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MEMORANDUM

To: Kurt Triplett

From: Adam Weinstein, AICP, Planning and Building Director
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Date: June 24, 2021

Subject: DRAFT CODE AMENDMENTS, KIRKLAND ZONING CODE CHAPTER 95
TREE MANAGEMENT AND REQUIRED LANDSCAPING
FILE NUMBER CAM18-00408

RECOMMENDATION:

It is recommended that City Council discuss general policy direction of Kirkland Zoning Code Chapter 95 ([KZC 95](#)). This Council discussion is not intended for a comprehensive review of the code but is intended to focus on broader substantive issues that will help inform a general framework for developing a draft code in advance of its consideration and possible adoption.

BACKGROUND DISCUSSION:

The removal of tree canopy cover in urban areas has resulted in the loss of beneficial functions that trees provide to the public. Tree ordinances are one of the ways cities balance urban growth with fostering a sustainable community. Kirkland's tree code (KZC 95) establishes a permit process and standards for the protection and replacement of trees, mainly on private property. While tree regulations add cost and plan review complexity to the development process, growth and development continue at a brisk pace. The current tree code does not stop tree removal related to building on private property, nor does it allow people to indiscriminately cut down trees in Kirkland.

The code functions to simultaneously respect private property rights and protect Kirkland's tree canopy while accommodating significant residential and commercial growth anticipated in Kirkland's land use policies and regulations. The goals are often in conflict – the best tree retention strategy would be to preclude tree removal and the best development strategy would be to not require tree retention. This inherent tension is complicated further by regulating rates of tree removal, retention and planting over short- and long-term horizons. Because KZC 95 was last updated in 2010, this code amendment project has presented an opportunity to review code effectiveness, ensure the code is relevant and consistent with best available science, and that KZC 95 aligns with the community's vision.

Updating Kirkland's tree code is an important project identified in the 2018 (and subsequent) Planning Work Programs, the 2014-2019 Citywide Urban Forest Work Plan¹, and more recently in Kirkland's Sustainability Master Plan².

Additional project sequencing, background information and many of the questions discussed below are described in more detail in the May 18, 2021 City Council meeting staff memo³.

At the May 18 City Council meeting, the Council decided to "step back" and discuss the desired outcomes from the process at a high level. The Council requested that general questions asking for general policy direction be emailed to each Councilmember, who would individually provide their responses directly to staff.

This memo poses those same high-level questions on the tree code's general policy direction below. Having considered various policy directions and their effects, the Council is asked to discuss these questions as a group at its meeting and provide staff with an initial consensus or majority response to help establish a framework that could lead to KZC 95 code changes. With a majority response to the questions below, staff will return with a code framework that meets Council's needs and that supports the development of a final draft code.

Councilmember responses to staff were not circulated prior to the July 6 Council meeting discussion. The compiled responses to these questions will be made available for review at the start of July 6 study session. In addition to these responses, Councilmembers have articulated their individual perspectives on KZC 95 at prior City Council meetings, Council Committee meetings, and retreats over the 3-year course of this project. The totality of this input, including Councilmember responses, has shaped the "staff recommendations" under each question below.

GENERAL POLICY DIRECTION:

1. Does the current code need a major update as proposed, or just minor amendments such as adjusting definitions and code clarifications?

Discussion: Most of the proposed code changes are relatively minor code amendments that clarify the intent and administration of the regulations. However, to increase the certainty (also referred as code "predictability") with development permit review outcomes, some of the draft codes result in relatively major, complex code changes that can make the code more difficult to administer or change the outcomes, resulting in more tree removal. Staff would generalize the "Levels" of code changes according to the impact of the proposed code modifications as follows:

- No impact - to address typos and redundancies; clarify, simplify or further define something already in the code, simplify formatting or remove outdated references.

¹ [Citywide Urban Forest Work Plan 2014-2019](#), Objective 4.3 Update Tree Codes, page 5.

² [Sustainability Master Plan](#), Natural Environment + Ecosystems Focus Area, page 40.

³ [May 18, 2021 City Council meeting staff memo](#), pages 1-2.

- Minor - updates Best Available Science, Best Management Practices, industry standards, etc. without an increase in requirements or changes to code intent.
- Moderate - restructuring of code sections and any of the above that results in new, increased or eliminated requirements that are relatively uncontroversial.
- Major - substantially new, increased or eliminated requirements, added procedures or cost to permit applicants. Changes the impact of the code significantly on either development or tree retention.

One example of a “major” code amendment involves modification of the existing code provision that requires tree retention in setbacks. In the updated draft code, specific building envelope dimensions require measurements and calculations that are not practical/simple for all users, may complicate development feasibility studies, and that increase plan review procedures and possibly design costs. The Landmark tree concept and increased tree removal allowances are also “major” code amendments.

Staff recommendations: Maintain the current code structure and make minor to moderate adjustments to the code with clarifications and improved definitions, such as tree condition ratings, groves, and simple terms describing the location of trees required to be retained, etc. As discussed in the sections below, staff recommends major updates related to new regulations for Landmark trees.

City Council Discussion and Decision: Should the range of tree code updates being considered by the Council be reduced/simplified to exclude most major updates to the code?

2. What is Council’s desired outcome from an amended tree code?

Discussion: For guidance in considering code update outcomes, the initial KZC 95 project scope included three primary objectives:

- Support the policy goals established in Kirkland’s Comprehensive Plan and the objectives in the Urban Forestry Strategic Management Plan (UFSMP).
- Address issues and challenges that have arisen since the last tree code revision.
- Update the code so that it is effective and practical to use.

The stated objective of the amendment in the UFSMP was to update the tree code to “simplify & clarify,” with a goal to “protect, maintain and enhance the urban forest.” The relevant Comprehensive Plan goals are:

- *Strive to achieve a healthy, resilient urban forest with an overall 40 percent tree canopy coverage.*
- *Provide a regulatory framework to protect, maintain and enhance Kirkland’s urban forest.*
- *Balance the regulatory approach with the use of incentives, City practices and programs, and public education and outreach.*

These objectives seem to align with previous Council discussions and input that emphasized canopy retention/restoration, code clarification and simplification, and pursuit of creative public and private tree planting initiatives.

Feedback from public outreach efforts, a public hearing, significant input from stakeholders and staff code administrators identified the issues and challenges that have arisen since the 2010 code revision. These challenges are primarily associated with code clarity and simplicity while at the same time a desire for increased code predictability and a somewhat more prescriptive code. As noted above, increases in code predictability can reduce code flexibility and simplicity: what may be effective and practical for a well-seasoned developer may not be for a property owner or less-experienced contractor.

Staff recommendations: Simplify and clarify the current code consistent with minor/moderate code amendments (Question 1):

- Increase readability with better definitions/terminology and removing any unnecessary code language.
- Streamline overly complicated code provisions and consider plates/tables where possible.

Consider measures that result in the same or greater tree retention on development sites as the current code (Question 6) and meet policy goals with code amendments that incrementally increase tree canopy citywide. Based on the outcome of legal options available, allow replanting elsewhere, such tree banks and fee-in-lieu of on-site tree planting.

Consider not pursuing moderate/major changes in the draft code with effects that do not meet project objectives or policy goals, such as increased tree removal allowances that are not offset by other retention efforts (Question 4).

City Council Discussion and Decision: What is Council's desired outcome from the amended tree code?

3. Does the Council feel the problems with the current tree code are related to trees lost with development, or with private property tree removals?

Discussion: The majority of concerns from Kirkland residents relate to tree removal with development. That makes sense since development sites often result in highly visible, sudden, and dramatic changes to the environment. Development also has a measurable impact on tree canopy as tracked by the City's most recent canopy assessment. Private property tree removals tend to be more incremental and not to result in the stark changes that occur with development. However, those smaller-scale removals also contribute to canopy loss. An effective tree code needs to address both contributors to canopy loss and ensure that the regulations work in concert toward the City's policy objectives. That being said, tree retention standards on development sites *and* limits on property owner tree removals demonstrably:

- Slows canopy cover loss and ensures a multi-aged urban forest.
- Supports UFSMP objectives and the City's policy goals.

- Meets the project objective to address issues and challenges that have arisen since the last code revision (tree canopy cover loss).

Relative to the current code, the draft code results in greater tree removal than the current code (see Question 4 below).

Staff recommendation: Considering that both tree removal scenarios are linked to the loss of tree canopy cover, and given both the limitations of increasing tree retention on development sites (Question 5) and the desire to allow tree removals in proportion to property size (Question 4), the updated code should aim to both maximize tree retention on development sites *and* limit property owner tree removals, with proportional changes based on property size, to meet canopy cover goals.

City Council Discussion and Decision: Does the Council feel the problems with the current tree code are related to trees lost with development, or with private property tree removals?

4. Does the Council want to provide more flexibility to private property owners to remove (more?) trees from their property?

Discussion: The draft code allows more property owner tree removals than the current code⁴. Kirkland's private property tree removal allowance is fairly standard or even generous compared to other municipalities. Currently, tree removal allowances and approved tree removal permits account for approximately 1,200 trees removed annually.

As discussed in Question 3, the draft code balances greater tree removal allowances, hedge removals and increased tree removals on development sites (Attachment 1) with limited property owner Landmark tree removals, recognizing that Landmark tree protection on development sites is difficult from both an arborist's and an architect's point of view (Question 5) and may not result in long-term protection under a 5-year maintenance agreement.

Staff recommendation: If the Council concurs with the direction of the draft code to allow more tree removal for larger properties, the canopy loss can be mitigated by:

- Reconsidering hedge removals.
- Limiting property owner Landmark tree removals (Question 5).
- Increasing annual tree removal allowances more conservatively than the draft code.
- Requiring tree replanting elsewhere.

While not immediately mitigating canopy loss, the following actions can foster an expanded tree canopy on private property:

- Ongoing education and outreach to help inform the community on the purpose of Kirkland's tree code and the benefits of trees.
- Tree planting programs and incentives for private property owners to preserve trees.

⁴ Scenario Example, Code Result and Other Options are provided in the May 18, 2021 staff memo, Code Change 1, page 3.

City Council Discussion and Decision: Does the Council want to provide more flexibility to private property owners to remove (more?) trees from their property?

5. Should big (Landmark) trees have higher retention standards on development sites than other trees? Be protected on non-development sites?

Discussion: Comprehensive Plan Policy E-2.1 articulates that a healthy, sustainable urban forest “consists of diverse tree ages and species, both in native and planted settings. Larger, mature trees should be maintained and protected, as the greatest benefits accrue from the continued growth and longevity of larger trees.”

With development scenarios, it is substantially more difficult to successfully retain larger trees because they require large root protection areas. The current code already functions to retain large trees at the perimeter of lots from construction impacts while allowing the full development potential that zoning dictates.⁵ A special designation for certain-sized trees likely would make little difference unless there are:

- Changes to development regulations, like increasing setbacks, reducing maximum lot coverage, etc.
- Requirements to substantially change proposed building designs.
- Changes to the design process for certain development types such as short plats, subdivisions and multi-family projects (discussed under staff recommendations).
- Canopy restoration requirements for when landmark trees are removed.

Given the limitations to protecting large trees in the majority of development scenarios, other measures to protect large trees have been considered, such as:

- Altogether prohibit/ban property owner Landmark tree removals, much like trees in critical areas.
- Preserve in perpetuity Landmark trees that were protected with development (similar to groves) that could otherwise be removed after 5-year maintenance agreements expire.
- Limit the number of property owner Landmark tree removals within a given period of time, as proposed in the draft code (at lower rates than the current allowance of 2 at the same time within 12 months).

Staff recommendation: Landmark trees should be defined and assigned a new and high retention standard. That standard is most likely to be effective at preserving these larger trees with larger single-family property development (over 15,000 square feet), short plats, subdivisions; require the Integrated Development Plan (IDP) permit review process so that large tree retention decisions can be made early in the design phase, prior to investments in infrastructure configuration (see Question 6/Staff Recommendation). In addition, the code should allow or require clustering of lots/building sites in order to provide more design flexibility to retain trees. For multi-family developments, require a presubmittal meeting with arborists in attendance and preliminary tree information so that similar infrastructure and project layout decisions occur early in the design process.

⁵ Scenario Example, Code Results and Other Options provided in the May 18, 2021 staff memo, Code Change 3, page 5.

Limit Landmark tree removal in non-development (property owner) tree removal scenarios and require a permit for their removal (as an “allowance,” the requested courtesy notification prevents tracking and administering replacements).

City Council Discussion and Decision: Should big (Landmark) trees have higher retention standards on development sites than other trees? Be protected on non-development sites?

6. Should the updated tree code require more retention of trees on development sites than the current code?

Discussion: The current tree code does a good job of requiring tree retention in required setbacks. Compared to the current code, the draft KZC 95 is expected to result in greater tree removal and less tree retention on development sites, in the interest of clarity and predictability, by focusing on retaining trees with minimum condition and size standards.

Staff recommendation: If Council concurs that the updated code should result in *the same tree retention* rates as the current code, the following measures would apply:

- Broaden the revised grove definition to include trees between 6-12 inches in trunk diameter, consistent with the current code.
- Include “fair”⁶ condition trees with Tier 2 tree retention to increase tree retention on development sites, consistent with the current code.

If Council concurs that the updated code should result in *increased tree retention* on development sites than the current code allows, in addition to the previous measures, the following would apply:

- Adopt standards for landmark trees as discussed in policy direction Q.5 above.
- To slow the loss of canopy cover that was previously protected on development sites, limit Landmark tree removals after 5-Year Maintenance Agreements expire (Question 5/Staff Recommendation).
- Mandate the IDP development review process for short plats and subdivisions citywide (currently required in the Holmes Point Overlay area), allow and or require clustering of lots for short plats and subdivisions, and consider applying presubmittal review requirements to multi-family developments.
- Leverage private and public resources with a city program for canopy restoration.

City Council Discussion and Decision: Should the updated tree code require more retention or the same retention of trees on development sites than the current code?

⁶ Excerpt from the draft definition of “fair” condition trees: A single defect of a significant nature such as a trunk cavity or multiple moderate defects such as large girdling roots, trunk damage, evidence of decay that are not practical to correct or would require multiple treatments over several years...

7. In addition to unavoidable tree removal with development (i.e., within building envelope), should some/all remaining trees be allowed to be removed if they are mitigated?

Discussion: There continues to be discussion of allowing unrestricted removal of trees on development sites if removed trees are somehow mitigated through replanting. This results in significantly accelerated canopy loss in the near- and mid-term with the hope of long-term canopy offsets. While it makes sense to plant trees to ensure future canopy cover, it is important to have a mix of old and new trees to provide an even succession of benefits over time. Even with considerable replanting efforts, new nursery-sized replacement trees do not begin to contribute benefits for 10-20 years, which is why it's important to *balance* the retention of healthy trees with planting new trees.

Staff recommendation: To slow the loss of canopy cover city-wide, staff does not recommend allowing the removal of trees that would be candidates for retention from development sites. The city can also:

- Provide ongoing education around new tree planting and landscape management.
- Improve public tree maintenance.
- Implement tree planting programs applicable to public and private property.

City Council Discussion and Decision: In addition to unavoidable tree removal with development (i.e., within building envelope), should some/all remaining trees be allowed to be removed, if they are mitigated?

8. Does the Council prefer certain mitigation options for trees removed on development sites, such as:

- a) On-site tree replanting?***
- b) Off-site replanting supported by fees-in-lieu of planting?***
- c) Off-site replanting in specified locations using a formal "tree banking" system?***
- d) Other mitigation options?***

Discussion: The current code establishes an order of priority for mitigating trees removed with development: plant on the development site first, then plant at another "approved location in the City," and finally payment of fees in-lieu of planting after the first two options are "explored in depth". Fees in-lieu must be deposited into the City Forestry Account (CFA)⁷ and used for specific purposes, one of which is citywide tree planting⁸. The CFA has been used to match grant funding for urban forestry projects such as the Parks tree inventory, the 2010 tree canopy assessment and the Urban Forestry Strategic Management Plan. More recently, CFA funds support Green Kirkland Partnership efforts to increase canopy cover in Park open spaces. With a limited revenue source and multi-departmental urban forestry-related expenditures, the CFA is somewhat manageable to administer.

⁷ KZC 95.33(3)(c).

⁸ KZC 95.57.2

A “tree bank” involves setting up a new, comprehensive program in which specific areas would be designated for off-site tree planting. Staff is currently examining the legal implications of establishing an off-site mitigation program with the implementation of the Urban Forestry 6-Year Work Plan (Question 9). Some of the legal implications include whether fees incurred from tree removal on private property can be banked to use with public property tree planting, if banked fees must be used within a certain time period, and what it would look like to legally and procedurally administer a “banking” program. It is difficult to estimate the precise timing of the program launch as substantial additional work is needed to design the program, develop a capital facilities program, and determine the actual capacity for the City to fully mitigate continued canopy loss.

The Council has inquired about the possibility of mitigation standards for removal of right-of-way trees associated with development. Distinct from the potential legal limitations noted in Question 9 below, the City Attorney’s office has indicated that additional mitigation standards and a fee-in-lieu approach is likely defensible given that right-of way trees are public assets.

Staff recommendation: Continue to mitigate trees lost through development on private property through on-site tree retention and replanting. If legally defensible, pursue a strategy where trees removed from private and/or public property development projects that cannot be replanted on site are offset through a formal mitigation program. Dedicate funding to increase canopy cover through public tree planting initiatives, incentive programs and education/outreach. Explore measures for development projects resulting in extraordinary tree removal (defined by a threshold) that can be mitigated through a capital tree planting program.

In prior discussions, Council has considered appropriate mitigation for Landmark trees removed on development sites. Staff recommends that planting on-site be pursued first (consistent with Question 7) or in combination with payment of in-lieu fees that support a tree bank program, if implemented.

City Council Discussion and Decision: Does the Council prefer certain mitigation options for trees removed on development sites?

9. Should the revenue generated from fees-in-lieu of planting on development sites be used to fund city-wide tree planting programs?

Discussion: See Question 8/Discussion on the City Forestry Account. Although the current code supports a fee-in-lieu option, the majority of CFA account funds are the result of civil penalties from unauthorized tree removals, which may be further legal justification to keep “tree bank” funds separate. Collection of in-lieu fees is limited by State law (RCW 82.02.020), so a tree bank option will require additional research by the City Attorney’s office. If this option is available, Council could consider proactive measures with dedicated funding to increase canopy cover lost through development, support ongoing tree planting initiatives and public education/outreach on the benefits of trees. Other revenue sources such as those discussed in the UFSMP⁹ should also be considered.

⁹ [Urban Forest Strategic Management Plan](#), Section 4.2, Potential Funding Sources, page 38-40.

Note that reevaluating the use of new or existing urban forestry-related funds is a budgeted project through the approval of a 2021-2022 Service Package Request.¹⁰

Staff recommendation: If legally defensible, pursue new revenue sources to fund city-wide tree planting programs.

City Council Discussion and Decision: Should the revenue generated from fees-in-lieu of planting on development sites be used to fund city-wide tree planting programs?

10. Should onsite planting standards for new development use tree credits, % of trees required, type of trees, and/or planting objectives (reduce heat island, mitigate storm water run-off, provide habitat)?

Discussion: There are pros and cons for different planting standard systems. Prior to the adoption of Kirkland's tree code, 25 percent of existing trees on short plat developments were required to be retained. Although a simple, straightforward requirement, it became apparent that often, the retained trees were of poor quality or newly-exposed forest trees susceptible to windthrow. The current tree code uses retention values as a standard for tree retention and a credit system as a standard for replanting. Retention values addressed tree quality issues. Credits are based on the premise that trunk diameter, as a general indicator of tree size, translates (albeit indirectly) to canopy cover. Tree credits are units that account for the biomass of trees per acre. It applies to both counting existing trees and as a minimum replanting requirement. Other cities that have adopted a tree credit system include Olympia, Vancouver, WA, Issaquah, Medina, Kenmore, and Woodinville. The City of Renton found credits too complicated to administer and revised their tree code to a simple 1:1 removal-to-replacement approach, which doesn't account for the biomass of what was removed versus planted.

Additional planting standards and objectives that have been discussed are:

- Requiring specific canopy cover on a neighborhood or lot-by-lot basis
- Requiring specific conifer-to-deciduous ratios (30% conifer to 70% deciduous).
- Requiring tree species with large canopy cover at maturity
- Requiring native tree species (Douglas fir, Bigleaf maple, Western red cedar, etc.)
- Applying regulations based on ecosystem services such as mitigating urban heat effects, stormwater mitigation, etc.

While establishing specific performance measures, the drawbacks of focusing on these planting standard objectives are increased code complexity, limited opportunities for increasing species diversity, overcrowded/inappropriately located trees, infrastructure conflicts, and limiting property owner discretion for tree selection. A measuring and monitoring program must be in place to track the effectiveness of tree codes with specific ecosystem service outcomes. The staff memo for the May 18, 2021 City Council meeting addresses policy implications of KZC 95 amendments on tree canopy goals.¹¹

¹⁰ Formalization and Enhancement of Tree Bank, Service Package Request #21BP15.

¹¹ [May 18, 2021 City Council staff memo](#), page 10.

Staff recommendation: Staff recommends continuing with current tree credits system for planting requirements (with potential tree credit increased). Staff also recommends using code incentives and tree planting programs to plant native trees, conifers, and large-at-maturity trees, rather than requirements. Many native conifers and large-at-maturity tree species are inappropriate for small to average sized lots (the current code incentivizes native conifer retention by awarding additional credits). There are ongoing debates about what the “new native” looks like - what was native 100 years ago is likely to continue to shift in hardiness, along with the habitats that native trees support. In many ways, adhering to a native plant palette promotes a monoculture susceptible to pests/disease, versus increasing species diversity.

While alternative or additional planting standards and objectives as discussed above are all very worthwhile, staff is cautious with increasing code complexity with the major code changes involved with increased or targeted tree planting requirements (Question 1). The new draft condition ratings address tree quality, while the draft code further clarifies the application of the tree density credit system currently in use. If Council agrees, the tree density credits per acre can be increased incrementally by lot size. For example, smaller lots could have the same 30 credits per acre, (which equates to 6 new trees in an average-sized treeless lot), while the tree density credit requirement for larger lots could be higher. Higher credit requirements on larger lots will result in both greater tree retention and replanting.

City Council Discussion and Decision: Does Council have a preference for certain onsite planting standards for new development? For example, tree credits, % of trees required, type of trees, and/or planting objectives (reduce heat island, mitigate storm water run-off, provide habitat)?

11. Should we reduce tree mitigation requirements for residential development projects that meet a minimum standard of affordable housing (e.g., projects that include units that are affordable to households with incomes at or below 60% of Area Median Income)?

Discussion: There is a perception that tree retention/mitigation requirements are a barrier to affordable housing development, when there are few, if any conflicts between the two. For example: the current code aims to retain high-quality trees located in setbacks, essentially unbuildable areas. An ADU is an added footprint, no different than the building footprint of the main structure. If a tree was located in the middle of a proposed ADU footprint, it would have to be removed to allow the property owner the reasonable use of their property. If the tree was located outside the building footprint, in a setback and the property configuration allowed, KZC 95 works to have the permit applicant adjust the proposed plan to retain high-quality trees, the same as the code functions with the primary building footprint. The draft code helps to further clarify which trees should be retained. The code streamlining measures described in Question 6 also apply to affordable residential housing types.

Staff recommendations: We suggest alternative means of making it easier to develop affordable housing. Reducing the number of trees, including mature trees, within lower-income housing areas projects could disadvantage residents who live in these areas. A project on the Sustainability Master Plan (EV-10.4) aims to identify areas in Kirkland with low canopy cover

associated with social disparities and adverse environmental conditions. In the meantime, tree retention is just as important with the development of affordable housing.

City Council Discussion and Decision: Should we reduce tree mitigation requirements for residential development projects that meet a minimum standard of affordable housing (e.g., projects that include units that are affordable to households with incomes at or below 60% of Area Median Income)?

12. What "best professional judgement" questions do you have for staff that would help your decisions?

Many of the Councilmember's questions below are addressed in this memo. Below are paraphrased requests for staff recommendations or additional information that would help with decisions related to the tree code amendment project.

Staff requests that Council review the questions below for accuracy and to inform staff if corrections are needed or if we missed anything in our responses.

1. What are the long-term impacts on tree canopy with the proposed code changes? Are short-term losses with development recovered through mitigation, re-planting, etc.?

Staff response: short-term losses versus long-term impacts of proposed code changes are shown in Attachment 1 in the May 18, 2021 City Council meeting packet, in the "Effects" and "Factors Considered" columns for proposed code changes.¹²

2. If more trees will be lost through development, what goals should we aim for (preserve more significant/landmark trees, improve tree canopy quality in 20 years, etc.)?

Staff response: We can provide consistent and efficient citywide urban forest management by implementing the Urban Forest 6-Year Work Plan. We'll continue to monitor our canopy cover (the 2-D outline of tree leaves as seen from above) in addition to the expanded policy goals for improving canopy quality¹³ by considering these management objectives wherever we can:

- *Species diversity – more variety lowers the risk of losing entire tree populations.*
- *Varied tree age/size – so that old and new trees provide an even succession of benefits over time.*

See staff's response to Question 13 below for ways to implement these objectives.

3. How can we achieve the 40% goal across the city (ideally, with native trees)?

Staff response: see General Policy Question 10 above regarding native trees. When looking at the pre-annexed city boundary from 2002 to 2018, Kirkland's canopy cover is not fluctuating dramatically, as described in a This Week in Kirkland article.¹⁴ We can continue to measure/monitor canopy cover and other data (such as our field study on the efficacy of KZC 95), look for any emerging issues, then consider strategies to respond to trends in

¹² [May 18, 2021 City Council meeting](#) packet, Attachment 1, e-page 11.

¹³ [Kirkland Comprehensive Plan](#), Policies E-2.1 through E-2.4

¹⁴ [This Week in Kirkland](#), Check-in with the Tree Code Update, March 28, 2018

canopy gain/loss such as adjustments to the code, implementing the 6-Year Urban Forest Work Plan, incentives and public education on why trees are important.

4. Can code simplicity/clarity be achieved while reducing polarizing elements?

Staff response: Code simplification and clarification are discussed under the General Policy Direction section above, Questions 1 and 2. As evidenced by the time devoted to this project and with comparisons to prior work on tree ordinances in other cities, tree codes tend to involve polarizing elements. Council will need to find a balance between diverse opinions about the effects of the code.

5. What may be the unintended consequences of encouraging diverse housing type development to provide for affordable housing (and its effect on tree canopy cover?)?

Staff response: see General Policy Question 11 above. But the code changes that allow more diverse housing options on single-family lots can result in less tree retention if the total building footprint is larger than the previously allowed one single-family home. (Example – A new home with a detached ADU will have a larger footprint that may result in less tree retention.)

6. Are there case studies/examples of similar-sized cities with tree codes that balance inevitable development with maintaining/increasing tree canopy?

Staff response: For this project, we examined specific elements in other municipal tree codes, such as Landmark trees, requirements for replanting etc. Staff compiled data on other city's canopy goals and their current canopy status (UFSMP). Most cities that have tree codes also have canopy goals and struggle with the same issues of accommodating growth while maintaining/increasing tree canopy.

7. What is your recommendation on how to create code that helps us accomplish not only our canopy goals, but our environmental and environmental justice goals?

Staff response: To accomplish our canopy goal, the Council can review the data of past performance and adjust the code accordingly. We recommend at the very least trying to end up with the same level of retention/removals as the current code and add aggressive tree planting programs for private and public property trees.

8. How can we be creative and be a community leading the way in urban forest management?

Staff response: In many ways we already are, but just like any other program, the effectiveness of the City's overall UF management is related to support and financial resources.

9. How can we manage the tension between saving our tree canopy and creating more affordable housing?

Staff response: see General Policy Question 11 and the response to Question 5 above.

10. Are we requiring the right trees to be planted on properties? (concerned that developers default to deciduous and ornamental trees).

Staff response: Our Field Study showed the issue with new tree planting is a) too many arborvitae and b) trees planted in inappropriate locations. In the draft code, we do not allow credits to be awarded for arborvitae planted on development sites and clarified suitable tree locations. Staff does not have a problem with ornamental trees because they

provide species diversity, however planting exclusively dwarf trees do not meet the intent of the code and is addressed in a draft code clarification (See General Policy Question 10).

11. How can we maintain wildlife habitat throughout the city so that native wildlife can move safely?

Staff response: Retaining large trees can be beneficial to a significant number of native and migratory birds, support restoration efforts in open space areas, support private and organizational efforts to acquire land that supports habitat, like the Goat Hill trail, provide public education materials that encourage property owners to think twice about tree removal on private property, create a backyard wildlife habitat and promote Kirkland's Community Wildlife Habitat program, etc.

12. How can tree code amendments meet (or exceed!) our SMP goal of achieving 40% tree canopy by 2026?

*Staff response: See Question 10. Canopy restoration tends to be a mid-to-long term perspective. Rapid canopy loss is not quickly mitigated by new tree planting¹⁵, so it will take tree code adjustments for greater effectiveness in addition to other strategies, or "tools in the toolbox" as described in this short *This Week in Kirkland* article¹⁶.*

13. How we can best diversify our trees in terms of age and appropriate species?

Staff response: We can retain large trees on development sites and slow the loss of mature canopy resulting from property owner tree removal (Landmark tree protection). We can update our street tree inventory and manage public trees with age and species diversity objectives in mind. Species diversity is difficult on private property, although we can incentivize tree planting.

14. How can we meet/exceed canopy goal and balance individual property rights, while increasing affordable housing?

Staff response: Finding a balance that is appropriate to this community continues to be the fundamental challenge of this process. The discussion questions posed above will facilitate Council's search for the appropriate balance. As noted above, it is not evident that tree regulations are a significant driver of housing affordability and lessening tree canopy in more affordable communities is not an equitable outcome.

15. How can we identify trees unambiguously that are critical to stability of steep slopes or for the protection of wetlands and aquifer recharge zones, i.e., objective determinations based on science that are 100% predictable and reproducible?

Staff response: KZC Chapter 85 is the appropriate code to protect life and property in geologically hazardous areas. Chapter 85 relies on qualified professionals to assess site specific features (soils, slopes, hydrology, vegetation, etc.) to make site specific development recommendations. Similarly, KZC Chapter 90 is the appropriate code to protect streams and wetlands. Chapter 90 unambiguously protects trees in these critical areas except for hazard or invasive trees. Both chapters have been updated to be consistent with best available science while the KZC 95 regulations have been under consideration.

¹⁵ [This Week in Kirkland](#), Tree Code Update: The Importance of Preservation, April 11, 2019.

¹⁶ [This Week in Kirkland](#), What's in Our Toolbox? March 20, 2019.

REVIEW:

We will want to confirm that Council expectations for staff are to establish a code framework that consists primarily of minor code amendments with some modest amendments in key places and a major amendment related to Landmark trees. Does Council agree with that statement?

NEXT STEPS:

With majority or consensus responses from Council on these broad framework questions, staff will bring back a code framework that reflects the Council's general direction for code changes to KZC 95. If the code framework is agreeable to Council, staff will develop a draft code that reflects the general policy direction framework. Note that substantive changes to the draft code may warrant additional public comments and/or hearings.

KZC code changes involve comprehensive implementation phases. Prior to adoption of KZC 95, staff will be seeking additional direction from the City Council on effective dates and options related to vesting of projects.

Attachment







1. Effects Matrix

cc: File Number CAM18-00408
Planning Commission
Houghton Community Council

Kirkland Tree Code Update
Effects – Guide to General Policy Direction

See Key Below
Revised June 28, 2021

Attachment 1

CURRENT CODE	DRAFT CODE ¹ <i>Pros & Cons</i> ²	WHAT THE DRAFT CODE DOES	DRAFT CODE EFFECT ³	STAFF RECOMMENDATION
Tree removal allowance Allows 2 tree removals per 12 months on any size property, without a permit.	INCREASE tree removal allowance according to property size + More equitable with larger properties + Balances limited Landmark tree removal + No permit required (notification is more streamlined) - Cannot track specific tree removal data - Major code amendment	Allows greater tree removals without a permit: 2 removals for lots <10,000 sq. ft 3 removals for lots 10,001-20,000 sq. ft 4 removals for lots >20,001 sq. ft		Do not increase tree removal allowances, or offset canopy loss with other retention efforts: • Reconsider hedge removals • Limit property owner Landmark tree removals • Increase removal allowances more conservatively than the draft code
Property owner tree removal – Large hedge removal The current code limits tree removal to 2 trees per 12 months the removal of overgrown hedges.	ALLOW overgrown hedge removals + Balances Landmark tree removal limits + Requires 1:1 replacements + Will provide even succession of benefits <u>over time</u> - Greater number of allowed tree removals at one time + Moderate code amendment	Provides a mechanism to exceed allotted removal allowances to remove >6" DBH trees forming a hedge. Permit required.		Do not allow hedge removals that will result in greater tree removal than the current code
Property owner tree removal - Mitigation Mitigation for property owner tree removals is not triggered until the last 2 trees on the property are removed.	INCREASE number of replacement trees and the minimum number of existing trees that must remain on larger properties + Opportunity to increase species diversity - Offsets increase tree removal allowances <u>over time</u> + Moderate amendment	Requires 1:1 tree replacement when removals on larger properties include the last 2, 3, or 4 existing trees.		Increase tree replacement requirements, and: • Provide ongoing education/outreach • Create incentives for property owners to preserve trees • Develop tree planting programs for private property
Property owner tree removal - Large/mature trees No special protection with property owner tree removals.	DEFINE new Landmark tree category LIMIT property owner Landmark tree removals + Define by size (and condition for development scenarios) + Slows removal of Landmark trees previously protected with development, when 5-Year Maintenance Agreements expire + HCC compromise to limit vs. prohibit Landmark tree removals + Offsets increased tree removal allowances <u>immediately</u> + Can track Landmark tree removal/replacement data - Major code amendment	• Defines large, healthy trees • Limits Landmark tree removal to 1 per 24 months • Requires a permit		Slow the loss of canopy cover resulting from property owner large/mature tree removal • Define Landmark trees • Limit property owner Landmark tree removal
Tree retention with development - Large/mature trees Retain on development sites where practicable.	DEFINE Tier 1 trees: Landmark trees and groves PROTECT Landmark trees on development sites + May improve retention on clustered SPLs/SUBs and larger lots + No change in large tree retention on small to average lots - Retaining large tree/critical root zones on average lots with minimum 50% lot coverage will continue to be a challenge - Major code amendment	Provides higher level of tree protection for minimum 30" DBH Landmark trees in good-excellent health with development		Protect Landmark trees with development as proposed for a slight increase in Landmark tree retention with larger lots, IDPs, clustering, etc., however, efforts may be neutralized by property owner removal allowances.
Tree retention with development - Condition High/Moderate Retention Value Trees	DEFINE Tier 2 trees by condition + More predictable code outcomes + Greater code clarity - Slightly less tree retention by excluding "Moderate Retention Value" trees	• Clearly defines tree condition using industry standards in layperson terms, organized within chart format • Defined as good-excellent condition trees		For the same retention as the current code: • Include "fair" condition trees

CURRENT CODE	DRAFT CODE ¹ <i>Pros & Cons</i> ²	WHAT THE DRAFT CODE DOES	DRAFT CODE EFFECT ³	STAFF RECOMMENDATION
	<ul style="list-style-type: none"> + Minor code amendment - Significantly less tree retention without "Fair" condition tree protection 	<ul style="list-style-type: none"> • Located in setbacks (see "Retained tree location below") 		
Tree retention with development - Groves 3 touching/overlapping significant trees (min. 6" DBH), without strict condition standards. Protected in perpetuity.	REVISE grove definition + Increases code predictability and known development feasibility - Reduces age diversity of retained grove trees - Condition criteria exclude trees in fair condition - Size criteria eliminate 6-11" DBH trees + Moderate code amendment	Redefines grove by size and condition: <ul style="list-style-type: none"> • Must fit good-excellent condition criteria • Each tree must be minimum 12" DBH 	↓	For the same retention as the current code: <ul style="list-style-type: none"> • Define groves as minimum 6" DBH trees • Include "fair" condition trees
Tree retention with development - Location Trees located in setbacks	ESTABLISH specific building envelope dimensions + Greater predictability for developers - Increased code complexity for all - Increased code text - Increased difficulty at development feasibility phase - Increased design/review time applying 2 building envelope dimension standards - Major code amendment - Slightly less tree retention by excluding 'Moderate Retention Value' trees	Guarantees development rights using specific building envelopes: <ul style="list-style-type: none"> o Tier 1: 40' w x 40' d with contiguous/shifting 20' w x 20' d o Tier 2: 50' w x 50' d footprint, or Building facades greater than 50' w: the maximum footprint shall be less 10% a distance between side setbacks, etc. 	0	Do not specify building envelope dimensions, continue to define location as trees in setbacks, as in current code
Tree retention with development – Decisions early in the design phase Integrated Development Plan (IDP) is required in HPO but optional citywide	REQUIRE IDP for SPL/SUB development citywide + Greater predictability for developers + Greater awareness of tree protection and removals upfront + More information available to neighbors + Greater successful tree retention with early planning + Helps to plan clustering of lots + Moderate code amendment	Citywide IDP standards will: <ul style="list-style-type: none"> • Eliminate phased development review process • Limit tree removals that occur at various permit stages • Streamline modification section of code • Require Planning Director decision for modifications (vs. Hearing Examiner) 	↑	For greater tree retention on development sites: <ul style="list-style-type: none"> • Require IDP citywide • Apply pre-submittal review requirements to Multi-Family developments • Allow/require lot clustering with short plats/subdivisions • Leverage private and public resources with City programs for canopy restoration
Tree mitigation with development – Priority: 1 - Retain 2 - Plant on site 3 - Plant offsite 4 - Payment in lieu of planting (City Forestry Account)	CLARIFY order of tree mitigation/replanting + Greater predictability for developers + Greater code clarity + No impact code amendment	Clarifies tree planting priorities in the current code	0	To further offset canopy loss, establish: <ul style="list-style-type: none"> • Formal "tree bank" program to mitigate trees removed from private and/or public property • Public/private tree planting programs • Ongoing education/outreach • Incentives for property owners to preserve trees • New revenue sources to fund city-wide tree planting programs
Tree mitigation with development – Tree density credit requirement	CLARIFY application of the tree density credit system + Greater predictability for developers + Greater code clarity + No impact code amendment	Clarifies tree planting requirements in the current code	0	To further offset canopy loss: <ul style="list-style-type: none"> • Use code incentives/tree planting programs for native/conifer/large trees • Increase minimum tree density credits per acre incrementally by lot size (major code amendment)

KEY:



Results in greater tree retention/less tree removals when compared to the current code



Results in greater tree removal/less tree retention when compared to the current code



No change compared to current code

¹[DRAFT CODE](#)

²PROS & CONS – (o) No or negligible change, (+) Positive change, (-) Negative change

³DRAFT CODE EFFECT - as observed in the analysis of 22 issued Single Family development permits using the current tree code as a baseline for comparison.

Key to acronyms/abbreviations:

DBH – Diameter at Breast Height; tree trunk measurement at 4.5' feet above grade

HCC – Houghton Community Council

HPO – Holmes Point Overlay

IDP Integrated Development Plan

PC – Planning Commission

SPL/SUB – short plat or subdivision development