



KING COUNTY

1200 King County Courthouse
516 Third Avenue
Seattle, WA 98104

Signature Report

Motion 16667

Proposed No. 2024-0198.1

Sponsors Perry

1 A MOTION acknowledging receipt of a tree code update
2 report, in response to the 2023-2024 Biennial Budget
3 Ordinance, Ordinance 19546, Section 90, Proviso P2

4 WHEREAS, the 2023-2024 Biennial Budget Ordinance, Ordinance 19546,
5 Section 90, Proviso P2, states that \$100,000 of the appropriation "shall not be expended
6 or encumbered until the executive transmits a tree code update report and a motion
7 acknowledging receipt of the report is passed by council. The motion should reference
8 the subject matter, the proviso's ordinance number, ordinance section and proviso number
9 in both the title and body of the motion. The report shall include, but not be limited, to
10 the following:

11 A. A description of current tree regulations for urban unincorporated areas, and
12 the enforcement mechanisms for the county's current regulations;

13 B. A description of tree retention regulations and enforcement mechanisms for
14 urban areas in neighboring western Washington and King county cities;

15 C. A description of industry best practices for tree retention regulation, and
16 enforcement mechanisms, in urban areas;

17 D. An evaluation and recommendation of whether and how the county's urban
18 unincorporated areas tree retention regulations or enforcement mechanisms, or both,
19 should be updated given other jurisdiction's requirements or industry best practices; and

20 E. If updates are recommended, a timeline and public engagement strategy for

Motion 16667

21 completing the update and transmitting a proposed ordinance to council," and

22 WHEREAS, the King County executive is committed to implementing urban tree
23 retention regulations and enforcement mechanisms that ensure the urban forest continues
24 to store carbon and provide climate benefits, improve water and air quality, enhance
25 habitat for salmon and other wildlife, reduce polluted stormwater runoff in our
26 communities and waterways, offer recreational opportunities, and provide cool shade for
27 streams and sidewalks, and

28 WHEREAS, the King County executive hereby transmits to the council the tree
29 code update report required in Ordinance 19546, Section 90, Proviso P2;

30 NOW, THEREFORE, BE IT MOVED by the Council of King County:

Motion 16667


31 Receipt of a tree code update report, Attachment A to this motion, is hereby
32 acknowledged.

Motion 16667 was introduced on 7/9/2024 and passed by the Metropolitan King County Council on 9/24/2024, by the following vote:


Yes: 7 - Balducci, Barón, Dembowski, Dunn, Mosqueda, Perry and Zahilay

Excused: 2 - Upthegrove and von Reichbauer

KING COUNTY COUNCIL
KING COUNTY, WASHINGTON

Signed by:

E76CE01F07B14EF...
Dave Upthegrove, Chair

ATTEST:

DocuSigned by:

8DE1BB375AD3422...
Melani Hay, Clerk of the Council

Attachments: A. Tree Code Update Report, June 2024

Motion 16667

Tree Code Update Report

June 2024



King County

I. Contents

II. Proviso Text 4

III. Executive Summary 4

 A. Background 4

 B. Report Requirements 5

 C. Conclusions and Next Actions 5

IV. Background..... 6

 Department Overview 6

 Key Historical Context..... 6

 Key Current Context 9

 Report Methodology 13

V. Report Requirements 14

 A. A Description of the County’s Current Tree Retention Regulations for Urban Unincorporated Areas, and the Enforcement Mechanisms for the County's Current Regulations..... 14

 B. A Description of Tree Retention Regulations and Enforcement Mechanisms for Urban Areas in Neighboring Western Washington Counties and King County Cities20

 C. A Description of Industry Best Practices for Tree Retention Regulation and Enforcement Mechanisms In Urban Areas21

 D. An Evaluation and Recommendation of Whether and How the County's Urban Unincorporated Areas Tree Retention Regulations or Enforcement Mechanisms, or both, Should be Updated Given Other Jurisdiction's Requirements or Industry Best Practices .28

 E. A Timeline and Public Engagement Strategy for Completing the Update and Transmitting a Proposed Ordinance to the Council29

VI. Conclusion/Next Actions31

VII. Appendices32

II. Proviso Text

Ordinance 19546, Section 90, Proviso P2¹

Of this appropriation, \$100,000 shall not be expended or encumbered until the executive transmits a tree code update report and a motion that should acknowledge receipt of the report and a motion acknowledging receipt of the report is passed by the council. The motion should reference the subject matter, the proviso's ordinance number, ordinance section and proviso number in both the title and body of the motion. The report shall include, but not be limited to, the following:

- A. *A description of current tree retention regulations for urban unincorporated areas, and the enforcement mechanisms for the county's current regulations;*
- B. *A description of tree retention regulations and enforcement mechanisms for urban areas in neighboring western Washington and King County cities;*
- C. *A description of industry best practices for tree retention regulation, and enforcement mechanisms, in urban areas;*
- D. *An evaluation and recommendation of whether and how the county's urban unincorporated areas tree retention regulations or enforcement mechanisms, or both, should be updated given other jurisdiction's requirements or industry best practices; and*
- E. *If updates are recommended, a timeline and public engagement strategy for completing the update and transmitting a proposed ordinance to council.*

III. Executive Summary

Ordinance 19546 included a Proviso that requires a report provided to the King County Council that describes tree retention regulations and enforcement mechanisms for urban unincorporated King County, municipalities within King County, and urban areas in neighboring western Washington. The Proviso also requires an evaluation of whether and how the County's urban area tree retention regulations and enforcement mechanisms should be updated. The Department of Local Services gathered information and produced this report.

A. Background

Recent research documented in King County's 30-Year Forest Plan and Greenhouse Gas Mitigation (Forest Conversion Review Study) Report indicated that there has been steady loss of tree canopy in urban unincorporated King County.^{2,3} Urban forest canopy provides a range of benefits to communities including:

- Storing carbon and providing climate benefits.
- Offering a shady respite that cools streams and helps mitigate the impacts of heat.
- Enhancing salmon and other wildlife habitat.
- Hosting recreational opportunities.

¹ Ordinance 19546, pg.84 [[LINK](#)]

² King County 30-Year Forest Plan pg. 18 [[LINK](#)]

³ King County Comprehensive Plan Workplan Action 18: Greenhouse Gas Mitigation (Forest Conversion Review Study) Report pg. 5 (Executive Summary) [[LINK](#)]

- Improving water and air quality, which have environmental and human health benefits.
- Reducing stormwater runoff.
- Supplying scenic beauty.
- Providing cultural resources and supporting cultural heritage and historic values.

Data from the King County 30-Year Forest Plan showed that areas with lower canopy cover and less access to forested parks are more often occupied by low-income residents and people of color. Therefore, the report incorporates consideration of equity issues.

The County obtained funding through a Washington Department of Natural Resources Urban and Community Forestry grant, which was augmented by funds available in the 2023-24 Water and Land Resources Division budget to fund a report, titled "Guide to Developing Effective Urban Tree Regulations on Private Property" (the Guide).⁴ The Guide compiles and evaluates tree retention regulations and enforcement mechanisms of urban unincorporated areas of King County, all 39 municipalities within King County, and from select jurisdictions across the nation. This report, as well as other research into urban areas in neighboring western Washington counties, is the primary source of information for this report.

B. Report Requirements

The Guide identifies 13 industry best practices that are integral elements and strategies of effective tree retention regulations and enforcement mechanisms. These industry best practices range from including a detailed purpose and intent section of King County Code (KCC) to maintenance requirements for retained and replaced trees. See Section C of this report for a detailed list of industry best practices; these include: regulation of significant trees, nuisance trees, hazard trees, landmark or exceptional trees, heritage trees, tree health and viability, tree retention and removal, replacement tree quantities and standards, property owner tree removal without development/construction, addition of permit application requirements, consolidation of regulations; protection of culturally modified trees, and integration of the Washington Wildland Urban Interface Code.

A gap analysis conducted for this report used these elements and strategies to determine if and where current County regulations included industry best practices. The results of the gap analysis identified that current County regulations met some, but not all, industry best practices, and led to a recommendation that the County's tree retention regulations and King County Code (Code) enforcement mechanisms should be updated for urban unincorporated areas. The gap analysis also identified opportunities for adding and modifying regulations and enforcement mechanisms to strengthen protection of the urban tree canopy.

C. Conclusions and Next Actions

This report identifies that King County's tree retention regulations and enforcement mechanisms be updated for the urban unincorporated areas. It recommends that updates to the King County Code be informed through the public engagement strategy detailed in Section E of this report. The proposed public engagement strategy aims for a robust and equitable engagement process. While many industry best practices are met by the current regulations, public engagement and further analysis would determine which industry best practices would be adopted into Code and would explore options for

⁴ Guide to Developing Effective Urban Tree Retention Regulations on Private Property, 2024 [\[LINK\]](#)

how to strengthen the standards of each best practice to ensure retention and survival of the urban tree canopy.

This report also recommends adoption of tree retention regulations and enforcement mechanisms for Rural Towns. As with the urban unincorporated areas, further analysis and public engagement are needed to determine which industry best practices should be adopted into King County Code, and the standards adopted to enact the best practices.

IV. Background

Department Overview

King County Department of Local Services (DLS) works to promote the well-being of residents and communities in unincorporated King County by seeking to understand their needs and delivering responsive government services. This includes maintaining roads and bridges, issuing permits, managing land use planning, and providing several programs to unincorporated areas, such as participatory budgeting, community needs lists, and subarea planning. The DLS Permitting Division (Permitting) provides land use planning services and development permitting review to the residents of rural and urban unincorporated King County. Permitting services include building and land use permit review and the review of clear and grade permits, including the review of tree removal and landscaping plans.

King County Department of Natural Resources and Parks (DNRP) Water and Land Resources Division (WLRD) safeguards King County's water and land resources by providing services that protect public health and safety and yield significant environmental benefits. DNRP employs scientists, engineers, policy experts, ecologists, and project managers dedicated to protecting the health and integrity of King County's natural resources, so that they can be enjoyed today and for generations to come. As a department, DNRP protects and restores the natural environment for the people, fish, and wildlife of King County, promoting resilient, sustainable, equitable communities. DNRP restores habitat, builds and operates major infrastructure that protects Puget Sound, transforms waste management to reduce carbon emissions, and expands and enhances regional parks and trails, all of which contribute to our region's unique quality of life.

Key Historical Context

Trees and the Urban Forest in King County

Urban forest is a collection of woodlands, groups of trees, and individual trees located in urban areas. Trees may be on developed lots, parks, gardens, or within the public rights of way. Urban forest is composed of both public and private lands in cities, towns, and unincorporated areas.⁵ Urban forest provides a full range of benefits to communities including:

- Storing carbon and providing climate benefits.
- Offering a shady refuge.
- Enhancing/providing habitat for aquatic and terrestrial wildlife.
- Hosting recreational opportunities.
- Improving water and air quality.

⁵ American Forests [[LINK](#)]

- Reducing stormwater runoff.
- Supplying scenic beauty.
- Providing cultural resources and supporting cultural heritage and historic values.
- Supporting mental and physical wellbeing.

King County gained nearly 200,000 residents between 2000 and 2010 (11.4 percent increase) and another 270,000 between 2010 and 2020 (13.7 percent increase).⁶ Constant pressure from population growth has created challenges for retaining valuable forestland and tree canopy. Because of growth management planning, most development in recent decades has occurred within cities and the designated urban unincorporated areas instead of rural areas.

The Greenhouse Gas Mitigation (Forest Conversion Review Study) Report prepared by the County to determine how development has affected tree canopy cover loss and therefore carbon sequestration, found that during the 24 years covered by the study, from 1992 to 2016, total forest cover in King County decreased from 61 percent to 60 percent, which represents a loss of nearly 9,000 acres countywide.⁷ This loss was primarily due to forest conversion within cities and urban unincorporated areas.⁸

Data from the King County 30-Year Forest Plan (30-YFP), which was developed to expand and enhance forest cover in King County over the next three decades, show that the urban unincorporated areas have tree canopy cover that ranges from more than 45 percent in the more rural areas of the urban unincorporated areas to 21 percent in White Center and 28 percent in Skyway.⁹ The canopy cover has remained mostly the same in the rural area of the County, while it has declined from 37 percent to 29 percent in urban unincorporated areas between 1992 and 2016, as shown in Table 1. Losses in forest cover and the projected increase in population indicate that there will be a continual loss of trees unless regulations to protect forest canopy are enhanced.¹⁰

Land Cover	Rural Land		Urban Unincorporated Areas	
	1992	2016	1992	2016
Forested	70%	71%	37%	29%
Developed	3%	4%	42%	49%

Note: Percentages do not add to 100 percent, as they exclude water areas.

⁶ King County Office of Economic and Financial Analysis, King County Population. [\[LINK\]](#)

⁷ King County Comprehensive Plan Workplan Action 18: Greenhouse Gas Mitigation (Forest Conversion Review Study) Report pg. 9 [\[LINK\]](#)

⁸ King County Comprehensive Plan Workplan Action 18: Greenhouse Gas Mitigation (Forest Conversion Review Study) Report pg. 9 [\[LINK\]](#)

⁹ King County 30-Year Forest Plan pg. 16 [\[LINK\]](#)

¹⁰ King County 30-Year Forest Plan pg. 15-19 [\[LINK\]](#)

¹¹ King County 30-Year Forest Plan pg. 19, Table 2 [\[LINK\]](#)

Tree Retention and Equity Impacts

As highlighted in the 30-YFP there are disparities in urban tree canopy coverage that often align with economic disparity. It states:

“As in other parts of Washington, areas with lower canopy cover and less access to forested parks are more often occupied by low-income residents and people of color. Focusing efforts to increase and improve urban forests in areas with low canopy cover is one way to begin to address inequities created by uneven access to the benefits provided by urban trees. However, a paradox with addressing inequities in urban canopy cover is that more trees and parks can make neighborhoods more desirable for new residents. This can lead to increases in housing costs and gentrification that displaces the very residents the greening efforts were meant to benefit. Increasing urban canopy cover while preventing displacement requires meaningful collaboration and co-development of strategies between community members and urban planners. Targeted planting and urban forest maintenance, paired with input from local communities to better understand needs and cultural uses for urban forests, can provide a starting point for tree planting efforts and for designating new urban parks that can improve overall well-being.”¹²

Low-income neighborhoods and communities of color generally experience higher levels of air pollution and suffer higher rates of related health impacts.¹³ Heat produced from the heat island effect is a health threat that is projected to increase with climate change.¹⁴ An analysis by National Public Radio found that pavement and other materials can become 50 to 90 degrees Fahrenheit hotter than the surrounding air, creating an oven-like effect.¹⁵ The heat stays through the night, resulting in temperatures up to 22 degrees Fahrenheit hotter. This phenomenon is what is known as the heat island effect. Lower-income people are less likely to have air conditioning and less able to afford the higher utility bills associated with air conditioning. In addition, lower-income people are more likely to have pre-existing health conditions that can be exacerbated by heat. Increasing tree canopy cover can support efforts to improve human health, and reduce disparities in health outcomes, a determinant of equity.¹⁶

¹² King County 30-Year Forest Plan pg. 36 [\[LINK\]](#)

¹³ American Forests [\[LINK\]](#)

¹⁴ "Heat Island" definition from "What are Heat Islands?", U.S. Environmental Protection Agency: "Structures such as buildings, roads, and other infrastructure absorb and re-emit the sun's heat more than natural landscapes such as forests and water bodies. Urban areas, where these structures are highly concentrated and greenery is limited, become "islands" of higher temperatures relative to outlying areas. These pockets of heat are referred to as "heat islands." [\[LINK\]](#)

¹⁵ Trees Are Key To Fighting Urban Heat – But Cities Keep Losing Them [\[LINK\]](#)

¹⁶ "Determinants of equity" definition located in K.C.C. Chapter 2.10.210.B, means, in part, the social, economic, geographic, political and physical environment conditions in which people in our county are born, grow, live, work and age that lead to the creation of a fair and just society. Access to the determinants of equity is necessary to have equity for all people regardless of race, class, gender or language spoken. Inequities are created when barriers exist that prevent individuals and communities from accessing these conditions and reaching their full potential. [\[LINK\]](#)

In June of 2020, King County and the City of Seattle conducted a heat mapping project that investigated the impact of hotter summers on the region and its inequitable impacts.¹⁷ The data and analysis show:

- Surface level temperatures in areas with paved landscapes, less tree canopy, and industrial activity are substantially higher during summer heat events compared to less urbanized areas, and
- Areas with hard landscapes held on to heat longer than areas that have more natural landscapes, increasing the potential for heat-related health risks in those areas. More urbanized areas were as much as 20 degrees hotter than less urbanized areas, due in large part to differences in land use and land cover.

Key Current Context

King County created the Urban Forestry Forum (Forum) in 2022 to foster collaboration on county-wide urban forestry objectives and facilitate the exchange of information, strategies, industry standards, successes, and challenges among King County and its 39 municipalities. The Forum identified King County as a key player in gathering and synthesizing information and showcasing best practices that support urban tree canopy retention and growth. In response to loss of forest cover in urban unincorporated King County, DNRP's Water and Land Resources Division (WLRD) also established an Urban Forestry Program, supported by a staff person hired in mid-2023. The Urban Forestry Program Manager coordinates work of the Forum and works to identify tools and resources needed to enhance urban tree canopy across the county.

In response to the Forum's identified need for comprehensive and effective tree retention regulations, the County obtained funding through a Washington Department of Natural Resources Urban and Community Forestry grant, which was augmented by funds available in the 2023-2024 WLRD budget. These funds supported the Analysis of Urban Tree Protections in King County project. Consultants from Facet and Terra Firma Consulting (Consultants) were contracted to perform two major tasks: (1) data collection and evaluation of existing tree codes for all King County municipalities and unincorporated areas of King County and (2) development of a guide containing insights, best practices, and recommendations for King County and jurisdictions to consider when developing tree retention regulations.¹⁸ The Consultants collected data and evaluated existing tree codes on a national level and provided a summary of the national findings.¹⁹ The findings of these tasks are compiled into a report, titled "Guide to Developing Effective Urban Tree Regulations on Private Property" (the Guide).²⁰ The Guide is the primary source of information for this report.

Climate Resilience

The County's climate preparedness actions found within the King County Strategic Climate Action Plan (SCAP) address a wide range of climate impacts, including those related to heavier rain events, hotter summers, lower snowpack, increased flooding, sea level rise, and changes in the potential for wildfire.²¹ Because climate change will likely increase many existing environmental, health, and safety challenges, the actions the County takes now to prepare for climate change will create near-term and long-term

¹⁷ Heat Mapping Project [\[LINK\]](#)

¹⁸ Facet [\[LINK\]](#)

¹⁹ National Tree Code Research Spreadsheet [\[LINK\]](#)

²⁰ Guide to Developing Effective Urban Tree Retention Regulations on Private Property, 2024 [\[LINK\]](#)

²¹ King County Strategic Climate Action Plan [\[LINK\]](#)

benefits. One tool to promote climate resilience is the preservation and expansion of tree canopy, especially that of the urban forest where the heat island effect is exacerbated by tree canopy loss. As stated in the SCAP, neighborhoods that lack green space or tree cover face greater exposure to climate-related impacts such as the urban heat island effect or air pollution.

In addition to the SCAP, the County has produced several plans that address climate change and climate resilience. The plans are discussed in the Linkages to Other County Policies and Plans section below. These plans ensure that climate preparedness will be operationalized through the development of methods and guidelines that incorporate climate considerations into day-to-day agency processes such as policy development, strategic planning, capital planning, and project implementation. The preservation of urban forest cover plays a role in supporting the outcomes of these plans.

Linkages to Other County Policies and Plans

The plans below contain policies and recommended actions that address forest health and climate resilience in urban unincorporated King County and also address concerns about equity. Protection of existing trees, maintaining or improving the health of existing trees, and planting new trees in areas lacking adequate tree cover are core actions need to achieve the outcome of retaining urban forest cover. All of these actions directly contribute to goals outlined in numerous King County plans, including:

- King County Comprehensive Plan;
- King County Strategic Climate Action Plan;
- Clean Water Healthy Habitat Plan;
- King County 30-Year Forest Plan;
- King County Countywide Planning Policies, and
- King County Equity and Social Justice Strategic Plan.

[King County Comprehensive Plan \(Comp Plan\)](#)

The Comprehensive Plan is a policy document that guides how growth and development in unincorporated King County will occur over the next 20 years.²² The Comprehensive Plan is an important part of any County Code update as regulations must be consistent with policies established in the Comprehensive Plan. The Comprehensive Plan policies that pertain to tree retention include, but are not limited to:

- U-112 King County will work with other cities, residents, and developers to design communities and development projects that employ techniques that reduce heat islands throughout the community and the region;
- E-423 New development should, where possible, incorporate native plant communities into the site plan, both through preservation of existing native plants and addition of new native plants;
- E-449 King County shall promote retention of forest cover and significant trees using a mix of regulations, incentives, and technical assistance, and
- E-475 To improve adjacent wetlands and aquatic habitat, areas of native vegetation that connect wetland complexes should be protected. Whenever effective, incentive programs such as buffer averaging, density credit transfers, or appropriate non-regulatory mechanisms shall be used for this purpose.

²² King County Comprehensive Plan [[LINK](#)]

[King County Strategic Climate Action Plan \(SCAP\)](#)

The SCAP is a five-year plan for County climate action, integrating climate change into all areas of County operations and work.²³ The SCAP outlines the County's priorities and commitments for climate action to residents and partners. Specifically, this plan supports the following priority actions related to urban forest canopy:

Reducing Greenhouse Gas Emissions Focus Area 6: Forests and Agriculture

- Performance Measure GHG38: Increase tree canopy above baseline in unincorporated urban King County with the lowest coverage (White Center and Skyway) measured as part of the 30-Year Forest Plan.

Preparing for Climate Change Focus Area 3: Health and Equity

- Priority Action Prep. 3.1.1: Develop and implement an Urban Heat Island Strategy. The Climate Action Team will work with internal and external partners to develop and implement strategies for reducing temperatures and the associated risk of heat-related illnesses in areas identified as urban heat islands. The strategy will leverage and build on ongoing efforts related to mapping surface temperatures in King County, increasing tree canopy, providing access to green space and open space, and green building.

[Clean Water Healthy Habitat \(CWHH\)](#)

King County's CWHH initiative intends to protect water quality and habitat throughout the County.²⁴ Tree retention relates to at least two of the CWHHs defined outcomes, including 1) healthy forest and more green spaces and 2) cleaner, controlled stormwater runoff. Trees provide areas for green spaces throughout our communities. Typical medium-sized trees can capture over 2,000 gallons of rainfall per year.²⁵ Thus, protection and expansion of tree cover should be a key component of any stormwater management program.

[King County 30-Year Forest Plan \(30-YFP\)](#)

The 30-YFP was developed to expand and enhance forest cover over the next three decades.²⁶ King County's commitment to maintaining and enhancing forest cover throughout King County is evident in its 30-YFP a collaborative effort involving input from interested parties such as Indian Tribes, nonprofits, municipalities, forestland owners, managers, and community members. Among the plan's seven priorities is a focus on urban forests, with goals and strategies to increase tree canopy and urban forest health:

- Urban Forest Canopy
Increase tree canopy in urban areas, with a focus on areas with the lowest canopy cover and maintain and improve the health of existing urban forests.
 - Maintain and increase existing tree canopy in urban areas, prioritizing areas with low canopy cover.
 - Maintain urban trees and improve urban forest health.

²³ King County Strategic Climate Action Plan [\[LINK\]](#)

²⁴ Clean Water Healthy Habitat pg. 20-22 [\[LINK\]](#)

²⁵ USDA Fact Sheet #4 [\[LINK\]](#)

²⁶ King County 30-Year Forest Plan [\[LINK\]](#)

- Equity and cultural resources: Increase tree canopy above current baseline in urban unincorporated areas with low canopy cover and support urban forest projects as a foundation for youth training to develop tomorrow's forestry leaders.

- Human Health

Prioritize tree canopy improvements and increased access to forested spaces to improve human health outcomes and advance health equity.

- Increase tree canopy with improvements focused in geographies and communities with residential areas subject to high levels of summer heat and/or pollution or other human health disparities.
- Improve access to forested spaces, prioritizing communities where the needs are greatest, and support outdoor recreation opportunities that can provide physical and mental health benefits.
- Equity and cultural resources: Increase use, engagement, and sense of belonging in forested parks where access to or use of parks and green space is below the regional average.

- Salmon Habitat

Increase and improve forest cover and condition in areas where it can enhance salmon habitat.

- Protect, increase, and improve the extent and health of riparian forests.
- Equity and cultural resources: Align salmon habitat restoration with Tribal priorities and use culturally important plant species in salmon habitat restoration.

- Water Quality and Quantity

- Maintain and expand forest canopy where it provides the most benefit for improving water quality and quantity, reducing stormwater runoff, and reducing flooding.
- Maintain and expand forest cover in areas identified as having poor water quality or high pollutant loads to streams and rivers, where forest cover improvement can provide benefits. Maintain and expand forest cover to improve water quantity conditions in areas identified as having high potential to mitigate flooding or where protecting groundwater is a priority.
- Equity and cultural resources: Integrate equity considerations into prioritization of stormwater projects involving forest cover.²⁷

[King County Countywide Planning Policies \(CPPS\)](#)

CPPs create a framework for growth management planning for all jurisdictions in King County.²⁸ The CPPs implement the Washington State Growth Management Act and the VISION 2050 Multicounty

²⁷ King County 30-Year Forest Plan pg. 6-9 [\[LINK\]](#)

²⁸ King County Countywide Planning Policies [\[LINK\]](#)

Planning Policies.^{29,30} Comprehensive plans for the County and cities and towns in the County are developed within the CPP framework. The following CPPs relate to topics covered by the scope of the Proviso:

- EN-11 Enhance the urban tree canopy to provide wildlife habitat, support community resilience, mitigate urban heat, manage stormwater, conserve energy, protect and improve mental and physical health, and strengthen economic prosperity. Prioritize places where Black, Indigenous, and other People of Color communities; low-income populations; and other frontline community members live, work, and play.
- EN-21 Preserve and restore native vegetation and tree canopy, especially where it protects habitat and contributes to overall ecological function.
- EN-23 Protect and restore natural resources such as forests, farmland, wetlands, estuaries, and the urban tree canopy, which sequester and store carbon.

[King County Equity and Social Justice Strategic Plan \(ESJ Strategic Plan\)](#)

The 2016-2022 ESJ Strategic Plan's pro-equity policy agenda aims to incorporate equity considerations into long-term improvement to built and natural environments and focuses the County's work on investments that address the root causes of inequities.³¹ This plan emphasizes the importance of upstream investments and incorporating an equity lens into all policy decisions. As discussed in the Tree Retention and Equity Impacts section of this report, there is a disparity in the distribution of urban forest cover in different neighborhoods, which has the follow-on effects of urban heat and heat-related illness for the residents of those areas. It is vital to apply a pro-equity approach to address this disparity.

Report Methodology

A DLS-DNRP workgroup met monthly over the course of six months to collaborate on this work. The Indian Tribes, community partners interested in tree retention regulations, the King Conservation District, and non-profit organizations were invited to one-on-one conversations where they could share their concerns and advice about tree retention in King County. DNRP managed the contract with consultants from FACET and Terra Firma Consulting (Consultants).

The Consultants conducted an analysis of tree regulations and enforcement mechanisms for private property in urban unincorporated areas and all 39 municipalities within King County. Based on this analysis, they developed a Guide for local jurisdictions with industry best practices for tree retention regulations and enforcement mechanisms which informs Section C.³² In addition, tree retention regulations and enforcement mechanisms for urban areas in neighboring western Washington counties including Kitsap, Pierce, and Snohomish was analyzed separately, and the information gathered from these counties was integrated into this report. The tree retention regulations summary spreadsheet for neighboring western Washington counties is provided as Appendix A.

²⁹ Washington State Growth Management Act [\[LINK\]](#)

³⁰ VISION 2050 Multicounty Planning Policies [\[LINK\]](#)

³¹ King County Equity and Social Justice Strategic Plan [\[LINK\]](#)

³² Guide to Developing Effective Urban Tree Retention Regulations on Private Property, 2024 [\[LINK\]](#)

V. Report Requirements

A. A Description of the County's Current Tree Retention Regulations for Urban Unincorporated Areas, and the Enforcement Mechanisms for the County's Current Regulations

This section provides an overview of the portions of the King County Code (KCC.) that pertain to trees, followed by a summary of Code standards organized by regulatory topic (e.g., retention, replacement, etc.). There are sections of KCC. that regulate trees on public property, which are not addressed as part of this report.³³ This report focuses on tree retention on private property, rather than public trees located within public areas. The majority of the urban tree canopy is located on private property, so regulating trees on private property has the potential for the greatest outcome for preservation and growth of the urban tree canopy.³⁴ Private property is the area experiencing the highest rates of development, driven in part by the need for additional housing.³⁵ Management of trees on public property, within rights-of-way and within parks, is tied to responsibilities associated with providing utilities, access, and park amenities to and for the benefit of the public. Trees in these areas are regulated by a variety of plans and legal documents including franchise agreements for utilities within the right of way.

Tree retention regulations for private property within urban unincorporated King County are found in multiple sections of KCC., including:

- KCC. Chapter 16.82, Clearing and Grading, regulates clearing and removal of vegetation including trees. This chapter specifies when permits are required for clearing or grading activities, and describes the criteria for retention, removal, and replacement of trees in the Urban Growth Area (UGA).
- KCC. Chapter 21A.12, Development Standards - Density and Dimensions, regulates the height of trees near Seattle-Tacoma International Airport and King County International Airport (Boeing Field).
- KCC. 21A.34.080.B, General Provisions – Residential Density Incentives (RDI), requires that when 75 percent or more of the units in the RDI developments consist of townhouses or apartments, the development shall provide perimeter landscaping and tree retention in accordance with KCC. 21A.16 for townhouse or apartment projects.
- KCC. Chapter 21A.16, Landscaping and Water Use, provides landscaping standards for residential, commercial, industrial, institutional, and utility developments and requires either the retention or planting of trees to meet the landscaping standards.

³³ Although not the focus of this document, the Consultant provided public tree code sections in the Tree Retention Regulations Summary Spreadsheet for Jurisdictions within King County in their report.

³⁴ Guide to Developing Effective Urban Tree Retention Regulations on Private Property, 2024 (Executive Summary) [\[LINK\]](#)

³⁵ Guide to Developing Effective Urban Tree Retention Regulations on Private Property, 2024 pg.22 (Tree Retention and Replacement) [\[LINK\]](#)

- KCC. Chapter 21A.26, Communication Facilities, provides criteria for landscaping at communication facility sites.
- KCC. Chapter 21A.24, Critical Areas, contains additional requirements to address tree retention and vegetation in wetlands, streams, frequently flooded areas, geologically hazardous areas, fish and wildlife habitat conservation areas, and critical aquifer recharge areas. Many of these standards are mandated by the State of Washington.
- KCC. Chapter 21A.25, Shorelines, contains additional requirements to address tree retention within shoreline areas.
- KCC. Chapter 21A.60, Urban Design Standards - North Highline, contains a minimum tree canopy equivalent that must be retained through landscaping for the North Highline community service area subarea.
- KCC. Title 23, Code Compliance, identifies processes and methods to encourage compliance with county and state laws and regulations to promote and protect the general public health, safety, and environment of county residents.

Tree Retention

[Clearing and Grading Code](#)

The majority of tree retention regulations for the UGA are found within KCC. 16.82.156, Significant Trees within the Clearing and Grading.. Within the UGA, significant trees are required to be retained unless a permit has been issued for their removal. KCC. 21A.06.1167 defines a significant tree as:

"an existing healthy tree that is not a hazard tree (i.e., a tree that does not have a probability of imminently falling due to a debilitating disease or structural defect) and that, when measured four and one-half feet above grade, has a minimum diameter of:

- A. Eight inches for evergreen trees: or
- B. Twelve inches for deciduous trees."

Exclusive of areas required for site access by vehicles, pedestrians, or utility infrastructure, significant trees must be retained within perimeter areas at various rates depending on whether the trees are along the perimeter adjacent to a street or the perimeter adjacent to an interior property line (Table 4).³⁶

Table 2: KCC. 16.82.156.A.1 Retention of Trees on the Perimeter of a Site	
Perimeter Location	Tree Retention Required
Interior perimeter	100%
Street perimeter	75%

Significant trees located within the interior of a site (portion of parcel not considered perimeter) must also be retained at a rate dependent on the type of development and the zone. Project sites with twenty-five percent or greater of the total gross site area in critical areas, critical area buffers, or other

³⁶ K.C.C. 16.85.156.A.1 [[LINK](#)]

areas to be left undisturbed, are exempt from significant tree retention; however, the areas within the critical area and their buffers are subject to critical area regulations (Table 5).³⁷

Table 3: KCC. 16.82.156.A.2 through A.6 Retention of Trees on the Interior of a Site		
Zone	Type of Development	Significant Tree Retention Required
UR* or R-1**	Not specified	20 trees per acre or 10 percent of trees, whichever is greater.
Not specified	Apartment or townhouse development	10 trees per acre or 5 percent of trees, whichever is greater
R-4through R-48**	Commercial or industrial development, or a residential subdivision	10 trees per acre or 5 percent of trees, whichever is greater
Not specified	Sports fields, play fields, or other recreational facilities in institutional developments	10 trees per acre or 5 percent of trees, whichever is greater
Not specified	Utility developments and mineral extraction operations	Exempt

*UR = Urban reserve zone. This zone allows agricultural and other low-density uses, allows limited residential growth, and requires residential developments to be clustered.

**R = Urban residential zone. R-1, R-4, and R-8 zones include a mix of predominantly single detached dwelling units, with a variety of densities and sizes in locations appropriate for urban densities. R zones that are R-12 and greater, including R-48 zones, allow for a mix of predominately apartment and townhouse dwelling units, and mixed-use developments.

KCC. 16.82.156.C.2 allows damaged, diseased, or standing dead trees, not classified as danger trees, to be counted toward the significant tree retention requirement if the applicant demonstrates that such trees will provide important wildlife habitat.

Pursuant to KCC. 16.82.156.D, significant trees must not be removed before County approval. While a specific number of significant trees are required to be protected during project development, if those significant trees cannot be retained, they may be removed and replaced by planting new trees. During construction of a project, significant trees proposed for retention must be protected. A tree retention plan, showing the location, size, species, and condition of significant tree to be retained, transplanted, or replaced, must be submitted before construction begins for review and approval prior to permit issuance.

Pursuant to KCC. 16.82.156.F, dead, diseased, damaged, or stolen plantings must be replaced within three months or during the next planting season, if the loss does not occur in a planting season.

KCC. 16.82.156.F states that pruning and trimming of significant trees is allowed. Topping and removal of 20 percent or more of the tree is not allowed. Cutting of major roots is also not allowed.

³⁷ K.C.C. 16.82.156.A.2 [[LINK](#)]

Development Standards - Density and Dimensions Code

KCC. 21A.12.190 Restricts any tree from being allowed to grow to a height in excess of the height limit established by the Airport Height Maps for the Seattle-Tacoma International Airport and King International County Airport (Boeing Field).³⁸

Landscaping and Water Use Code

All development in unincorporated King County is subject to the Landscaping and Water Use Code (KCC. 21A.16), except for communication facilities that are regulated pursuant to KCC. chapter 21A.26. KCC 21A.16.020 states "tree retention for uses established through a conditional use permit, a special use permit, or an urban planned development application shall be determined during the applicable review process."³⁹

The Landscaping and Water Use code encourages tree retention by stating that one of the purposes of the Code, as provided in KCC. 21A.16.010, is "retaining existing vegetation and significant trees by incorporating them into site design."⁴⁰ This Code requires the planting or retention of landscaped perimeters to act as visual separators between residential zones and nonresidential zones, and visual screens and barriers as a transition between differing land uses, and to provide shade for and to diminish the visual impacts of parking lots. The use of trees and other vegetation species typically associated with the Puget Sound Basin is encouraged by reducing the required amount of perimeter and parking area landscaping by 25 percent when native species are used. Existing trees can be used and/or supplemented to meet the requirements of this Code; however, tree retention is not required by this Code.

Critical Areas Code

"Critical areas" are areas "subject to natural hazards or a land feature that supports unique, fragile or valuable natural resources", and include flood hazard areas, wetlands, and geologically hazardous areas, among others.⁴¹ Activities within critical area are primarily regulated by KCC. chapter 21A.24, Critical Areas. Clearing and grading activities within critical areas are also regulated by KCC. chapter 16.82, Clearing and Grading.

Within the Critical Areas Code, there is a provision that allows the removal of hazard trees as necessary for surveying or testing purposes.⁴² In addition, there are standards that minimize removal of trees greater than 12 inches in diameter when a new utility corridor is established, or when residential service distribution lines are maintained or replaced.⁴³ Construction of a tree-supported structure (e.g., a tree house used as accessory living quarters or for play) is allowed in some critical areas.⁴⁴

³⁸ Airport Height Map [\[LINK\]](#)

³⁹ K.C.C. 21A.16.020 [\[LINK\]](#)

⁴⁰ K.C.C. 21A.16.010 [\[LINK\]](#)

⁴¹ Definition of Critical area, K.C.C. 21A.06.254 [\[LINK\]](#)

⁴² K.C.C. 21A.24.045.D.18 [\[LINK\]](#)

⁴³ K.C.C. 21A. 24.045.D.34 and 21A. 24.045.D.60 [\[LINK\]](#)

⁴⁴ K.C.C. 21A. 24.045.D.64 [\[LINK\]](#)

[Shorelines Master Program Code](#)

The Shoreline Master Program (SMP) addresses tree retention and removal in the shoreline jurisdiction.⁴⁵ This area generally includes lands within 200 feet of Puget Sound, lakes less than 20 acres in size, streams over a certain size, and the floodplains and wetlands associated with these water bodies.⁴⁶

The SMP requires that the construction of private access roads to a single detached residence within a shoreline jurisdiction must avoid the removal of significant trees.⁴⁷ Existing native vegetation located outside of critical areas in shorelines areas is required to be retained to the maximum extent practical, as are trees during construction, repair, replacement, and maintenance of utility facilities.^{48,49} Areas disturbed by construction are required to be rehabilitated as rapidly as possible.⁵⁰

[Communication Facilities Code](#)

The Communication Facilities code, requires landscaping to be used for screening purposes, but does not require tree retention specifically. As with the Landscaping and Water Use Code of KCC. chapter 21A.16, existing vegetation can be used to meet the landscaping requirements, but preservation of existing trees is not required.

[North Highline Urban Design Standards GreenCenter Requirements](#)

Developments subject to the standards of KCC. chapter 21A.60 Urban Design Standards – North Highline must meet a minimum tree canopy equivalent of 30 percent through landscaping. Pursuant to KCC. 21A.60.060, this is referred to as a GreenCenter score of 0.3. To achieve this score, a development site must provide a minimum amount of vegetation including trees, by planting or retaining vegetation. While this standard may encourage retention of trees, it does not require retention of trees.

Tree Replacement

Pursuant to KCC. 16.82.156.E.2, if the required number of significant trees cannot be retained, nonsignificant sized trees may be retained or new trees may be planted to meet significant tree requirements.⁵¹ Replacement trees shall be calculated as shown in Table 6. For this calculation, every removed significant tree is assigned a diameter of 12 inches.

Table 4: KCC. 16.82.156.E.2 Replacement Tree Diameter	
Replacement tree size (diameter)	Replacement tree size for each inch diameter of removed tree
3 inches or greater	½ inch diameter
Less than 3 inches	1 inch diameter

If nonsignificant trees are retained in exchange for the removal of significant trees, the removed significant trees are assigned a diameter of 12 inches. The retained nonsignificant trees are calculated as

⁴⁵ K.C.C. 21A.25 [\[LINK\]](#)

⁴⁶ K.C.C. 21A.06.1082, 21A.06.1082B, 21A.06.1083A, 21A.06.1083B [\[LINK\]](#)

⁴⁷ K.C.C. 21A.25.140.E [\[LINK\]](#)

⁴⁸ K.C.C. 21A.25.160.C.9 [\[LINK\]](#)

⁴⁹ K.C.C. 21A.25.260.C.4 [\[LINK\]](#)

⁵⁰ K.C.C. 21A.25.260.D.1 [\[LINK\]](#)

⁵¹ K.C.C. 16.82.156.E.2 [\[LINK\]](#)

their actual size. The sum of inches of the retained nonsignificant tree diameters must equal that of removed significant trees.

KCC. 16.82.156.E.4 states that if DLS determines that retaining or replacing significant trees on site is impractical or contrary to the overall objectives of the underlying zone classification, alternative off-site locations may be used as provided in Table 7.

Table 5: KCC. 16.82.156.E.4 Off -Site Replacement Tree Ratios	
Location of Tree Replacement Plantings	Ratio of Replacement Trees to Removed Trees
Within the same subbasin that also affords wildlife habitat protection or enhancement	1 to 1
Within the same subbasin but without wildlife habitat protection or enhancement	1 ½ to 1
Within the same basin that also affords wildlife habitat protection or enhancement	2 to 1
Within the same basin but without wildlife habitat protection or enhancement	3 to 1
Within the same drainage that also affords wildlife habitat protection or enhancement	3 to 1
Within the same drainage but without wildlife habitat protection or enhancement	4 to 1

Code Enforcement

Code enforcement is provided by the Permitting Division of DLS. Code Enforcement Officers (Officers) investigate unlawful activities, including violations of tree retention regulations. Officers currently have more than 300 cases each, and priority is given to those cases that pose significant safety risks to humans or the environment. Officers begin the enforcement process by investigating a complaint.⁵² Their first priority is to achieve voluntary compliance by educating the violator about specific code requirements. If the violator is not willing to work with the Officer and bring the property into compliance, a notice and order may be issued, civil penalties may be assessed, a lien may be placed on the property, and a court order may be sought to achieve compliance and ensure the property is restored. Each Officer is assigned to a specific geographic area and works in partnership with the communities to which they are assigned.

KCC. 16.02.580 authorizes staff to serve a notice of violation or order to the person responsible for violating the Code.⁵³ KCC. 16.02.590 authorizes staff to issue a stop work order upon confirmation that work is being done contrary to the provisions of the Code. KCC. 16.82.030 gives staff authorization to make inspections and take actions as may be required to enforce the provisions of the chapter. To help enforce Code compliance, KCC. 16.82.170 allows staff to require a financial guarantee (also known as a bond) be posted by applicants to ensure survival of trees either retained or planted to meet significant tree retention and replacement requirements. KCC. 21A.16.190 requires a financial guarantee to be

⁵² Introduction to Code Enforcement in King County [[LINK](#)]

⁵³ K.C.C. Title 16 [[LINK](#)]

provided to the County to ensure that all trees either retained or planted to meet landscape requirements survive.⁵⁴

B. A Description of Tree Retention Regulations and Enforcement Mechanisms for Urban Areas in Neighboring Western Washington Counties and King County Cities

Tree codes from all 39 King County jurisdictions and King County Code that applies to urban unincorporated areas were compared and 31 components of tree retention regulations were identified. The extent to which municipalities and King County include those tree retention components in their land use code is illustrated in Appendix C of the Guide (King County Jurisdictional Tree Code Matrix).⁵⁵ Key attributes of tree retention regulations in each municipality and King County are summarized in Appendix D of the Guide (King County Jurisdictional Tree Code Summary Spreadsheet).⁵⁶ The results of data collection for the three neighboring western Washington counties are found in the Tree Retention Regulations Summary Spreadsheet for Neighboring Western Washington Counties, attached as Appendix A of this report.

Every jurisdiction in King County, and in Pierce and Snohomish counties, has a unique set of regulations for trees on private property. Since trees are not regulated by state mandates or standards for protection, unlike wetlands and other critical areas for which the state provides a model code, the extent of regulatory components in each code vary greatly, making it a challenge to determine specific code provisions that are working and overall effectiveness of a particular jurisdiction's code.^{57,58,59}

King County Cities and Neighboring Counties Approach to Tree Regulation

The Consultants found that there are as many variations in the package of tree retention regulations as there are jurisdictions. The City of Bellevue is currently revising its existing tree retention regulations, and Kitsap County is currently drafting its first comprehensive tree retention regulations, so their regulations were not examined. Information summarized in the tables presented in Appendices C and D of the Guide were used to develop a suite of best practices for comprehensive tree retention ordinances.^{60,61}

King County Rural Towns Approach to Tree Regulation

The Fall City Moratorium Subdivision Work Plan Report (Moratorium Report) requested that this report provide a staff recommendation of whether tree retention regulations should be adopted for Rural Towns. Rural Towns include Fall City, Snoqualmie Pass, and Vashon Island. King County tree retention regulations do not currently apply within Rural Towns. During the public engagement process for the Moratorium Report in August and September of 2023, retaining trees was identified as one of four community priorities.⁶² Pursuant to Chapter 3, Section III.B. of the King County Comprehensive Plan,

⁵⁴ K.C.C. Chapter 21A.16 [\[LINK\]](#)

⁵⁵ King County Jurisdictional Tree Code Matrix [\[LINK\]](#)

⁵⁶ King County Jurisdictional Tree Code Summary Spreadsheet [\[LINK\]](#)

⁵⁷ MRSC Critical Areas [\[LINK\]](#)

⁵⁸ Washington State Department of Ecology Wetland Guidance [\[LINK\]](#)

⁵⁹ Washington State Department of Commerce Critical Areas Handbook [\[LINK\]](#)

⁶⁰ King County Jurisdictional Tree Code Matrix [\[LINK\]](#)

⁶¹ King County Jurisdictional Tree Code Summary Spreadsheet [\[LINK\]](#)

⁶² Fall City Subdivision Moratorium Work Plan Report pg. 12 [\[LINK\]](#)

“the purposes of the Rural Town designation are to recognize existing concentrations of higher density and economic activity in the rural area...”⁶³ While the 30-YFP states canopy cover has remained mostly the same in the rural area of King County, R-4 zoning, which is a medium-density residential zoning, is found in Rural Towns as well as within the urban unincorporated areas.⁶⁴

The Moratorium Report found that lack of tree preservation regulations, along with the denser R-4 zoning, led to lack of mature trees and did not reflect the rural character consistent with Rural Towns. Adopting tree retention regulations in Rural Towns would provide the same environmental benefits to those towns as it would to urban areas, including shade, green space, healthier air, and cooler summer temperatures. In addition, preserving existing trees and ensuring that new trees are planted throughout new developments is consistent with the definition of rural character as defined by RCW 36.70A.030(20), which states that rural patterns are ones in which natural landscape and vegetation predominate over the built environment, providing visual landscapes that are traditionally found in rural areas and communities.⁶⁵

C. A Description of Industry Best Practices for Tree Retention Regulation and Enforcement Mechanisms In Urban Areas

Industry Best Practices and Strategies

At the request of King County, the Consultants developed a guide of best practices that King County and jurisdictions could use when developing or revising tree retention regulations and enforcement mechanisms.⁶⁶

The Guide identifies the following recommended elements of tree retention regulations and enforcement mechanisms that are integral components of effective tree regulations.

- Significant Trees
- Nuisance trees
- Hazard trees
- Landmark or Exceptional Trees
- Heritage Trees
- Tree Health and Viability
- Tree Retention and Removal
- Replacement Tree Quantities and Standards
- Property Owner Tree Removal Without Development/Construction
- Permitting Requirements
- Consolidated Regulations
- Protection of Culturally Modified Trees
- Washington Wildland Urban Interface Code

⁶³ King County Comprehensive Plan pg. 3-15 [\[LINK\]](#)

⁶⁴ King County 30-Year YFP pg. 18 [\[LINK\]](#)

⁶⁵ RCW 36.70A.030(20) [\[LINK\]](#)

⁶⁶ Guide to Developing Effective Urban Tree Retention Regulations on Private Property, 2024 [\[LINK\]](#)

Each element is described in more detail below.

[Purpose and Intent](#)

A clearly stated Purpose and Intent section is important because it supports the need for strong tree retention regulations, which may be relevant in a legal challenge to the code and may also help guide interpretation of the code.

[Significant Trees](#)

A significant tree is a tree that meets a minimum size threshold and is subject to tree retention regulations.⁶⁷ Protecting significant (i.e., large) trees is important because they generally contribute the most to overall tree canopy and they provide enhanced ecosystem benefits as compared to smaller trees. Although development of a parcel may require removal of some existing trees, focusing removal on smaller trees minimizes the overall impact of tree removal. Allowing the removal of smaller trees provides flexibility for the use of property.

[Nuisance trees](#)

A nuisance tree is a tree that creates safety hazards or damages buildings and infrastructure, such as interfering with utilities, lifting sidewalks, or interfering with visibility at an intersection, and cannot be corrected by reasonable practices, such as pruning, bracing, or cabling.

[Hazard trees](#)

A hazard tree (or tree part) is a tree that is at high risk of falling, which creates a risk to public safety and adjacent infrastructure. Assessment of potential hazard trees is usually performed by a trained professional arborist.

[Landmark or Exceptional Trees](#)

These are larger, healthy mature trees, the removal of which results in immediate loss of wildlife habitat and quantifiable benefits such as heat, stormwater, and air quality mitigation. Preservation of landmark or exceptional trees is important to maintain a multi-aged, resilient urban forest.

[Heritage Trees](#)

Heritage tree codes protect trees with unique or historical attributes of significance to the community, such as size, relation to a historical event, special site location, or unusual or exemplary species. Heritage tree programs generally require increased levels of protection compared to other significant trees.

⁶⁷ Guide to Developing Effective Urban Tree Retention Regulations on Private Property, 2024 pg. 57 [\[LINK\]](#)

Tree Health and Viability

Specifying that a significant tree must be healthy or viable in the definition of "significant tree" is one way to ensure long-term tree retention. If unhealthy or non-viable trees are retained through development but do not survive more than a few years, the intent of retention is not achieved.

Tree Retention and Removal

Tree retention and removal standards are important to preserve existing canopy cover and to achieve canopy and climate goals, while allowing carefully planned development. Standards for retention and removal are foundational to effective tree retention Ordinances. The standards typically focus on preserving trees with high ecological value, replacing trees that need to be removed to enable development, and requiring remedial actions to minimize damage to retained trees. The four key elements of tree retention and removal standards are:

- Methods for Quantifying Tree Retention
- Tree Retention Priorities
- Tree Protection During Development
- Replacement Tree Standards

Methods for Quantifying Tree Retention

Generally, three methods of quantifying tree retention and replacement are used in tree retention regulations and there are advantages and disadvantages to each method which are listed in the tables below. These methods for quantifying tree retention and replacement are:

- Canopy cover
- Count or percent of total trees, including percent of total diameter inches
- Tree density credit

Canopy Cover Method

The first method used to set minimum tree retention and replacement standards is the "canopy-based approach." Tree canopy is determined by measuring the canopy cover provided by retained trees and adding the estimated canopy cover that will be provided by replacement trees at 20 or 30 years of age. Canopy cover can be measured on-site but is most often calculated through an assessment of remotely sensed imagery. Canopy cover usually does not include canopies from off-site trees, trees in public rights of way, or invasive species, unless otherwise specified. Allowable removal of existing canopy and requirements for replacement trees are determined by minimum canopy cover that must be established at the post-construction target date.

Table 6: Advantages and Disadvantages to 'Canopy Cover' Approach	
Advantages	Disadvantages
<ul style="list-style-type: none"> • Canopy can be assessed in a desktop exercise using aerial imagery or field assessment. • Can be cost effective for heavily treed sites. 	<ul style="list-style-type: none"> • Uncertainty in aerial imagery of projected canopy cover. • Reliance on GIS tools. • Canopy cover potential for replacement tree is a future projection based on tree size or species that may or may not be the reality based on environmental and site factors.

	<ul style="list-style-type: none"> • Subjectivity of canopies from off-site sources (such as trees located near property lines and public rights of way).
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Count or Percent of Total Trees

The second method is to use a count or percentage of total significant trees on a site. These methods alone are generally less effective at retaining existing tree canopy because they do not account for individual tree size, such as diameter or canopy radius, unless other retention requirements are specified elsewhere in the Code. For example, a six-inch maple is given the same weight and value as a 24-inch Douglas fir tree. Allowable tree removal is determined by the percent of existing trees that must be retained.

A less frequently used method to quantify tree retention is the percent total of diameter inches. This method allows the permit applicant to measure the diameter of each tree and then retain a percentage of the sum of all diameter inches on a site.

Table 7: Advantages and Disadvantages to 'Count or Percent of Total Trees' Method	
Advantages	Disadvantages
<ul style="list-style-type: none"> • Simplicity of calculation. 	<ul style="list-style-type: none"> • Does not account for individual trees of different sizes. • Does not provide greater protections or value to larger diameter trees.

Tree Density Credit Method

A third method regulates tree retention based on the diameter of individual trees and assigns more credit when larger trees are retained. Tree density credits include existing trees, replacement trees, or a combination of both. Allowable tree removal and any required supplemental tree planting is regulated by the total minimum density credits established for the parcel planned for development.

Tree density credit methods are used for their ease of data collection as they require no specialized expertise. In addition, tree diameter by species can be used as a correlation for canopy, age, and ultimate size when assessing retention values for specific species.

Table 8: Advantages and Disadvantages to 'Density Credit' Approach	
Advantages	Disadvantages

<ul style="list-style-type: none"> • Does not require access to up-to-date aerial imagery. • Trunk size is easily quantifiable. • DBH measurement is correlated to canopy, age, and size. • Many jurisdictions have tree credit systems in place. 	<ul style="list-style-type: none"> • Code language can be difficult to interpret for staff and applicants. • Requires additional guidance and educational materials.
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Tree Retention Priorities

Tree retention priorities ensure that mature, ecologically significant trees are retained, and the loss of mature canopy is prevented whenever possible. Including specific retention priorities provides an opportunity to protect tree(s) that contribute to a diverse canopy and ecosystem benefits. Both larger diameter trees and grove trees provide more ecological benefits to the urban forest than single, smaller sized trees.

Tree Protection During Development

To ensure long term survival of retained trees, protection of retained trees from construction impacts is essential. Impacts can include root loss, damage to branches and trunks, and soil contamination or compaction. The ultimate effects on tree health are often not visible for several years; trees may gradually decline and eventually fail as a result of construction-related damage.

Replacement Tree Quantities and Standards

Requiring replacement for trees that are removed during construction, which eventually mitigates for loss of canopy cover, is a key component of effective tree retention regulations. Tree replacement is generally triggered when a site under development is projected to fall short of minimum required tree credits, percent canopy cover, or other tree retention standards.

Replacement Tree Species

Best practice is to retain native conifer species, such as Douglas-fir, western redcedar, and western hemlock, and replacement of these species in-kind. Although deciduous trees, small ornamental trees, and fruit trees do provide valuable canopy cover, they do not offer the same level of year-round ecosystem benefits that conifers provide in western Washington.⁶⁸ Adaptation to local climate, soils, topography, etc. are important considerations when selecting replacement tree species. Criteria for tree replacement selection include optimal growing conditions by species, proper planting practices, and protection of infrastructure such as buildings, utilities, driveways, sidewalks, and fences.

Approved Trees

To simplify the implementation of tree selection and permit review process, a list of recommended trees would provide guidance to applicants and staff. A list of replacement tree species can help alleviate confusion and ensure trees have the greatest potential for survival: a 'right tree, right place' approach.

⁶⁸ Guide to Developing Effective Urban Tree Retention Regulations on Private Property, 2024 pg. 30 (Replacement Tree Species) [[LINK](#)]

[Prohibited Trees](#)

A list of prohibited tree species, which are those known to become weedy or invasive, can provide valuable guidance when identifying species for use as replacement trees.

[Replacement Tree Size](#)

The specification of minimum size requirements to count as a replacement tree and/or toward tree credits or canopy requirements is a best practice. Requiring a minimum replacement size provides uniformity for tree replacement standards to ensure canopy replacement can be achieved in a specified timeframe.

[Location](#)

Specify tree replacement planting locations in tree regulations. Replacement trees are planted on-site to maintain tree canopy within the land use area. To ensure that the intent of replacement trees is met, best practices would include establishing a priority list of on-site replanting locations. Requiring planting in specific locations, generally where construction is not allowed on a site, can lead to long term retention of those trees or greater environmental benefit. These priority locations include:

- Perimeter areas, setbacks, or transition zones;
- Areas adjacent to existing tree groves, and
- Areas adjacent to or within critical area buffers.

If on site planting is not feasible, an option to retain benefits of planted trees is to allow for off-site planting locations.

[Fee in lieu](#)

If it is not possible to plant replacement trees on site, an option is for the jurisdiction to collect a fee in lieu of planting trees. Generally, a fee in lieu is allowed when replacement trees cannot be planted on site due to inadequate spacing, existing conditions, or other extenuating circumstances. Funds collected could be used to fund tree plantings and other urban forestry related expenses.

[Property Owner Tree Removal Without Development/Construction](#)

Not all tree canopy removal is associated with construction. Regulating tree removal in the absence of construction activity protects significant trees at all times, not just during construction, and helps maintain tree canopy. This element protects significant trees from removal where no development activity is proposed. It ensures long term survival of trees maintained during construction and provides an avenue for continued protection of replacement trees. It also prevents developers from clearcutting project sites prior to applying for construction permits.

[Permitting Requirements](#)

[Site Plan](#)

It is best practice to require site plans or tree protection and replacement plans with tree removal permit applications. The plan should identify significant trees with canopies drawn to scale, clearly mark trees to be retained and removed, and include the critical root zone of all significant trees, as well as the location of protected grove trees. It should also include components such as a tree inventory, tree protection plan, and tree replacement plan, a timeline for implementing protection and/or replacement, and discussion of any impacts to significant trees. A trend seen in jurisdictions with recently updated tree regulations is the requirement for this plan to be prepared by a qualified professional.

[Tree Code Update Report](#)

[Maintenance requirements](#)

Requiring replacement trees to be maintained for the lifetime of the project encourages applicants to care for the trees and ensure that canopy cover and ecological value is being adequately replaced.

[Incentives](#)

Offering incentives to retain significant trees can encourage applicants to consider trees at the early stages of the design process and to retain large, mature trees or groves of trees. Incentives can include departures from zoning requirements, such as parking regulations, setback, or height allowances, and could also include assigning additional credit to larger trees that are retained, reduced or waived permit fees, and expedited review times.

[Enforcement](#)

Enforcement generally includes penalties for unpermitted tree removal activities and violations of tree regulations and ensures compliance with approved plans. Penalties often include civil fines and required mitigation planting. Best practice is to set penalties for removing significant trees without a permit high enough to discourage the practice of knowingly removing trees, paying fines, and tracking repeat offenders for the purpose of issuing increased penalties. Equity needs to be considered when developing enforcement measures.

[Monitoring](#)

It is best practice to monitor development sites to ensure applicants are retaining and replanting trees according to approved site or landscape plans. Pre- and post-construction monitoring is recommended.

[Consolidated Regulations](#)

The Code sections that regulate trees are found in various Code chapters. It is best practice to place all tree protection regulations in the same chapter or section of the Code, to the extent feasible, for ease of application and understanding. It is more convenient to follow (and comply with) for Code users than cross referencing multiple Code sections.

[Emerging Regulatory Best Practices](#)

In addition to the current industry best practices discussed above, some new elements that have not been addressed in previous tree retention regulations are recommended as industry best practices by the Guide.⁶⁹ These include protection of Culturally Modified Trees and aligning with and supporting the Washington Wildland Urban Interface Code.

[Protection of Culturally Modified Trees](#)

Culturally Modified Trees (CMTs) are trees that have been modified in some way by past or current Indigenous People. CMTs are living, growing cultural resources that are with us today. They are also non-renewable, and once removed, are gone forever. In the Puget Sound region, these trees are often cedar and feature sections where bark was stripped for clothing, tools, baskets, and other purposes, or have bent boughs which help indicate important harvesting and hunting areas or waterways. These trees are

⁶⁹ Guide to Developing Effective Urban Tree Retention Regulations on Private Property, 2024 pg. 50-51 (Washington Wildland Urban Interface Code, Culturally Modified Trees) [\[LINK\]](#)

physical evidence of the connection between native peoples and their lands, and many have survived where Tribal villages or longhouses were burned down by settlers to the region.⁷⁰

CMTs contribute not only to a community's canopy and ecosystem but often are part of critical native forest remnants and wildlife habitat. The cultural and ecological significance of CMTs should be considered for local jurisdictions' tree retention code.

Currently, identified CMTs are protected under state law (RCW 27.53.060), which regulates the removal or alteration of any historic or prehistoric archaeological resource site.⁷¹ However, most jurisdictions do not protect CMTs in local tree ordinances. Some jurisdictions have quasi protection for historic or culturally significant trees, which may be used to help protect CMTs within the jurisdiction.⁷²

[Washington Wildland Urban Interface Code](#)

The Washington Wildland Urban Interface (WUI) Code is a set of regulations for land use and building construction in areas that are at risk of wildfires.⁷³ The purpose of the Code is to provide a comprehensive and holistic approach to enhancing building resilience from wildfires. One tenet of the Code is to help prevent structure fires in the wildland urban interface from spreading to wildland fuels such as trees. Another tenet is to prevent ignition of buildings and trees from direct exposure to wildfire.⁷⁴ The 2021 edition of the International Urban Interface Code has been adopted by Washington State but will not go into effect for one to two more years, as the Legislature must first complete additional work for implementation of the State's WUI Code. Adopted tree regulations must be in alignment with the WUI Code as to not create conflict and to help ensure the safety of people and structures located in the wildland urban interface.

D. An Evaluation and Recommendation of Whether and How the County's Urban Unincorporated Areas Tree Retention Regulations or Enforcement Mechanisms, or both, Should be Updated Given Other Jurisdiction's Requirements or Industry Best Practices

This section provides an evaluation and recommendation of whether and how the County's tree retention regulations should be updated, given other jurisdictions' requirements and industry best practices.

The Guide provides recommendations that were developed through analysis of the industry best practices. These industry best practices were reviewed alongside existing standards in the County's Code to determine which industry best practices were already in use (Appendix B).

Current County regulations do not fully meet industry best practices, thus the County's tree retention regulations and enforcement mechanisms are recommended to be updated. This report recommends a robust public engagement process as outlined in Section E, to gather feedback on which industry best

⁷⁰ Culturally Modified Tree Training [\[LINK to video\]](#)

⁷¹ RCW 27.53.060 [\[LINK\]](#)

⁷² Guide to Developing Effective Urban Tree Retention Regulations on Private Property, 2024 pg. 21 (Heritage Trees) [\[LINK\]](#)

⁷³ International Code Council, Wildland Urban Interface Code [\[LINK\]](#)

⁷⁴ International Code Council, Wildland Urban Interface Code [\[LINK\]](#)

practices to include in a Code update, as well as the detailed standards that will implement those best practices.

E. A Timeline and Public Engagement Strategy for Completing the Update and Transmitting a Proposed Ordinance to the Council

This section provides a public engagement strategy that could be employed as part of an update of tree retention regulations, as well as a timeline for transmitting a proposed Ordinance to the County Council.

Recommended Engagement for Developing Tree Regulations

High-level Goals of Engagement

The recommended public engagement focuses on creating opportunities for meaningful input and facilitating participation in the planning process by residents who reflect the diversity of the urban unincorporated areas, including those who have not historically been included in planning. Public engagement should meet the "County engages in dialogue" level of engagement as described in the Community Engagement Guide (Appendix C). As stated in the Community Engagement Guide, at this level of engagement, "the county engages community members to shape county priorities and plans." The strategies employ the use of forums, advisory boards, coalitions, legislative briefings and testimony workshops, and community-wide events. Public outreach is recommended to be extensive and occur over the course of two years. The engagement plan should be reviewed and modified by community members and organizations in order to ensure that the strategies and tools reach the desired goals of engagement.

Methods for Collecting Input

To adequately engage underrepresented and limited English proficiency populations, the recommended approach is to engage with trusted community-based organizations, including faith-based communities and other organizations that serve immigrant and non-English speakers, using the community liaison model. Community liaisons are community members who reflect the demographics of the populations in community. Educated by the County on the issues being discussed, they share and gather information with community members. Community liaisons should be compensated for their time, involvement, and expertise. Meetings need to be held where residents already gather to be respectful of their time and engagement. The number of participants at meetings, and if possible, their race and ethnicity, should be documented to ensure they represent the demographics of the community. If the demographics are not met, the community engagement approach should be modified with the intent of engaging those racial and ethnic groups who are not being represented.

Larger meetings would be coordinated by the County and primarily conducted via Zoom, as the urban unincorporated areas are located in all corners of the county. These meetings would include breakout room discussions hosted by community liaisons. If tree retention regulations and enforcement mechanisms are updated for Rural Towns, Fall City, Snoqualmie Pass, and Vashon Island would also be affected.

This geographic distribution of the unincorporated areas and Rural Towns could result in driving times being a barrier for many in attending in-person meetings if local meeting sites are not provided. When in-person meetings are held, the same topic will need to be repeated at multiple meetings strategically

located near groupings of unincorporated areas so that all residents in the urban unincorporated areas will have equal opportunity to attend those meetings.

Addressing Barriers to Participation

To reach community members not traditionally engaged in land use planning processes, County meetings should be held during the workday and in the evenings. Food, childcare, and language interpretation service should be provided at County-hosted meetings to the extent feasible. Staff could attend existing community meetings to discuss the regulations update and to receive feedback from a population reflective of the diversity of the community. Staff should make a specific effort to engage with non-English speaking communities, persons of color, community service providers, businesses, and youth. To assist with this effort, staff could create a project webpage that includes materials in English, Spanish, Vietnamese, Khmer, Somali, Mandarin, Korean, Tagalog, Hindi, Telugu, and Tamil. Communications could also occur through the King County Unincorporated Area News email newsletter. During the process, smaller group meetings with Indian Tribes, businesses or business interests, and community-based organizations could be held to engage those who have not always had a voice in the planning process.

Phases of Engagement

Early engagement should be focused on gaining an understanding of the community's concerns with tree retention regulations and enforcement mechanisms and sharing information about general land use planning concepts with a focus on tree retention regulations. Engagement activities could include hosting County-led meetings with community liaisons in a prominent role, attending existing community meetings, posting an online survey, and creating a project webpage. If possible, translators could attend meetings for communities with identified non-English speaking groups, and the project webpage could be translated into languages identified above. The County could contract with a consultant that specializes in community engagement to assist with the hosting of County-led meetings. Early engagement should focus on building a network and developing partnerships with Indian Tribes, community groups, arborist and landscape businesses, and key community members, developers, and to other business whose work may be impacted by tree retention regulations. This phase of engagement should also seek to confirm whether the recommendations in the report align with community priorities, as well as help staff learn of any issues not contemplated in the report that are important to community members.

An early draft of a proposed tree retention Code should be shared at the second phase of engagement. Early input will help drive the overall content and the details of the regulations. Channels through which the early draft could be shared include online open houses, in-person meetings with individuals and small groups, topic-specific focus groups, email correspondence, and booths at community events. County staff knowledgeable about tree retention regulations, community liaisons, and consultants should host these events. Notice of the release of the early draft should be provided using the King County website, social media (Facebook, Twitter, Instagram, Nextdoor), King County Unincorporated Area News email newsletter, and emails gathered during the early engagement process.

The third phase of engagement should occur after the release of a Public Review Draft (PRD). A PRD should be publicized through emails, social media, and a press release. Community members would be able to review draft standards and have an opportunity to recommend changes to all parts of the draft regulations. Small group meetings led by County staff and community liaisons could be held with Indian

Tribes, community groups, arborist and landscape businesses, key community members, and developers.

Timeline

As part of the tree code analysis, the Consultant interviewed four cities who had recently amended their tree regulations. Those four cities reported an average regulation amendment duration of four years. Staff estimates needing roughly two years to complete public engagement after a community engagement plan is shared with and finalized by community, draft new proposed regulations, and transmit a proposed Ordinance to the Council.

Table 9: Potential KCC Update Timeline			
Year 1			
Q1	Q2	Q3	Q4
<ul style="list-style-type: none"> • First phase of public engagement to introduce project • Interdepartmental coordination 	<ul style="list-style-type: none"> • Draft early Code version • Obtain general input 	<ul style="list-style-type: none"> • Refine • Issue 1st public review draft of potential updates • Second phase of engagement 	<ul style="list-style-type: none"> • Second phase of engagement • Revise potential proposed Code
Year 2			
Q1	Q2	Q3	Q4
<ul style="list-style-type: none"> • Obtain specific input • Issue 2nd public review draft of potential updates 	<ul style="list-style-type: none"> • Third phase of public engagement 	<ul style="list-style-type: none"> • Finalize proposed Ordinance 	<ul style="list-style-type: none"> • Executive transmits to the Council

VI. Conclusion/Next Actions

This report provides an overview of tree retention regulations and enforcement mechanisms from King County, municipalities within King County, and from neighboring western Washington counties to help inform a legislative framework that can be used to draft code standards. Industry best practices as recommended by the Guide have been discussed. The engagement strategy and timeline describe a process for translating the recommended practices into a future ordinance. Engagement and further analysis are needed to determine the industry best practices best suited for King County urban unincorporated areas and to explore options for strengthening the standards of each best practice to ensure retention and survival of the urban tree canopy.

The report recommends adoption of tree retention regulations and enforcement mechanisms for Rural Towns. Further analysis and public engagement are needed to determine which industry best practices to incorporate into tree retention regulations and enforcement mechanisms for Rural Towns and the standards adopted to enact those best practices. Those best practices and standards would need to be consistent with RCW 36.70A.030 and would need to serve the interests of the Rural Town communities.

VII. Appendices

- A. Tree Retention Regulations Summary Spreadsheet for Neighboring Western Washington Counties
- B. Gap Analysis Between King County's Tree Retention Regulations and Industry Best Practices
- C. Community Engagement Guide, May 2011

Appendix A. Tree Retention Regulations Summary Spreadsheet for Neighboring Western Washington Counties

JURISDICTION Revised	Pop.	Code Sections	Significant Tree Criteria	Other Tree Definitions	Tree Retention & Mitigation Related to Development	Tree Protection & Maintenance Related to Development	Property Owner Tree Removals No Development	Enforcement & Violations
King County 2004	Urban Unincorporated: 118,700	KCC. 16.82.156 Clear/grade KCC. 21A.16 Zoning & Landscaping KCC. 16.82.051 Critical Areas, hazard, emergency	8" DBH evergreen 12" DBH deciduous Healthy, non-hazardous. (KCC. 21A.06.1167)	Heritage designation [general] through "significant plant interpretation" (KCC. 20.36.100). Hazard tree: defined, no reference to TRAQ.	<u>Retain</u> : excluding critical areas, for trees located in the interior of the development proposal - <ul style="list-style-type: none"> For UR or R-1 development, retain 20 trees per acre or 10% of trees, whichever is greater. For apartment or townhouse development, sport fields, playfields, etc., commercial, industrial, R-4 to R-48 subdivisions, retain 10 trees per acre or 5% of trees, whichever is greater. Projects with >25% of site in critical areas are exempt from significant tree retention requirements. <u>Replant</u> : calculations outlined in KCC. 16.82.154 subsection E.1, 2. <u>Fees in lieu</u> : N/A	<u>Submittal</u> : inventory; tree retention plan (to include replacement trees); no credential designated. <u>Protection standards</u> : based on CRZ, typical tree protection measures. <u>Maintenance assurance</u> : minimal - pruning only; dead, damaged must be replaced; can require guarantees; 5 year vesting final short plats.	<u>Allowed to remove</u> : within urban growth area with clear/grade permit: trees located within site access/utility areas and trees within proposed building footprint/outside required perimeter landscape areas. Hazard per significant tree (21.A.06.1167), with utility, mining, government service areas, parks, libraries, etc. <u>Permit</u> ? Yes. Forestry Practices apply. <u>Replant</u> : Restoration plan required for clear/grade permits to restore trees on individual lots (rural area).	N/A
Kitsap County	Unincorporated: 180,259	DRAFTING NEW CODE IN PROGRESS						
Pierce County 2022	Unincorporated: 370,000	PCC 18J.15.030 Tree Conservation	8" Garry Oak 5" Pacific Yew 10" Pacific Madrone 15" (various species) 24" Douglas Fir, Sitka Spruce (PCC Table 18J.15.030-1)	Legacy tree : any tree larger than 40" or with historical, cultural, or biological significance	<u>Retain</u> : 30% of significant trees up to minimum tree density requirements PCC 18J.15.030.F.3 <ul style="list-style-type: none"> Employment Centers: 5 tree units per acre Urban Centers and Districts, Rural Centers: 20 tree units per acre Urban Residential: 30 tree units per acre <u>Replant</u> : Calculations outlined in Table 18J.15.030-3. <u>Fees in Lieu</u> : N/A	<u>Submittal</u> : Tree conservation plan, show location of trees to be retained or planted, show tree canopy. <u>Protection Standards</u> : No construction within critical root zone. <u>Maintenance assurance</u> : Irrigation is required until tree is established.	<u>Permit</u> : Development permit.	Notice and Order, Stop <u>Work Order</u> , <u>Civil penalty: \$1,000 for each violation</u>
Snohomish County 2014	Unincorporated: 79,215	SCC 30.25.016 Tree Canopy Requirements	8" for all trees except dogwoods and vine maples that are 7" and except alders Tree canopy: evergreen and deciduous 6' or greater	Hazardous tree : defined, no TRAQ reference, determined by qualified professional.	<u>Retain</u> : All significant trees within perimeter landscaping, critical areas and buffers. <u>Replant</u> : Calculations outlined in Table 30.25.016(3). <u>Fees in lieu</u> : N/A	<u>Submittal</u> : Shown on residential development <u>application</u> <u>Protection Standards</u> : No construction within the drip line, signage required <u>Maintenance</u> : Retained and planted trees may not be removed except if hazard. Must be replaced if removed	<u>Allowed to Remove</u> : Must retain trees in perimeter landscaping. <u>Permit</u> : Residential development permit <u>Replant</u> : Calculations outlined in Table 30.25.016(3).	Notice of Violation, Stop Work Order, Emergency Order, Citation: \$5,00 for each violation, Civil penalty: \$100 per day for the first violation, \$250 per day for second violation, \$500 per day for 3 rd violation and beyond

Key to Terms & Abbreviations

DBH – Diameter at breast height, measured in inches at 4.5 feet from ground level.

DSH – Diameter at standard height, measured in inches at 4.5 feet from ground level.

NGPA – Native Growth Protection Area, a designated protected area limiting potential development.

CRZ, LOD, TPZ – Critical Root Zone, Limits of Disturbance and Tree Protection Zone, in reference to areas where tree root, soil and undergrowth may require protection from construction impacts.

TRAQ – Tree Risk Assessor Qualification – standards established by the ISA for assessing and managing risk associated with trees.

ROW – right-of-way.

ISA – International Society of Arboriculture

ASCA – American Society of Consulting Arborists

Appendix B. Gap Analysis Between King County's Urban Tree Retention Regulations and Industry Best Practices

Industry Best Practice	King County Code	KCC. Meets Best Practice	KCC. Does Not Meet Best Practice
Purpose and Intent	A purpose section is provided in KCC. 16.82.010. It is missing additional purpose statements to support the goals and priorities of County plans.		X
Significant Trees	KCC. 21A.06.1167 defines significant tree, and KCC. 16.82.156 requires protection for significant trees.	X	
Tree Health and Viability	KCC. 16.82.156.C.1 requires that all retained trees be able to survive more than 10 years after the date of project completion.	X	
Nuisance Trees	KCC. does not define or address nuisance trees.		X
Hazard Trees	KCC. defines hazard trees but does not require evaluation by a qualified professional to confirm that the tree is a hazard.		X
Landmark or Exceptional Trees	KCC. does not define or provide protections for landmark or exceptional trees.		X
Heritage Trees	KCC. does not define or provide protections for heritage trees.		X
Methods for Quantifying Tree Protection – Incentivize Retention of Large Trees	KCC. 16.82.156.A does not incentivize the retention of large trees.		X
Tree Retention Priorities	KCC. 16.82.156.C.3 incentivizes, but does not require, the retention of mature trees, trees in groves, trees within 25-feet of a critical area or its buffer, or trees on a historical register by crediting each retained tree that meets these criteria as two trees for retention requirements.	X	
Tree Protection During Development	KCC. 16.82.156.D provides protection criteria for trees during development, including the installation of fencing around retained trees, and not allowing the storage of construction materials, fill, or impervious surface within the protected area of retained trees.	X	
Replacement Tree Quantities and Standards	KCC.16.82.156.E requires tree replacement and sets forth the quantity of required tree replacement, however, the formula for determining the number of replacement trees treats every removed tree the same, no matter		X

Industry Best Practice	King County Code	KCC. Meets Best Practice	KCC. Does Not Meet Best Practice
	the size. Best practice is to calculate replacements to offset the size of trees removed, i.e., like for like.		
Approved Trees	KCC. does not provide a list of preferred replacement tree species.		X
Prohibited Trees	KCC. does not provide a list of prohibited trees.		X
Replacement Tree Size	KCC. does not require a minimum replacement tree size.		X
Location	KCC. 16.82.156.E.4 allows off-site planting if planting replacement trees on site "is impractical or contrary to the overall objectives of the underlying zoning classification" but does not provide planting location priorities.		X
Fee in Lieu	KCC. does not allow for payment in lieu of tree replacement.		X
Property Owner Tree Removal Without Development/Construction	KCC. requires permit review for all significant tree removals, whether or not tree removal is associated with construction.	X	
Permitting Requirements	KCC. 16.82.156.B requires a tree retention plan to be submitted, however the plan requirements do not meet industry best practices.		X
Maintenance Requirements	KCC. 16.82.170 gives staff the authority to require financial guarantees, also known as bonds, to ensure that retained and replacement trees survive.	X	
Incentives	KCC. 16.82.156.C.3 offers some incentives to encourage the retention of mature trees, trees in groves, trees within 25-feet of a critical area or its buffer, and trees on a historical register by crediting each retained tree that meets these criteria as 2 trees for retention requirements. However, it does not offer any of the development incentives identified as best practices including deviation from zoning requirements such as parking regulations, or setback or height allowances, or reduced or waived permit fees or expedited review times.		X
Enforcement	KCC. 16.02.580 authorizes the building official to serve a notice of violation or order on the person responsible for violating the code. KCC. 16.02.590 authorizes the building official to issue a stop work order when any work is being done contrary	X	

Industry Best Practice	King County Code	KCC. Meets Best Practice	KCC. Does Not Meet Best Practice
	to the provisions of the code. Additional enforcement mechanisms are available through Title 23 of the code.		
Monitoring	KCC. 16.82.156.2 requires dead, diseased, damaged, or stolen plantings to be replaced within three months or during the next planting season.	X	
Consolidated Regulations	The tree retention regulations are not consolidated.		X
Washington Wildland Urban Interface Code	Adopted tree regulations must be in alignment with the WUI code as to not create conflict and to help ensure the safety of people and structures located in the Wildland Urban Interface. Current tree code does not address the WUI code.		X

Appendix C. Community Engagement Guide



Community Engagement Guide

May 2011

Overview

King County has developed this Community Engagement Guide for employees and programs to promote effective engagement and customer service with all county communities.

The Strategic Plan, "Working Together for One King County," charts a path for how King County will conduct its business for 2010-2014. One of the plan's goals is to "promote robust public engagement that informs, involves, and empowers people and communities."

The Strategic Plan's strategies to achieve these goals include:

- Develop communication channels that will allow all residents ongoing opportunities to be heard
- Ensure that communication, outreach, and engagement efforts reach all residents, particularly communities that have been historically under-represented
- Promote meaningful community participation in decisions that affect their community
- Develop guidelines and standards for public engagement for use by all county agencies
- Use public outreach to better communicate who we are and what we do

In late 2010, King County adopted an Equity and Social Justice Ordinance, establishing definitions and directing implementation steps related to the "fair and just principle" of the strategic plan. The ordinance defines the following equity and social justice foundational practices for the county:

- Raise visibility of equity and social justice
- Increase focus on upstream determinants of equity
- Consider equity and social justice impacts in all decision-making
- Promote fairness and opportunity in County government practices
- Collaborate across agencies
- Build community trust and capacity

This guide builds on the county's Strategic Plan as well as the Equity and Social Justice Ordinance.

Community engagement is a two-way exchange of information, ideas and resources. Engagement activities include a range of approaches from informing to sharing leadership to resident-led efforts, depending on the degree of community and county involvement, decision-making and control.

Community engagement should offer opportunities for communities to express their views and have a meaningful role in decision-making. It should also consider the diversity of our communities, including culture and ethnicity, and seek to create an inclusive and accessible process. Effective engagement removes barriers for communities that may have previously prevented residents from successfully working with county government.

The work is challenging and complex and you might make mistakes. The rewards of successful public engagement, however, are great, and lead to better results and work products.

This guide provides tools, examples and resources to help you in the community engagement process.



King County

Getting started:

This guide should be used during the initial planning stage and before work begins with the public.

The three steps to using this guide:

1. Review the **Community Engagement Continuum** and the examples.
2. Carefully complete the **Community Engagement Worksheet**
3. Share the **Community Engagement Worksheet** with your team members and include their input before you begin next steps.

Notes:

If you have questions or need assistance contact:

Matias Valenzuela	206.205.3331; Matias.Valenzuela@kingcounty.gov
June Beleford	206.263.8762; June.Beleford@kingcounty.gov



Community Engagement Continuum

The continuum provides details, characteristics and strategies for five levels of community engagement. The continuum shows a range of actions from county-led information sharing that tends to be shorter-term to longer-term community-led activities. The continuum can be used for both simple and complex efforts. As a project develops, the level of community engagement may need to change to meet changing needs and objectives.

The level of engagement will depend on various factors, including program goals, time constraints, level of program and community readiness, and capacity and resources. There is no one right level of engagement, but considering the range of engagement and its implications on your work is a key step in promoting community participation and building community trust. Regardless of the level of engagement, the role of both King County and community partners as part of the engagement process should always be clearly defined.

Levels of Engagement				
County Informs	County Consults	County engages in dialogue	County and community work together	Community directs action
King County initiates an effort, coordinates with departments and uses a variety of channels to inform community to take action	King County gathers information from the community to inform county-led interventions	King County engages community members to shape county priorities and plans	Community and King County share in decision-making to co-create solutions together	Community initiates and directs strategy and action with participation and technical assistance from King County
Characteristics of Engagement				
<ul style="list-style-type: none"> • Primarily one-way channel of communication • One interaction • Term-limited to event • Addresses immediate need of county and community 	<ul style="list-style-type: none"> • Primarily one-way channel of communication • One to multiple interactions • Short to medium-term • Shapes and informs county programs 	<ul style="list-style-type: none"> • Two-way channel of communication • Multiple interactions • Medium to long-term • Advancement of solutions to complex problems 	<ul style="list-style-type: none"> • Two-way channel of communication • Multiple interactions • Medium to long-term • Advancement of solutions to complex problems 	<ul style="list-style-type: none"> • Two-way channel of communication • Multiple interactions • Medium to long-term • Advancement of solutions to complex problems
Strategies				
Media releases, brochures, pamphlets, outreach to vulnerable populations, ethnic media contacts, translated information, staff outreach to residents, new and social media	Focus groups, interviews, community surveys	Forums, advisory boards, stakeholder involvement, coalitions, policy development and advocacy, including legislative briefings and testimony, workshops, community-wide events	Co-led community meetings, advisory boards, coalitions, and partnerships, policy development and advocacy, including legislative briefings and testimony	Community-led planning efforts, community-hosted forums, collaborative partnerships, coalitions, policy development and advocacy including legislative briefings and testimony



King County

Justice and King County Superior Court worked together with the Office of Performance, Strategy and Budget to reduce the number of warrants and detention time for failure to appear at court hearings particularly for youth of color. Extensive feedback from all groups represented contributed to designing a pilot program that provides outreach workers to youth with prior warrant histories. [More information](#)

County and community work together: Community and King County share in decision-making to co-create solutions:

- A. **Skyway Solutions.** King County worked together with a diversity of residents in Skyway to craft an action agenda that reflects local goals and promotes community-driven activities for revitalization. The process was co-designed by community members and facilitated by a non-profit partner to engage meaningful community leadership and participation in decision making - a guiding principle of equitable development. Because the community would be responsible for leading implementation, the process was intentionally designed to build the capacity of the community to address problems, find solutions, and lead change. Today, Skyway Solutions is sustained by the collective leadership of an engaged and mobilized community; King County provides technical assistance upon request. [More information](#)
- B. **Committee to End Homelessness.** The Department of Community and Human Services and community organizations and representatives worked together in the Committee to End Homelessness in King County to identify barriers and develop strategies to link persons living below the poverty line with affordable, quality and healthy housing options. The main focus of the project is to provide culturally competent services for all clients by removing barriers that prevent them from getting and maintaining housing. [More information](#)

Community directs action: Community initiates and directs strategy and action with participation, and technical assistance from King County

- A. **Equal Start Community Coalition.** Public Health partnered with community members to form the Equal Start Community Coalition to address social determinants that lead to inequities in birth outcomes for African American, Native American and Latino families. The community-led coalition brings together affected groups, community members, health and human service providers, and policy makers to exchange ideas and identify strategic actions with technical assistance and funding support from Public Health. [More information.](#)

King County References and Resources:

2010-2014-King County Strategic Plan, www.kingcounty.gov/strategicplan/
 King County Equity & Social Justice, www.kingcounty.gov/equity
 King County Civil Rights Commission, www.kingcounty.gov/exec/CRC
 Plain Language Style Guide, www.kingcounty.gov/exec/styleguide/plainwriting
 Translation Executive Order, www.kingcounty.gov/operations/policies/executive/itao/inf142aao.asp
 Communities Count - Indicators Across King County, www.communitiescount.org/

Resources:

City of Seattle Race and Social Justice Initiative, <http://www.seattle.gov/rsji>
 Community Toolbox, ctb.ku.edu/en/tablecontents/chapter_1006.aspx
 Bayside Community Engagement Framework, www.bayside.vic.gov.au
 An Overview of Communities Practice-National Congress of American Indians Policy Research Center www.oes.ca.gov/operational/oes/vulnerable_populations
 PBS Series, Unnatural Causes, Is Inequality Making Us Sick? www.unnaturalcauses.org



King County

Continuum of Engagement Examples:

County informs: King County initiates an effort, provides information through a variety of channels, and directs community to take action

- A. **Flooding emergency preparedness.** In preparing for an emergency flood scenario, the departments of Natural Resources and Parks, Development and Environmental Services, and Public Health worked together to communicate across various departments to ensure culturally-appropriate strategies were utilized and all communities received instruction in how to prepare for potential flooding. Websites, local ethnic media, educational materials in the most common languages, professional organizations, outreach to ethnic community centers, door-to-door contacts and Unincorporated Area Councils were used to disseminate directions to residents on how they can be prepared during an emergency. King County television featured an emergency preparedness Public Service Announcement. [More information](#)
- B. **Cancer screening outreach.** As part of an education campaign to reduce cervical cancer rates among local Vietnamese and Latina women, populations that suffer from higher rates of cervical cancer and lower rates of screening for the illness, Public Health produced materials and media releases in different languages. [More information](#)

County consults: King County gathers information from the community to inform county-led interventions:

- A. **Link Light Rail survey and outreach.** Following a Town Hall meeting hosted by King County, Department of Transportation (DOT) conducted a survey targeted to gather information from affected neighborhoods impacted by Link Light Rail services changes. DOT's *In Motion Program* consulted and worked directly with community-based agencies serving limited English proficient and English as a second language immigrant and refugee communities to ensure they were prepared on the use of the new regional ORCA fare cards. Presentations were made to community organizations that provide services to the most vulnerable populations to ensure they received information to help them access safe and efficient modes of transportation. [More information](#)
- B. **Solid Waste Management.** In cooperation with cities that were represented by interlocal agreements King County's Department of Natural Resources and Solid Waste Division, drafted a comprehensive Solid Waste Management plan to ensure dumping sites were not targeted to low income communities with higher concentrations of ESL populations. GIS mapping helped to identify, inform and promote actions to prevent those communities from becoming targeted for dumping site facilities. <http://www.kingcounty.gov/environment/dnrm.aspx>

County engages in dialogue: King County engages community members to shape priorities and plans:

- A. **Equity & Social Justice.** King County Equity & Social Justice sponsored Town hall events at various locations throughout the county utilizing the PBS series *Unnatural Causes: Is Inequality Making Us Sick?* Trained facilitators conducted dialogues with over 100 community groups representing education, criminal justice, human services, public health, youth and faith-based groups. The main goal of the dialogues was to raise awareness about the root causes of inequities, promote a common understanding of equity and social justice principles, and exchange ideas with community groups about possible actions and activities to create stronger and healthier communities. [More information](#)
- B. **Youth outreach.** Youth and community members were engaged to help develop a process for identifying causes preventing them from appearing at court hearings and being issued warrants. King County Juvenile

Certificate Of Completion

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Subject: Complete with DocuSign: Motion 16667.docx, Motion 16667 Attachment A.pdf	
Source Envelope:	
Document Pages: 3	Signatures: 2
Supplemental Document Pages: 42	Initials: 0
Certificate Pages: 5	Envelope Originator: Cherie Camp
AutoNav: Enabled	401 5TH AVE
Enveloped Stamping: Enabled	SEATTLE, WA 98104
Time Zone: (UTC-08:00) Pacific Time (US & Canada)	Cherie.Camp@kingcounty.gov
	IP Address: 198.49.222.20

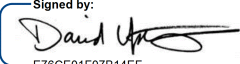
Record Tracking

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Security Appliance Status: Connected	Pool: FedRamp	
Storage Appliance Status: Connected	Pool: King County-Council	Location: DocuSign

Signer Events

Dave Upthegrove
dave.upthegrove@kingcounty.gov
Chair
Security Level: Email, Account Authentication (None)

Signature


Signed by:

E76CE01F07B14EF...
Signature Adoption: Uploaded Signature Image
Using IP Address: 67.185.138.82

Timestamp

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Electronic Record and Signature Disclosure:
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Melani Hay
melani.hay@kingcounty.gov
Clerk of the Council
King County Council
Security Level: Email, Account Authentication (None)

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Sent: 9/25/2024 1:45:12 PM
Viewed: 9/25/2024 1:58:40 PM
Signed: 9/25/2024 1:58:45 PM

Electronic Record and Signature Disclosure:
Accepted: 9/30/2022 11:27:12 AM
ID: 639a6b47-a4ff-458a-8ae8-c9251b7d1a1f

In Person Signer Events	Signature	Timestamp
Editor Delivery Events	Status	Timestamp
Agent Delivery Events	Status	Timestamp
Intermediary Delivery Events	Status	Timestamp
Certified Delivery Events	Status	Timestamp
Carbon Copy Events	Status	Timestamp
Witness Events	Signature	Timestamp
Notary Events	Signature	Timestamp

Envelope Summary Events	Status	Timestamps
Envelope Sent	Hashed/Encrypted	9/25/2024 1:21:05 PM
Certified Delivered	Security Checked	9/25/2024 1:58:40 PM
Signing Complete	Security Checked	9/25/2024 1:58:45 PM
Completed	Security Checked	9/25/2024 1:58:45 PM

Payment Events	Status	Timestamps
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Electronic Record and Signature Disclosure

ELECTRONIC RECORD AND SIGNATURE DISCLOSURE

From time to time, King County-Department of 02 (we, us or Company) may be required by law to provide to you certain written notices or disclosures. Described below are the terms and conditions for providing to you such notices and disclosures electronically through the DocuSign system. Please read the information below carefully and thoroughly, and if you can access this information electronically to your satisfaction and agree to this Electronic Record and Signature Disclosure (ERSD), please confirm your agreement by selecting the check-box next to 'I agree to use electronic records and signatures' before clicking 'CONTINUE' within the DocuSign system.

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If you decide to receive notices and disclosures from us electronically, you may at any time change your mind and tell us that thereafter you want to receive required notices and disclosures only in paper format. How you must inform us of your decision to receive future notices and disclosure in paper format and withdraw your consent to receive notices and disclosures electronically is described below.

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You may contact us to let us know of your changes as to how we may contact you electronically, to request paper copies of certain information from us, and to withdraw your prior consent to receive notices and disclosures electronically as follows:

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To let us know of a change in your email address where we should send notices and disclosures electronically to you, you must send an email message to us at cipriano.dacanay@kingcounty.gov and in the body of such request you must state: your previous email address, your new email address. We do not require any other information from you to change your email address.

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- ii. send us an email to cipriano.dacanay@kingcounty.gov and in the body of such request you must state your email, full name, mailing address, and telephone number. We do not need any other information from you to withdraw consent.. The consequences of your withdrawing consent for online documents will be that transactions may take a longer time to process..

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