exceptional Tree Regulations

Proposed Changed	Rationale
Modify the threshold for designation as an exceptional tree (from the existing complex definition that varies by species and includes standards for groves, to one in which trees with a diameter of 24" or greater, standing alone or in groups, are designated as exceptional)	The existing definition of exceptional tree has been found to be problematic because property owners could not understand whether they had an exceptional tree on their property without hiring an arborist. Additionally, it made the requirements substantially more difficult to enforce because it was difficult to prove that a tree or trees met the complicated definition after they were removed. These barriers caused concern among property owners and appear to have significantly reduced overall compliance. Analysis by the Green Cities Research Alliance found that about 14% of trees in these areas were 24" or greater excluding parks.
Update criteria for tree removal to include trees that are causing physical damage to buildings or utilities that cannot be mitigated	This appropriately allows for removal of a tree that could cause ongoing damage to a structure or utilities, cause long-term safety issues, and make the City responsible for damages.
Remove the exemption for single-family lots less than 5,000 sq ft in size	Single-family lots less than 5,000 sq ft in size generally provide substantially more room for large trees than multifamily or commercial properties and thus should not be exempted.
Remove the limit on removal of more than three non-exceptional trees per year	This restriction cannot be effectively implemented without requiring a permit for the removal of all trees in order to track and monitor the total number of trees removed for any property. Moreover, this type of regulation only postpones tree removal and in an urban environment it would still allow for clearing of most lots within a couple years. DPD does not recommend requiring a permit for the removal of all trees due to the cost and burden of such a system compared to its likely overall lack of effectiveness.
Clarify criteria for tree removal during development	Existing criteria for removal during development have been problematic because they are too vague to be implemented fairly. Further, in practice, requiring retention of exceptional trees on high-density properties has been difficult without substantially reducing the value of the development potential or creating long-term conflicts with solar access and room for growth, which provides a substantial disincentive for maintaining large trees.

Additionally, DPD is proposing to update the exceptional tree removal approval process in order to make it easier to submit tree removal applications. As part of implementing the new requirements, DPD is proposing to provide an online tree removal application that will allow property owners or arborists to apply without having to go downtown and apply in person. DPD will also be implementing a new tree removal application fee in order to offset the cost to review applications. The initial fee will

be set at the DPD base fee (\$177 in 2011) based on preliminary analysis of estimated review time and will be reevaluated once there are a sufficient number of applications to gauge actual costs.

As an alternative to current planting standards for single-family properties, DPD proposes implementing a flexible landscaping requirement that allows owners to meet overall canopy and environmental goals through tree planting or retention.

Under this proposal, homeowners building new or replaced homes would be required to plant or retain trees sufficient to meet a tree score equal to 1 tree point per 200 sq. ft. of lot area after the first 2000 sq. ft. Tree points would be calculated based on the table below.

The proposed tree points calculations were developed to ensure that each lot would have sufficient canopy cover potential to be able to reach a canopy cover of 26% (the currently canopy cover in single-

### Proposed Tree Point Calculation

Tree Provided	Tree Point(s)
New small species tree	1
New small/medium species tree	2
New medium/large species tree	3
New large species tree	4
Preserved tree 6" and greater	One point for each inch of diameter

### Example Case

Lot size = 6000 sq. ft.  
 Minimum Tree Credit =  
 $(6000-2000)/200 = 20$

#### Sample Planting Plan

Plant one 12" tree = 12 credits  
 Plant one large evergreen tree = 5 credits  
 Plant three small trees = 3 credit

family areas) in 30 years in order to ensure that the impacts of redevelopment are mitigated. The exception for the first 2,000 sq. ft. would minimize the burden on small lots where it would be considerably more difficult to meet these standards. Additionally, a 25% bonus would be given to trees that are evergreen. Small, small/medium, medium/large, and large trees are categorized in the existing Green Factor tree list.

The tree credit system is designed to result in more canopy cover than existing landscaping and exceptional tree retention standards by requiring retention or planting linked to meeting the canopy cover goal. An analysis of 16 single-family parcels that underwent redevelopment between 2003 and 2007, including a review of site plans and aerial photos, demonstrated that, on average, these plans would result in a mature canopy cover of 17%, well below the average canopy cover in single-family areas of 26%. This result suggests that existing regulations are not sufficiently mitigating the impacts of development.

As an alternative to meeting the new tree point requirement entirely on-site, property owners would also be allowed to contribute to a fund dedicated to off-site planting for up to 50% of their requirement. Fee-in-lieu rate would be \$200 per tree point and would be used for planting in the right-of-way or on other private properties through the Trees for Neighborhoods program. If 5% of total points go to fee-in-lieu, it would result in an annual fund of \$180,000.

The single-family tree credit requirement would also be extended to include institutions in single-family zones. To ensure this requirement can be appropriately applied to large campuses, a provision is also proposed that would clarify the scope of the area that would be considered for small developments within a campus setting, similar to a provision that is currently in place for Green Factor requirements. This provision would ensure that small developments within a large campus would not be required to meet the tree credit requirement for the entire campus, just the area around the redevelopment. Major institutions in single-family areas would be required to meet this standard unless their major institution master plan contained specific alternative standards approved by the City.

DPD also proposes to implement a new street tree requirement for developing lots in single-family zones. Modeled on existing requirements in multi-family and commercial zones, applicants would be required to plant street trees "according to Seattle Department of Transportation (SDOT) Tree Planting Standards, unless it is not possible to meet the standards" when lots are developed or homes

are rebuilt or replaced. Preservation of existing street trees counts toward meeting the street tree requirement. SDOT, which is responsible for the review of all street tree permit applications, would also be responsible for determining the size, species, and location of street trees based on the Right-of-Way Improvements Manual standards, location of utilities, and site access requirements. The process for allowing departures to height, setbacks, and parking in order to preserve a large tree is also proposed to be modified in order to make it easier for applicants to use. Currently, departure requests in lowrise, Midrise, and commercial zones can only be authorized through the Administrative Design Review (ADR) process. Undertaking ADR for projects that are not already required to go through Design Review can add 3-6 months to the length of a permit process, which is a disincentive to using this provision. To reduce this disincentive, the proposal would allow DPD to make this determination without going through ADR where Design Review is not otherwise required.

Industrial areas pose particularly difficult challenges for tree planting due to the requirements of transportation infrastructure and the need for low-cost, flexible space that is able to accommodate a variety of storage, staging, and manufacturing uses. For example, many businesses accommodate heavy trucks and need open outdoor spaces that will not impede truck flow and can still be used for storage or other uses. Prescriptive tree requirements could substantially burden these properties by conflicting with the core needs of industrial users. One opportunity that has been identified within these areas are commercial or retail buildings, which are not subject to the same concerns as industrial properties and already effectively accommodate trees when located in other zones. Consequently, DPD proposes a Green Factor requirement for principal commercial and retail uses that add more than 4,000 sq. ft. of new floor area in industrial zones. A Green Factor requirement would provide for substantially more environmental function in these areas while allowing flexibility to consider options that would not negatively impact adjacent industrial uses in the area.

DPD is also proposing to update the enforcement provisions of the Tree Protection Code to improve the effectiveness and reduce the cost of enforcement. DPD is still in the process of drafting specific provisions and will have more details shortly.

## Conclusion

The proposed amendments to City regulations governing the planting and removal of trees on private property constitutes a comprehensive update of existing tree regulations in order to implement lessons learned from existing regulations, align existing development regulations with city-wide canopy cover goals, and implement new opportunities for expanding the city's tree canopy cover.

Overall, the recommendations are likely to result in substantially greater canopy cover potential by:

- Making existing exceptional tree regulations more effective;
- Applying more rigorous landscaping standards during construction; and
- Expanding the scope of existing regulations, such as to institutions in single-family zones and retail and commercial uses in industrial zones.

At the same time, the proposed amendments remove less effective provisions and streamline others in order to make the process more consistent and equitable and to ensure that trees are not seen as a burden to property owners. DPD believes that this proposal represents a reasonable balance between canopy cover goals and other City goals related to the environment, growth management, transportation, housing affordability, and urban design. The proposal also balances citywide goals with personal property goals for solar access, solar energy, and other aspects of property management. DPD believes that in conjunction with expanded education and incentives, these regulations will enhance and expand the urban forest in Seattle consistent with our overall goals for creating a more livable and sustainable community.