

**SEPA Draft Director's Report
Tree Protections Update
February 11, 2022**

INTRODUCTION

The Seattle Department of Construction and Inspections (SDCI) in consultation with the Office of Sustainability and Environment (OSE) have prepared draft updates to the Land Use and Tree Protection Codes that would implement the strategies from [Resolution 31902](#) adopted September 16, 2019 to increase tree protection consistent with the goals and policies of the [2015-2035 Comprehensive Plan](#) and the [2020 Urban Forest Management Plan \(UFMP\)](#). Throughout this work, the Urban Forestry Commission (UFC) has been engaged about tree protection needs, potential strategies and has provided input to SDCI and OSE. This draft legislation would respond to the direction in the resolution from City Council and allow for the expansion of the tree protections by accomplishing the following:

1. Expand the types and sizes of trees that are regulated, including a new definition of significant trees;
2. Apply replacement requirements to include significant trees 12 inches in diameter and larger;
3. Simplify provisions, including allowing development standards to be modified to aid in tree preservation as an administrative process without requiring Design Review, while maintaining Design Review as an option in multifamily and commercial zones;
4. Establish a payment option for tree replacement (payment in lieu);
5. Support tracking of tree preservation, removal, and replacement;
6. Increase penalties for violations of tree regulations.

BACKGROUND

Overview of existing tree categories (Seattle Municipal Code Chapter 25.11) on private property:

- “Exceptional” trees: The most ecologically and culturally important trees in the city, defined primarily by species and trunk size. Current rules protect these types of trees from removal unless they are hazardous or if removal is necessary to achieve the full development potential of a site. If removed for development, tree replacement is required, to result in canopy cover that is at least equal to the canopy cover prior to tree removal.
- “Significant” trees: Trees over 6 inches in diameter that are not already considered exceptional. These trees are an important component of the city’s canopy. Current rules limit the number of these trees that can be removed in single-family zones unless development is proposed.
- “Heritage” trees: Trees that have been given special designation by the Heritage Tree Program, co-sponsored by Plant Amnesty and Seattle Department of Transportation.

- Other: Trees under 6 inches in diameter are not regulated or protected unless located in an environmentally critical area.

History of Tree Protections

A summary timeline of tree protection legislative efforts including the development and establishment of plans, programs, interim regulations, and amendments is provided below:

- **2007:** The Urban Forest Management Plan was adopted by the City Council and establishes the goal of increasing the City's tree canopy. The plan tasked the Department of Planning and Development (DPD) (now SDCI) with evaluating the existing tree codes that govern private property. The City formed the Emerald City Task Force in 2007 and by the end of that year, the Task Force submitted a letter to the City recommending tree code changes. Following the Task Force's recommendations, DPD began the review of all current regulations, and developed and proposed new ones.
- **2008/2009:** Mayor Nickels proposed interim tree regulations in September 2008, which the City Council adopted in February 2009. The interim regulations were intended to be in place until new permanent regulations are adopted.
- **2009:** On May 15, 2009, the Office of City Auditor issued a report making recommendations on how to improve the City's management of trees. The report found that the City's current tree management framework needed to be strengthened to ensure that the entities established in the Urban Forest Management Plan are operational and effective in supporting and sustaining the City's urban forestry goals. Recommendations included a stronger cooperation and coordination between stakeholders to resolve conflicts; increased emphasis on public outreach and education; a tree inventory for making sound resource management decisions; and development and enforcement of new tree regulations to protect and increase Seattle's tree canopy.
- **2011-2012:** Under Mayor McGinn, DPD produced two drafts of tree code updates in 2011 and 2012. Those efforts did not move forward.
- **2011:** On September 20, 2011, the Office of City Auditor issued a status report on the implementation of audit recommendations made between 2007 and June 2011. The findings of this assessment showed that of the 13 recommendations made in the 2009 report, 11 had either been implemented by that time, or no further follow-up was planned. The two remaining recommendations were related to tree regulations: the City should adopt new tree regulations for tree protection on private property, and DPD needs to conduct an analysis to determine resource needs for implementing the new tree regulations. The report cites a timeline of 2012 for implementation of these remaining recommendations.
- **2017-2018:** On August 1, 2018, the City Council's Planning, Land Use, and Zoning Committee (PLUZ) was briefed on a draft bill to replace the tree code with new regulations prepared by Central Staff in consultation with SDCI and OSE. The Urban Forestry

Commission (UFC) made comments and recommendations on the new tree regulations in a letter to Mayor Durkan. The environmental review (SEPA) for the bill was appealed by tree advocates and the City Council tabled the draft bill.

- **2018:** In response to a 2016 Directive issued by Mayor Murray, which called for a “new urban forestry coordination structure to enhance urban forestry services”, the City’s urban forestry departments collaborated to bring the numerous existing programs together under the Trees for Seattle umbrella, the overarching initiative for the City’s urban forestry work.

City departments further collaborated to create a [Trees for Seattle Charter](#) which clarifies the goals, structure, responsibilities, and membership of the different groups responsible for urban forestry work. The resulting system consists of a Management Team, a Core Team, and an Inter-Departmental Team to work together to strengthen Seattle’s urban forestry work across all levels and relevant departments of City government. Issues identified by these groups are elevated to Department Directors and the Mayor’s Office as needed. In addition, the City developed and implemented [Trees for Seattle](#), a holistic one-stop public-facing website focused on coordinating planning, communications, customer service, and relevant operational efforts.

- **2019-2021:** Mayor Durkan and City Council adopted [Resolution 31902](#) on September 16, 2019. The resolution directs SDCI and OSE staff to explore strategies to protect existing trees, increase Seattle’s tree canopy, and balance City goals to support future growth and density as provided in the City’s Comprehensive Plan. The resolution also asks for quarterly reports to the Chair of the Land Use and Neighborhoods (LUN) Committee. Per resolution, the SDCI and OSE team have presented a total of twelve briefings to LUN from February 12, 2020, to date.

Resolution 31902

The resolution is a declaration of the City Council’s and Mayor Durkan’s intent to consider strategies to protect trees and increase Seattle’s tree canopy cover. The first part of the resolution introduces key values including the need for balancing tree protections with other City priorities and increased equitable distribution of tree benefits as follows:

- That the City desires a healthy urban forest that promotes a clean, healthy, resilient, and safe environment in places where people live, learn, work, and play;
- That the City values the important services and tree benefits that the urban forest provides to all of Seattle residents;
- The City’s existing canopy cover in single family residential areas is 28 percent and the current canopy cover goal is 30 percent by 2037;
- The City seeks to balance its goals of tree protections while supporting future growth and density; and
- That there is a need for tree benefits to be more equitably distributed citywide to prioritize and center the needs for residents of low-income and low-canopy neighborhoods

Resolution 31902 states that the strategies should prioritize the needs of low-income and low-canopy neighborhoods. The strategies listed in the resolution, which Executive staff are asked to explore, are as follows:

- A. Retaining protections for exceptional trees and expanding the definition of exceptional trees.*
- B. Adopting a definition of significant trees as trees at least 6 inches in diameter, and creating a permitting process for the removal of these trees.*
- C. Adding replacement requirements for significant tree removal.*
- D. Simplifying tree planting and replacements requirements, including consideration of mitigation strategies that allow for infill development while balancing tree planting and replacement goals.*
- E. Reviewing and potentially modifying tree removal limits in single-family zones.*
- F. Establishing an in-lieu option for tree planting.*
- G. Tracking tree removal and replacement on both public and private land throughout Seattle.*
- H. Providing adequate funding to administer and enforce tree regulations.*
- I. Requiring all tree service providers operating in Seattle to meet minimum certification and training requirements and register with the City.*

Relationship to Other Citywide Plans, Recommendations

There is a consistent and supportive relationship between the City's Urban Forestry Commission [recommendations](#), the [2020 Urban Forest Management Plan](#), the [2015-2035 Comprehensive Plan](#), and the strategies in [Resolution 31902](#). Both the UFMP and the Comprehensive Plan contain wide-ranging goals and policies that are consistent with citywide urban forestry practices and regulations that support other City and community goals. The UFC recommendations provide additional backing and advice to support the shared goals in those guiding documents for increasing tree protections.

Urban Forestry Commission (UFC) 2019 Recommendations

The UFC advises the Mayor and City Council on issues concerning the establishment of policy and regulations governing the protection, management, and conservation of trees and vegetation.

On [October 9, 2019](#), the Commissioners recommended the following actions:

- Expand permit program
- Certify tree service providers
- Replace significant trees
- Track changes in the urban forest
- Protect exceptional trees, groves, and trees on undeveloped lots
- Encourage tree retention on already developed lots
- Fund and enforce

2020 Urban Forest Management Plan (UFMP)

This plan prepared by the City's Urban Forestry Core Team developed a set of overarching outcomes to guide urban forestry work in the next five years. These outcomes were informed by an inclusive engagement process. The UFMP has six outcomes that were prepared to represent a comprehensive approach to mobilizing informed and effective action:

1. Racial and social equity. Urban forestry benefits and responsibilities are shared fairly across communities, community trust is built, and decisions are guided by diverse perspectives, including those of environmental justice priority communities.
2. Ecosystems and human health. The urban forest improves air quality, human well-being, public health and water quality; provides beauty, environmental and economic benefits, fish and wildlife habitat, food, outdoor fun; and helps store rainwater.
3. Human safety and property protection. In implementing the work, urban forestry teams use up-to-date practices to protect the safety of the public and staff.
4. Climate change. Urban forestry work helps people, and urban trees and vegetation adapt to, recover from, and mitigate the impacts of climate change.
5. Community care. The Seattle community, including all people, organizations, institutions, and businesses, works together to appreciate and care for the urban forest and to understand tree protection regulations.
6. Balance competing priorities. City government will work to grow, maintain, preserve, enhance, and restore Seattle's urban forest as it meets other priorities.

Urban forestry practices and policies work with and support other City and community goals including access to spaces, climate action, culturally appropriate resource provision, economic development, environmental protection, social justice, food and medicine production, housing, balancing tree shade with light, public safety, recreation, transportation, and utility provision. The UFMP acknowledges that tree benefits and responsibilities should be shared across communities and that the City will work to grow, maintain, preserve, enhance, and restore Seattle's urban forest as it meets other priorities.

The above stated outcomes and associated strategies were used to develop the specific actions included in the action agenda of the plan. The UFMP contains 19 actions to be undertaken within the next five years. These actions are in addition to and build upon the ongoing work of city departments.

Seattle 2035: Comprehensive Plan

This overarching plan prepared by the Office of Planning and Community Development (OPCD) in consultation with all city departments is a [comprehensive collection of City-adopted goals and policies](#) about how the City will accommodate growth over the next twenty years. Generally, the goals stated in the Comprehensive Plan define a future outcome that the City is aiming for, and the policies in the Plan provide guidance for more specific decisions that will be made over time. Washington's Growth Management Act (GMA) requires most counties and cities to prepare comprehensive plans that show how they will manage the population growth

that the state has projected for each county. The GMA defines a set of goals for managing growth and lays out the basic contents of comprehensive plans: The GMA goals include reducing urban sprawl, encouraging future development to occur in urbanized areas where public facilities and services already exist, maintaining transportation, housing, and open space opportunities, protecting property rights, and protecting the natural environment. Consistency with applicable Comprehensive Plan policies is discussed later in this report.

PROCESS

As part of Seattle's 2020 UFMP Update and per Resolution 31902, SDCI evaluated the existing tree protection regulations that govern private property and explored the strategies for increasing protections outlined in the resolution with subject matter experts in the Department, OSE, City Urban Forestry teams and the Urban Forestry Commission. Because it was also important to hear from community regarding potential strategies, SDCI and OSE conducted public outreach processes. Through October 2021, SDCI and OSE obtained feedback on strategies in the Resolution from BIPOC communities, as well as community organizations, environmental groups, builders, homeowners, tree service providers, and real estate agents. Feedback received helped identify and understand community and stakeholder interests and priorities that shaped and informed the recommendations.

To do this, SDCI and OSE used a two-pronged approach to the community engagement. One approach included an interdepartmental partnership with the Department of Neighborhoods' Community Liaisons to conduct culturally appropriate engagement in their own language targeting the needs and input of low-income and low-tree-canopy neighborhoods. The other approach focused on engaging other key stakeholders to hear their input through online listening sessions. In order to both collect input to inform the recommendations and allow time for more inclusive engagement, SDCI and OSE chose to conduct these two phases concurrently. This work took place between July and October 2021. A summary report and meeting notes are available on the [Changes to Code - Tree Protection website](#).

DRAFT ORDINANCE SUMMARY

The draft ordinance and updated business practices address five topics that would achieve goals laid-out in Resolution 31902 and fall into five major categories:

1. Allow for tracking of tree-related work through a tree service provider registration and service provider and property owner self-reporting (Not in the SDCI draft ordinance. For trees service provider registration provisions see C.B. 120207);
2. Expand the definition of an exceptional tree by lowering the threshold from 30" to 24" as measured by diameter at standard height (DSH) which is a standard method of expressing the diameter of the trunk of a tree measured at approximately 4.5 feet above ground) and adding tree groves, and heritage trees;

3. Define “significant tree” as any tree that has a DSH of six inches or greater and is not defined as an exceptional tree;
4. Allow for a payment option (voluntary payment-in-lieu) when tree replacement is required; and
5. Simplify processes and update enforcement provisions for tree regulations.

The five topics are described in more detail in the remainder of this report.

1. Tree service provider registration and service provider and property owner self-reporting

Resolution Strategies Addressed:

- B. Adopting a definition of significant trees as trees at least 6 inches in diameter, and creating a permitting process for the removal of these trees.
- G. Tracking tree removal and replacement on both public and private land throughout Seattle.
- I. Requiring all tree service providers operating in Seattle to meet minimum certification and training requirements and register with the City.

Tree service provider registration

The purpose of the registry proposed by the City Council in Council Bill 120207, separate from this SDCI proposal, is to help ensure compliance with tree regulations and industry best practices by tree service providers. A proposed acknowledgment affidavit would serve as an additional enforcement mechanism when a tree service provider violates the tree code. Tree service providers are subject to penalties under the existing and proposed codes for violations of the code. In addition, as part of this bill, if a tree service provider has been issued more than one notice of violation of regulations for exceptional tree removal will not be eligible to provide tree services on regulated trees or consult on development permit applications. Service providers found to be ineligible would be required to reapply to do business in Seattle with SDCI. Benefits and burdens for this recommendation are provided in Table 1.

TABLE 1 - Tree Service Provider Registration

Benefits	Burdens
<ul style="list-style-type: none"> • Increases quality of work performed • Supports tracking of tree removals and violations • Increases City’s ability to add more educational opportunities and trainings for tree service providers • Creates clear, concise requirements for registration compliance which allows for better customer service • Registry idea was supported by majority of stakeholders • Increases awareness of the existing tree codes and thereby protects more trees by reducing code violations and enforcement actions 	<ul style="list-style-type: none"> • Adds a new requirement for tree service providers to register with City prior to doing business in Seattle • Education and trainings are necessary for a successful registration program and care must be given to be inclusive to all tree service providers so that everyone understands and can comply with the new requirements (i.e.- language translation) • Increased regulatory requirements might impact BIPOC companies more than others (i.e. – requirement to have a full-time certified arborist that is TRAQ qualified on the payroll)

Property Owner Self-Reporting

SDCI would also establish a voluntary reporting website for property owner-conducted tree removals rather than the permit requirement included in the resolution strategy. Trees are removed outside of development by property owners for many reasons including yard maintenance and to increase solar access for a garden or for power generation. One strategy (Strategy B) in the resolution requests exploration of whether the City should regulate tree removal outside of development and require a permit. Currently no permits are required of property owners for the removal of up to three non-exceptional trees per year. The proposal would limit the size of the three trees allowed to be removed to those under twelve inches in diameter (see Topics 2 and 3).

The benefits and burdens of self-reporting are summarized in Table 2.

TABLE 2 - Property Owner Self-Reporting

Benefits	Burdens
<ul style="list-style-type: none"> • Maximum flexibility for property owner • Allows City to track reported tree removals • Educates property owners about how tree code applies to them • No cost to property owner • Provides more complete data for future policy analysis 	<ul style="list-style-type: none"> • No direct control of private property trees • No fees collected to support SDCI review/inspection • May not be a complete reporting of tree removal activities

Why is the tree removal permit not recommended at this time?

Fundamental to the strategy is the broader question of whether the City should implement a tree removal permit requirement to manage tree removal on private property outside of development compared with the practicalities and costs.

It is estimated that an unsubsidized tree removal permit with basic review and approval would cost the property owner about \$394 per hour for review by SDCI arborists and a flat fee of \$200 with an inspection and no public notice. SDCI provided public notice would add an additional flat fee of \$143. The average amount of time for tree reviews is three hours therefore the cost to the property owner would be \$1,182 for the basic review and a total average review fee of \$1,524. If more time is needed for review, the cost will increase by \$394 for each additional hour spent.

While a new tree removal permit process may improve control over tree removal decisions, the strategy as raised in the Council resolution also raises significant questions about the effectiveness, enforceability, cost, and necessity of such an expansion of government oversight for which SDCI would need additional staff to administer and enforce. Table 3 below is a basic overview of the benefits and burdens of a tree removal permit requirement.

TABLE 3 – Tree Removal Permit Requirement

Benefits	Burdens
<ul style="list-style-type: none"> • Allows greater control of tree removal • Opportunity for education about benefits of trees, alternatives to removal, or replanting • Opportunity to slow tree removal through increased scrutiny of removal restrictions • Opportunity to require new planting • Opportunity to track tree removal • Impediment may force some applicants to “think twice” about tree removal 	<ul style="list-style-type: none"> • Limits property owner flexibility to consider solar access, solar energy, gardens, aesthetics, accessory structures, views, access, maintenance, root damage, risk, etc. • Difficult to enforce • Cost of permits to property owner (permit + time) • Cost of City general funded enforcement (enforcement staff + arborist + court cases) • Cost to property owners for penalties for failure to get permit • Equity issues: difficult for immigrants, or low-income communities to understand regulations and pay fines • Unintended consequence of property owners removing trees before they are 6” in diameter

Additionally, SDCI is not recommending at this time implementation of the following strategy requested by Council: E. Reviewing and potentially modifying tree removal limits in single-family zones.

The current limit is three nonexceptional trees per year. SDCI would use data received and reported by tree service providers and property owners under this proposal to inform any future consideration of this request.

How tree service provider registration and service provider and property owner self-reporting would work

Prior to doing any tree work/removing any tree, the tree service provider performing the work would be required to register with SDCI. The self-reporting is also an online process.

Property owner self-reporting process

Online entry for tree service provider registration and service provider and property owner self-reporting would include uploading a site plan or placing tree locations on a pre-formatted site plan using a SDCI-provided GIS tool. The GIS tool *could* feed X-Y coordinates for each tree to the Tree Tracking System, and tree tracking reporting could then use a similar tool to create a printed or online site map for use in future policy making.

The applicant is the person responsible for filling out and completing all the required information on the form including acknowledging that they understand what the requirements are for doing tree-related work on private property. This form will be made accessible and available online as well as in a printed format at the City's Public Resource Center located on the 20th floor of the Seattle Municipal Tower. The form will be translated into the top tier languages most widely used in Seattle. (Refer to draft [Tree Care Providers Acknowledgment Form](#)).

Tree service providers must be approved by SDCI prior to doing any tree-related work on private property. The form will be provided to the applicant at the very beginning of the permit process and will be available online. The document could be set up as an e-signature linked to Accela and/or as a separate form that is uploaded by the applicant before they submit their application in the Seattle Services Portal.

The list of registered tree service providers would be hosted on the SDCI webpage. The SDOT webpage would be the template¹. Additional information that must be included are links to all updated SDCI tree-related Tips, the [Street Tree Manual](#) and the [ANSI 300 standards](#) for tree care to ensure that in cases where there are privately owned street trees located within the street right-of-way those trees are coordinated to be protected through SDOT. Prior to implementation, a new webpage would need to be developed to provide general education on how to care for trees as well as information to the public about this new submittal requirement. Internal staff training would be compulsory to ensure that all staff are aware that there is a new requirement for tree care providers operating in the City. SDCI arborists would conduct a joint effort with SDOT for the initial launch and training.

If a tree care provider gets a notice of violation for illegal removal of an exceptional tree, then that will be noted in the registry. SDCI staff would monitor the list on the website of tree service providers that are in good standing. The "suspension" would occur automatically when SDCI issues a Notice of Violation to a tree service provider.

¹ <https://www.seattle.gov/transportation/projects-and-programs/programs/trees-and-landscaping-program/registered-tree-service-providers>

Registered tree service providers will be required to comply with industry best practices for tree removal such as found in an industry standard manual.

Summary of tree service provider registration and service provider and property owner self-reporting

Many of the goals and benefits can be achieved (and burdens mitigated) from Tables 1 and 2 by tree service provider registration and service provider and property owner self-reporting. These include improvement of the management and quality of commercial tree service tree removal outside of development and additional assistance for SDCI in obtaining tree tracking documentation to understand better what is happening outside of development.

2. Expand the definition of an exceptional tree by lowering the threshold from 30” to 24” as measured by diameter at standard height (DSH) and add tree groves, and heritage trees.

Resolution Strategy Addressed:

- A. Retaining protections for exceptional trees and expanding the definition of exceptional trees.

Currently, over 70 species of trees are considered exceptional (and thus protected from removal) once they reach a certain [size](#). While a few species with smaller trunks, such as Madrona and Spruce, are exceptional once they are 6”, most species must be much larger.

This would lower the exceptional tree threshold from 30” to 24” as measured by diameter at standard height (DSH) and would add tree groves and heritage trees. Heritage trees are cataloged by Plant Amnesty and SDOT. This change would result in more trees regulated in the Tree Protection Code at the uniform diameter of 24”. All other tree size considerations included [Table 1 of Director's Rule 16-2008](#) defining exceptional trees remain the same and retain their exceptional tree status.

Benefits and burdens are included in Table 4.

TABLE 4 – Expanding the Definition of Exceptional Trees

Benefits	Burdens
<ul style="list-style-type: none">• Preserves more established large, mature trees which have the greatest environmental benefits; removes invasive species from list• Increases clarity for improved customer service and compliance with tree code• Clarifies both heritage trees and tree groves are regulated as exceptional trees• Helps accomplish citywide canopy coverage goals faster when preserving or requiring replacement for more large, mature trees than the current code	<ul style="list-style-type: none">• Large, mature trees can be expensive to care for and maintain, especially for low-income and BIPOC residents• Could lead to longer permit review times as more development proposals would become subject to tree code review• Increases to cost of tree replacement as more tree removals would require mitigation

3. Define “significant tree” as any tree that has a DSH of six inches or greater and is not defined as an exceptional tree

Resolution Strategies Addressed:

- B. Adopting a definition of significant trees as trees at least 6 inches in diameter, and creating a permitting process for the removal of these trees.
- C. Adding replacement requirements for significant tree removal.
- D. Simplifying tree planting and replacement requirements, including consideration of mitigation strategies that allow for infill development while balancing tree planting and replacement goals.

Define “significant tree” as any tree that has a DSH of six inches or greater and is not defined as an exceptional tree

Currently, there is no definition for significant trees and no replacement requirements in the existing regulations. This draft ordinance creates this category, the purpose of which is to trigger the reporting and registration requirements outlined in Item 1 (at the 6” threshold up to under 12”), and to require replacement (at the 12” threshold and larger) during development as outlined here and detailed below.

Significant trees and tree replacement requirements

The draft ordinance would require any significant tree 12 inches or greater in diameter removed as part of development to be either replaced on-site or mitigated by payment in-lieu of replacement, unless hazardous. This would allow for a property owner to remove up to three smaller diameter trees per year that are under 12 inches in diameter outside of development, which aids and supports a private property owner’s decision such as to have a garden and/or increase solar access.

Tree replacement requirements would continue to be based on the size of the tree removed as well as the proposed payment option. The replacement requirements are:

- Each exceptional and significant tree that is removed in association with development in all zones shall be replaced by one or more new trees, the size and species of which shall be determined by the Director; and
- The tree replacement required shall be designed to result, upon maturity, in a canopy cover that is at least equal to the canopy cover prior to tree removal.
- Preference is for onsite replacement. When onsite replacement cannot be achieved, or is not appropriate as determined by the Director, preference for offsite replacement is on public property.

Ecological Function

In addition to creating new and updating existing definitions of tree categories, the draft ordinance would give SDCI arborist staff discretion to evaluate the ecological function of significant trees over 12 inches in diameter and all exceptional trees and potential exceptional

trees and determine the likelihood that the trees will live to maturity due to factors including but not limited to:

1. Health and physical condition;
2. Development site constraints such as proximity to existing or proposed development, access and utilities, soil conditions, and solar access;
3. Environmental conditions external to the development site such as the likely occurrence of disease or insect infestation, landslide, or high water table.

Ecological function would be used to further determine whether trees in these two categories would be required to be protected or if allowed to be removed, replaced according to the provisions of the tree code as described above.

Analysis of tree regulation by Items 2 and 3

SDCI worked with Seattle IT and OSE to estimate the number of lots that would be regulated by the tree code due to the change from a 30” to a 24” diameter at standard height (DSH) threshold for exceptional trees. The analysis also looked at the effect of using a threshold of significant trees at a 12” DSH. The GIS analysis employed the City’s 2016 tree canopy layer, SDCI’s lot and zoning layers, statistics from a U.S. Forest Service study of tree canopy DSH distribution in 30 US cities, and an Accela query of SDCI tree reviews in 2020 and 2021.

The proposal to expand the definition of an exceptional tree by lowering the threshold from 30” to 24” as measured by diameter at standard height (DSH) and add tree groves and heritage trees would result in the regulation of about 22,400 trees. Residential and commercial zoned lots containing exceptional trees would rise from 4% to 5%.

The proposal to expand the range of regulated trees for newly defined significant trees with 12” diameter or larger and exceptional trees, would result in the regulation of about 70,400 trees. Residential and commercial lots containing regulated trees would rise from 5% to 16%. The analysis of tree regulation by Items 2 and 3 is shown in Table 5.

TABLE 5 – Analysis of tree regulation by Items 2 and 3

Existing tree regulation compared to proposal	Percentage of lots* to be regulated during development	Number of trees** to be regulated during development	Number of permit applications per year estimated to include a tree code review***
Regulating using existing definition of exceptional trees (varies by trunk size and species)	4% of lots in applicable zones	17,700 trees	580 permit applications
Regulating with an expanded definition of exceptional trees (most at 24” or larger); groves and heritage trees	5% of lots in applicable zones	22,400 trees	740 permit applications
Regulating trees 12” and larger plus exceptional trees	16% of lots in applicable zones	70,400 trees	2,300 permit applications

* The total number of approximately 162,000 applicable lots are in single family, multifamily and commercial zones.

** Estimated total number of trees 6” and larger on private property in the applicable zones: 175,000.

***These are likely existing permit applications for development that would be subject to review pursuant to the Tree Protection Code under Recommendations 2 and 3.

There are no replacement requirements for significant trees in the current tree code. Under this draft ordinance, there would be new replacement requirements for these trees at 12”, resulting in increased tree canopy. There would also be flexibilities in the provisions to allow for an option to make a payment in-lieu when mitigation is not feasible on-site (described in Item 4)

Benefits and burdens Items 2 and 3 are included in Table 6.

TABLE 6 – Regulating trees as part of development at 12 inches or greater for significant trees and the expanded definition of exceptional trees.

Benefits	Burdens
<ul style="list-style-type: none"> • Replacement requirement would help offset the loss of environmental tree benefits caused by the removal of the trees • Mitigation would help City reach canopy coverage goals faster than without any mitigation for tree replacement • Maintaining tree removal limits in combination with the “Right Tree, Right Place” guidelines based on ecological benefits of the tree allow for increased flexibility for builders and property owners • Mitigation trees planted in public right-of-way in BIPOC communities help address environmental justice and lessen historical inequities of reduced public health benefits due to lack of trees and lower tree canopies • New replacement trees provide an opportunity to improve the age and species diversity and overall health of the urban forest over time increasing environmental tree benefits citywide • Helps the City keep track of trees removed, replanted, and preserved • Removes uncertainty for property owners and builders when requirements are clearer and more understandable 	<ul style="list-style-type: none"> • Education and continued BIPOC outreach are necessary to help everyone understand what is required for compliance with the new requirements (i.e.- language translation) • Increased regulatory requirements • New, small trees are more vulnerable to damage and require care until they are fully established • New requirements add costs for property owners and builders; For mitigation of trees removed, BIPOC property owner would bear the highest impact because cost of replacement trees in-kind are the same for everyone regardless of income level when purchasing a replacement tree at a local nursery; One consideration is to partner with SPU’s tree giveaway program to mitigate the cost of replacement trees in-kind for low-income and/or BIPOC property owners. • Residents will bear the burdens of caring for newly planted mitigation trees on private property (i.e. – pruning, removal of leaves, gutter cleaning of debris, fertilizing)

4. Allow for a payment option (voluntary payment in-lieu) when tree replacement is required

Resolution Strategies Addressed:

- D. Simplifying tree planting and replacement requirements, including consideration of mitigation strategies that allow for infill development while balancing tree planting and replacement goals.
- F. Establishing an in-lieu fee option for tree planting.
- G. Tracking tree removal and replacement on both public and private land throughout Seattle.

Establish an in-lieu payment option for tree replacement

The draft ordinance includes provisions to allow development permit applicants to have the option to make a payment in lieu of planting trees onsite. A combination of planting trees onsite, offsite and/or payment in-lieu would be allowed provided that the results are equivalent to or greater than the minimum requirements for onsite tree plantings.

The payment in-lieu funds would be paid to the City as part of the development permit process. The payment in-lieu funds could potentially be used to support tree planting in low-canopy neighborhoods, many of which are BIPOC communities.

The payment would be calculated based on the Guide for Plant Appraisal, published in 2018, 10th edition, authored by the Council of Tree and Landscape Appraisers. The method is as follows:

- Nursery purchase price / square inches of the nursery tree = unit cost to replace tree
- Square inches of tree removed X unit cost to replace the tree = payment in-lieu amount
- Nursery purchase price = the average price of five common trees found on sites in Seattle per survey from area nurseries.
- Square inches of the nursery tree = the average size of replacement tree per survey from area nurseries.

An example of minimum (cost of (2) two-inch caliper replacement trees) and maximum payment (functional replacement using tree trunk area of the removed tree) calculated using the method outlined above for removal of two categories of trees is shown in Table 7 below.

TABLE 7 – Proposed Payment Categories

Proposed payment categories	Required mitigation	Payment In-Lieu*
Regulating significant trees 12” and larger (not exceptional)	Cost of (2) two-inch diameter replacement trees	\$436
Regulating with an expanded definition of exceptional trees (most at 24” or larger); groves and heritage trees	Cost per square inch of trunk for each tree removed	\$59.55/square inch

*These amounts represent a range of possible payment choices from a minimum (cost of (2) two-inch diameter replacement trees) to a maximum (cost per square inch of tree trunk area of the removed tree) based on SDCI’s tree cost assessment manual and tree pricing from regional nurseries. Policy decisions can be made to adjust the payments relative to the cost of direct replacement and policy goals to be achieved. Additional City costs may be covered by the payment in addition to what is shown in Table 7 such as to cover establishment of planted trees for a period, likely three to five years.

TABLE 8 – Examples of payments at different levels under the maximum charge shown in Table 7

Sample Size of Tree Removed	Max Payment	Payment at 30% max	Payment at 50% max	Payment at 75% max
At least 14 inches in diameter	\$9,162	\$2,749	\$4,581	\$6,872
At least 24 inches in diameter	\$26,926	\$8,078	\$13,463	\$20,195
At least 30 inches in diameter	\$42,072	\$12,622	\$21,036	\$31,554

Considerations in setting payment levels and recommendation for PIL amounts

The draft payment in lieu and future updates take into consideration key policy decisions related to setting the appropriate payment levels and cost recovery for City departments that may plant trees. One policy intent behind the existing and proposed tree codes is to prefer tree retention

and on-site replacement if it is feasible and desirable. As such, the price for payment should be comparable to direct replacement as well as to factor in the benefit to the builder to have the flexibility to meet their tree regulation requirements off-site. Thus, the amounts set for payment and off-site planting should be higher than direct replanting. In addition, the payment amount should be less than the financial penalty for illegal tree removal. Illegal tree removal penalties are set using a similar formula as is included in the draft ordinance for payment in lieu and are similar to the maximum amount shown in the table above.

Therefore, the draft payment for the small tree category is set to the minimum necessary to purchase two appropriate sized trees at regional nurseries and the large tree category is set to a draft payment at thirty percent of the maximum at \$17.87 per square inch of trunk area for the tree to be removed. These amounts do not yet account for other City of Seattle costs related to planting, such as tree establishment, and will likely be updated in the future. The draft amounts are roughly comparable to what is charged by the City of Portland, OR.

Benefits and burdens for this are included in Table 9.

TABLE 9 – Establishing an In-Lieu Payment Option

Benefits	Burdens
<ul style="list-style-type: none"> • Payment in-lieu would provide resources for planting new trees in low canopy areas including BIPOC neighborhoods to lessen environmental disparities and inequities • Adds flexibility for new development when there is not enough soil volume and space available to plant trees onsite and/or property owner's preference is to replant trees elsewhere to allow for a garden or solar access, etc. • Provides an opportunity to improve the age and species diversity and overall health of the urban forest over time increasing environmental tree benefits citywide • Use of funds to plant trees on City managed property increases the likelihood that trees will live to maturity. 	<ul style="list-style-type: none"> • Payment in-lieu may result in tree replacement in an area of the city that is different from the area in which a tree was removed.

How payment in-lieu would work

During review of a project, a SDCI plan reviewer would review the landscaping plan. If the applicant selected the payment in-lieu option, SDCI then would add the required payment to their permit application records in SDCI's online permit system. Payment would be required at the same time as permit fees to receive a building permit. The payment would be used for tree

planting. Tree planting would not be required to meet any specific distribution requirements or plant trees within a specific distance of any site that used the payment-in-lieu option; however, it would be an overall goal of the planting to achieve an equitable spread of funds throughout the city with a targeted focus on communities with lower tree canopies, including BIPOC communities. Records will be kept by the City to confirm that the funds were expended consistent with state law.

5. Simplify processes and update enforcement provisions for tree regulations

Resolution Strategy Addressed:

- D. Simplifying tree planting and replacement requirements, including consideration of mitigation strategies that allow for infill development while balancing tree planting and replacement goals.

Simplify processes and update enforcement provisions for tree regulations

Increased education and information

Some of the draft code provisions would require updated Director's Rules as well as revised SDCI Tips. As stated in previous sections, education will also be a top priority to help applicants better understand the value of preserving trees, the implications of tree removal impacts and the importance of planting trees.

Updated and new tree review processes

As part of this item, a simpler review process would be used to review proposed actions related to trees during development through a change from a Type 1 (a permit type that is not appealable to the City's Hearing Examiner) Design Review to a Type I administrative review. Emergency actions are more clearly delineated in the proposal. New code provisions would require that all emergency tree removals must have an extreme risk rating prepared by a TRAQ qualified certified arborist. This means that approval from SDCI is required in advance of hazardous tree removal unless it is an emergency action. Lastly, proposed updates would require a tree risk assessment for hazardous tree removal and that rating must be extreme or high risk to receive approval from SDCI to allow complete removal.

Increased penalties for violations of the Tree Code

This draft ordinance increases the penalties that are currently applied for illegal tree removal by 50%. This is intended to serve as an increased deterrent to violating tree regulations.

Benefits and burdens for this item are included in Table 10.

TABLE 10 – Simplifying Processes and Updating Enforcement Provisions

Benefits	Burdens
<ul style="list-style-type: none"> • Improves customer service for applicants and neighbors of new development as clearer regulations lead to more predictable outcomes • Faster permit review times allows for reduced delays for builders which helps make more housing available sooner • Reduces illegal tree removals • Reduces obstacles that can be difficult for disadvantaged communities to navigate due to factors such as language barriers and lack of resources. • Updated enforcement provisions can lessen illegal tree removals which might mean less interactions with City and reduce complaints over time • Stronger tree protections and enforcement will increase tree canopy over time and help achieve City's canopy coverage goals which increase shared environmental tree benefits citywide 	<ul style="list-style-type: none"> • Simplified processes can reduce confusion and barriers, but those processes and regulations still exist; Some BIPOC outreach feedback requested additional culturally appropriate outreach to better understand complex regulations and processes • Actions to update to existing processes and regulations have the potential to cause short term increases in calls and emails concerning tree removals and the meaning of the new regulations. Therefore, education and outreach are necessary to lessen impact

DIRECTOR’S RULES

As part of draft ordinance, SDCI prepared two draft Director’s Rules: one designating Exceptional Trees; and a second that lays out the draft in lieu payments and methodology. Other new Director’s Rules may be developed including updated best practices to assist plan reviewers relating to soil preservation, protective fencing, and other industry recommended methods to further protect and retain trees during development.

CONSISTENCY WITH COMPREHENSIVE PLAN

The draft ordinance is consistent with the City’s Comprehensive Plan including the following goals and policies:

GS 1.5 *Encourage **infill development** in underused sites, particularly in urban centers and villages.*

GS 3.1 *Encourage the preservation, protection, and restoration of Seattle’s distinctive natural features and landforms such as bluffs, beaches, streams, and remaining evergreen forests.*

GS 3.8 *Encourage the preservation and expansion of the tree canopy throughout the city for aesthetic, health and environmental benefits trees provide, considering first the residential and mixed-use areas with the least tree canopy in order to more equitably distribute the benefits to residents.*

GOAL

H G2 **Help meet current and projected regional housing needs of all economic and demographic groups by increasing Seattle’s housing supply.**

GOAL

H G3 **Achieve a mix of housing types that provide opportunity and choice throughout Seattle for people of various ages, races, ethnicities, and cultural backgrounds and for a variety of household sizes, types, and incomes.**

GOAL

EN G1 **Foster healthy trees, vegetation, and soils to improve human health, provide wildlife habitats, improve drainage, give residents across the city access to nature, provide fresh food, and increase the quality of life for all Seattleites.**

POLICIES

EN 1.1 *Seek to achieve an **urban forest** that contains a thriving and sustainable mix of tree species and ages, and that creates a contiguous and healthy ecosystem that is valued and cared for by the City and all Seattleites as an essential environmental, economic, and community asset.*

EN 1.2 *Strive to increase citywide tree canopy coverage to 30 percent by 2037 and to 40 percent over time.*

EN 1.7 *Promote the care and retention of trees and groups of trees that enhance Seattle’s historical, cultural, recreational, environmental, and aesthetic character.*

GOAL

EN G5 **Seek to ensure that environmental benefits are equitably distributed and environmental burdens are minimized and equitably shared by all Seattleites.**

POLICIES

EN 5.1 *Consider the cost and benefits of **policy** and investment options on different communities, including the cost of compliance as well as outcomes.*

EN 5.2 *Prioritize investments, policies, and programs that address existing disparities in the distribution of environmental burdens and benefits.*

EN 5.5 *Work towards achieving racial and social equity in health outcomes so that members of all communities have the opportunity to live long healthy lives.*

CONCLUSION

The draft ordinance would implement the strategies that City Council directed SDCI to explore in Resolution 31902 to support tree protections and increase Seattle's tree canopy cover. It would help to balance citywide goals of protecting, maintaining, and enhancing the urban forest as stated in the 2020 Urban Forest Management Plan while supporting future growth and density as provided in the City's Comprehensive Plan.