Archived: Friday, February 25, 2022 10:26:02 AM
From: Kathleen Russell
Sent: Thursday, February 24, 2022 11:53:27 AM
To: Keith Scully; Betsy Robertson; Doris McConnell; Laura Mork; Eben Pobee; John Ramsdell; Chris Roberts
Cc: Steve Szafran; Heidi Costello
Subject: [EXTERNAL] Letter to Council from TPCT re Tree Codes
Sensitivity: Normal
Attachments:
To Council from TPCT re Tree Codes Feb 2022 .pdf;

To City Council,

Please see the attached letter from the Tree Preservation Code Team (TPCT).

This is a summary of the proposed tree code amendments to be reviewed by Council on February 28, 2022.

Thank you,

Kathleen Russell
Tree Preservation Code Team/Communications

February 24, 2022

To: Mayor Scully and City of Shoreline Councilmembers

From: Tree Preservation Code Team (TPCT), a Non-Profit WA State Corporation

Re: Summary of Proposed Tree Preservation and Protection Code Amendments

Council Review 2022: Feb. 28, March 7, March 21

Background
The proposed tree code amendments were submitted to the City of Shoreline in November 2020.
City Staff reviewed the proposed code amendments and presented their initial Staff evaluation of proposed tree codes to the Planning Commission on October 7, 2021.
Subsequent presentations to the Planning Commission:
2021: November 18, December 2
2022: January 6, February 3.

Affected Zones. The proposed tree codes amendments pertain to the following zones: residential, MUR-35' and MUR-45', and TC-4. The penalties in Amendment 6 pertain to R-8, R-12, R-18, R-48, TC-4, MUR-35' and MUR-45' zones.

These proposed amendments do not pertain to Community Business, Neighborhood Business, Mixed Business, TC-1-2-3, and MUR-70' zones where none of the trees have to be retained and replacement trees are not required.

Summary of Proposed Tree Code Amendments

Section I. Recommendations by the Planning Commission on February 3, 2022.
The following proposed code amendments received recommendations from the Planning Commission and City Staff:

C1: 20.20.014: Definitions: Critical Root Zone; Critical Root Zone, Inner (ICRZ) *(inner critical root zone area).*
C2: 20.20.048: Definitions: 1) Tree, Canopy. 2) Tree, Hazardous. 3) Tree, Landmark (24").
This "Tree, Landmark" definition differs from the TPCT definition submission (see page 2 and Attachment A).
C3: 20.20.050: 1) Definitions: Urban Forest. 2) Urban Tree Canopy.
C4: 20.50.290: Tree Purpose
C5: 20.50.300: General Requirements ("stop work order" recommended).
C7: 20.50.350: Development standards for clearing activities. Increases Significant tree retention: 25% recommended. Incentives proposed by TPCT not recommended by Staff and not reviewed by the Planning Commission.
C8: Exception 20.50.350(B)(1) Significant Tree Retention.
- Waiving Tree Retention Requirements: proposed by Staff.
- Director authority to "waive and reduce" retention of trees on sites.

C10: 20.50.370: Tree Protection Standards

Section II. **Planning Commission: Further Review Requested**

Amendment 2: 20.20.048 Definition of Tree, Significant
Discussion on February 3, 2022 by Commissioners regarding 6" diameter at breast height (dbh) for Significant tree.
Chair Sager, Commissioners Lin and Callahan, constituting a majority on February 3, 2022, support review of 6" dbh definition of Significant tree.

Section III. **TPCT: Re-Submission of Original Proposal**

Amendment 2: 20.20.048 Definition of "Tree, Landmark"
In November 2020, TPCT originally submitted a revised code definition of "Tree, Landmark" (see below). This definition was revised to incorporate the "Landmark Tree Program" long term tree protection. We are concerned this definition will only pertain to the "Landmark Tree Program" and not the original intention as proposed by TPCT. Therefore, TPCT resubmits the original definition for review by Council supported by scientific documentation. *See Attachment A.*

TREE, LANDMARK: Any ~~healthy~~ viable Significant tree over ~~30~~ 24 inches in diameter at breast height (dbh). A permit is required for removal. ~~height or any tree that is particularly impressive or unusual due to its size, shape, age, historical significant or any other trait that epitomizes the character of the species, or that is an regional erratic.~~

Section IV. Proposed amendments not addressed by the Planning Commission on Feb. 3, 2022.
As understood by the Tree Preservation Code Team (TPCT), these proposed amendments will proceed to Council for review.

Amendment 5: 20.50.300: General Requirements. The Planning Commission and Staff agree with "stop work orders" for damage to significant trees on construction sites. However, an integral part of this proposed code are the penalties for damage to trees at construction sites. Current critical area code language includes damages of $3000 for Non-Significant tree; $9000 for Significant tree; and $15,000 for Landmark tree. This proposed amendment, with the same penalties as stated in SMC critical area code, is not effective without these penalties (Item "L" in proposed code.). This proposed amendment does not apply to R-4 and R-6 zones.

Amendment 6: 20.50.310 B.1.: Partial Exemptions [from tree permit].
Proposed by TPCT: revision of exemption on properties over 1 acre.

- TPCT recommends to maintain the exemption of "3 trees per 7200 square feet up + 1 tree per additional 7200 square feet" up to one acre.
- TPCT recommends that beyond one acre large property owners will be limited to a modified scale with maximum removal of 50 trees every 3 years without a tree permit.

The reason for this proposed amendment is that large property owners are allowed by this code to remove hundreds of trees every 3 years without a tree permit and without adherence to retention and tree replacement codes.

Currently tree permits are $217 per parcel not per tree. Large property owners have the option to submit a tree permit. City Staff will review the application to confirm it complies with code.
See Attachment B for examples and proposed table of exemptions.

Amendment 7: (C7): 20.50.350 B.1. Development standards for clearing activities.
Pertaining to Tree Retention. Planning Commission, City Staff and TPCT recommend tree retention of 25%. Current code is 20% retention.

Staff recommends not to approve the incentives originally provided by TPCT as they will add *"…additional strain on staff workload".* However, *"Staff is not opposed to providing incentives for increased significant tree retention, but staff will need to build this project into the department's workplan. If Commission and Council want these amendments studied in the future, Council could direct staff to develop a work plan for these amendments."* Oct. 7, 2021 Staff Report, *Attachment A, page 19.* Incentives were not discussed by the Planning Commission.

Exceptions to Tree Codes.
Amendment 8. Exception 20.50.310(B)(1). Significant Tree Retention. Code proposed by Staff. TPCT recommends removing the words "waive and reduce" as pertaining to retention of trees. This exception is available only to owners and developers who apply for reduction of tree retention. TPCT states this code exception does not support SMC code that requires retention of trees at development sites.

Amendment 9: Exception 20.50.360(C)(b): Tree Replacement. SMC code intention is to require tree replacement at development sites. The authority granted to the Director to reduce the number of replacement trees is counterintuitive to SMC code requiring tree replacement. This code proposal maintains the language that developers can either plant all replacement trees as required by code on-site or if all replacement trees cannot be planted on-site, pay the fee in lieu to the City fund to plant and maintain trees.
Note: The developer does have the option to redesign the structure to accommodate replacement trees on-site.

- This exception is available only to owners and developers who apply for reduction of tree replacement.

The proposal by TPCT is to remove the Director's authority to "reduce replacement trees".

The City does not have a master historical file of authorizations to reduce tree retention or replacement trees at development sites. The following examples of waived replacement trees are from individual project files (via Public Records Requests).

- 65 tree replacements waived at 8th Ave NE site in Ridgecrest;
- 28 tree replacements waived at 1st Ave NE in Parkwood;
- 29 tree replacements waived at NE 147th and Meridian site.

It is understood that these projects were vested in code prior to the 12/7/20 code change which provides a combination reduction along with a fee in lieu but the current code still allows the Director the authority to reduce replacement trees.

TPCT asked the Planning Commission and now asks Council to direct Staff to provide language to protect single private homeowners from these "Exceptions". The Director should have the authority to waive or reduce trees for single property homeowners in R-4 and R-6 zones.

Section V: Incentives and Code Language

According to *Comprehensive Plan Policy NE 6: "Provide incentives for site development that minimizes environmental impacts.",* TPCT understands we cannot request Staff to provide appropriate incentives or revise code language as this is the authority of the Council. However, TPCT requests additional language pertaining to the following codes we submitted:

- **Proposed Amendment 7:** Incentives to retain more trees over and above the proposed 25% retention. See page 19 of Oct. 7, 2021 Staff Report, Attachment A*,* "*Staff is not opposed to providing incentives for increased significant tree retention, but staff will need to build this project into the department's workplan. If Commission and Council want these amendments studied in the future, Council could direct staff to develop a work plan for these amendments."*

- **Proposed Amendments 8 and 9 (Exceptions)**
  TPCT recommends development sites R-8 thru R-48, TC-4, MUR-35' and MUR-45' not be granted reduction of tree retention or reduction of tree replacements as these are required by code. Language requested: Director can waive or reduce retention and replacement of trees to protect single property homeowners in R-4 and R-6 zones.

In closing, participation of the Tree Preservation Code Team is in accordance with the City's Comprehensive Plan, Policy CP1: "*Encourage and facilitate public participation in appropriate planning processes and make those processes user-friendly."* For the last two years, the Tree Preservation Code Team has participated in the process to amend Shoreline Municipal Code to protect trees. While we cannot preserve the trees on major development zones in Shoreline, we have submitted tree code amendments which, if enacted, offer a balance to conserve the beauty and benefits provided by Shoreline trees.

We thank City Staff, the Planning Commission, and the Council for consideration and review of these proposed tree code amendments.

Sincerely,

Melody Fosmore
Barbara Johnstone
Kathy Kaye
Kathleen Russell
Susanne Tsoming
Claudia Turner

Attachments A and B follow

ATTACHMENT A
Original Amendment proposal: Tree, Landmark
Submitted November 2020

AMENDMENT PROPOSALS SMC 20.20.048
"T" DEFINITIONS

TREE, LANDMARK: Any ~~healthy~~ viable Significant tree over ~~30~~ 24 inches in diameter at breast height (dbh). A permit is required for removal. ~~height or any tree that is particularly impressive or unusual due to its size, shape, age, historical significant or any other trait that epitomizes the character of the species, or that is an regional erratic.~~

Read as:

[TREE, LANDMARK: Any viable Significant tree over 24 inches in diameter at breast height (dbh). A permit is required for removal.]

Support Documentation (submitted 2/24/22)

Statement in support of changing SMC20.20.048 "T" Definitions pertaining to "Tree, Landmark"

TPCT's proposed 24" in diameter at breast height (dbh) instead of the current 30" dbh is supported by the following:

Science has shown that trees reduce the amount of carbon in the atmosphere by sequestering carbon in new tissue growth every year. The amount of carbon annually sequestered is increased with healthier trees and larger diameter trees. Appearing in SciTechDaily.com, it summarized a new study that appeared in *Frontiers in Forests and Global Change,* entitled "Large Trees Dominate Carbon Storage in Forests East of the Cascade Crest in the United States Pacific Northwest" by David J. Mildrexler and others, dated 11/5/20[1]. The study reported that researchers who examined the above-ground carbon storage of large diameter trees, i.e., more than 21" dbh on National Forest lands within Oregon and Washington, found these trees, though only 3% of the total number of trees studied, stored 42% of the total carbon within the forest ecosystem. It also revealed that trees more than 30" dbh, constituting .06% of the total number of trees studied, accounted for over 16% of the total above-ground carbon sequestration. This study supports and highlights the importance of protecting and preserving older, large-diameter trees as mitigators of climate change.

Furthermore, additional carbon accumulation is promoted if large trees are allowed to continue to grow larger. As reported, "[o]nce trees reach a large size, each additional increment in diameter resulted in a significant addition to the tree's total carbon stores". Therefore, changing the 30" dbh to 24"dbh in the SMC will permit smaller trees to "reach their ecological potential" and store greater quantities of carbon.

As Shoreline becomes more urban than suburban, conservation of our existing tree canopy or urban forest needs to be a priority. In a study entitled "Terrestrial carbon stocks across a gradient of urbanization: a study of the Seattle, WA region[2]", it explored the relationships between above-ground carbon stocks and land cover within an urbanized area. Its objectives were to estimate the above-ground live and dead terrestrial

[1] https://scitechdaily.com/large-trees-dominate-carbon-storage-in-forests-3-of-trees-account-for-42-of-carbon-storage/ and https://www.frontiersin.org/articles/10.3389/ffgc.2020.594274/full

carbon stocks across 154 sample plots in the Seattle region. They assessed carbon stocks as a function of distance from the urban core, such as heavy, medium and low and land cover, such as mixed forest and conifer forest. What they found was that "[b]oth the total carbon stocks and mean vegetated canopy cover were surprisingly high, even within the heavily urbanized areas, well exceeding observations within other urbanizing areas and the average US forested carbon stocks. As urban land covers and populations continue to rapidly increase across the globe, these results highlight the importance of considering vegetation in urbanizing areas within the terrestrial carbon cycle."

The USDA Forest Service, Northern Research Station, developed the Urban Forest Effects (UFORE) model[2]. Results from this model are used to advance the understanding of the urban forest resource, improve urban forest policies, planning and management, provide data for potential inclusion of trees within environmental regulations, and determine how trees affect the environment and consequently enhance human health and environmental quality in urban areas. In its Feb 2007 resource bulletin entitled "Assessing Urban Forest Effects and Values" it used San Francisco, California's tree canopy as its study case. In the summer of 2004, the USFS team used 194 one-tenth field plots in different areas of the city to gather scientific readings for its UFORE model to analyze.

Urban forest structure (e.g., species composition, tree density, tree health, leaf area, leaf and tree biomass, species diversity, etc. have structural and functional values. Structural value is based on the cost of having to replace the tree with a similar tree. Functional values are based on the functions a tree performs. For example, reduction in air temperatures and ultra-violet radiation and improvements in water quality. The structural value of an urban forest tends to increase with a rise in the number and size of healthy trees of which, "[l]arge, healthy, long-lived trees provide the greatest structural and functional values." Reciprocally, annual functional values also tend to increase with increased number and size of healthy trees.

Shoreline's urban native forest is comprised of trees with different size ranges and potential, depending on the species. As explained in the study,

> "[u]rban forests are a mix of native tree species that existed prior to the development of the city and exotic species that were introduced by residents or other means. Thus, urban forests often have a tree diversity that is higher than surrounding native landscapes. An increased tree diversity can minimize the overall impact or destruction by a species-specific insect or disease, but the increase in the number of exotic plants can also pose a risk to native plants if some of the exotics species are invasive plants that can potentially out-compete and displace native species."

Therefore, by changing to 24" dbh, more trees, like Pacific Madrone, Shore pine, Sitka spruce and Big Leaf Maple, etc. will be protected, which in turn will contribute to urban forest diversity.

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[2] https://www.nrs.fs.fed.us/pubs/rb/rb_nrs008.pdf

ATTACHMENT B

Amendment 7: Examples and Original Proposal with revised table of reduction.

Examples of current SMC: Significant tree removal without a tree permit. Seattle Golf Club can remove 939 significant trees every 3 years; Ballinger Commons can remove 468 significant trees every 3 years; private properties with 20 acres can remove 123 significant trees every 3 years; properties with 25 acres can remove 153 significant trees every 3 years. This code does not pertain to properties under a Master Development Plan.

Original Amendment Proposal
SMC Title 20 Development Code Chapter 20.50 General Development Standards
Tree removal on private property

Subchapter 5. Tree Conservation, Land Clearing and Site Grading Standards.
20.50.310 Exemptions from permit.
B. Partial Exemptions. With the exception of the general requirements listed in SMC 20.50.300, the following are exempt from the provisions of this subchapter, provided the development activity does not occur in a critical area or critical area buffer. For those exemptions that refer to size or number, the thresholds are cumulative during a 36-month period for any given parcel:

1. The removal of three Significant trees on lots up to 7,200 square feet and one additional Significant tree for every additional 7,200 square feet of lot area up to one acre and as follows:

Maximum Number of Trees Exempted	
Less than 7,200 sq ft	3 trees
7,201 sq ft to 14,400 sq. ft	4 trees
14,401 sq ft to 21,600 sq ft	5 trees
21,601 sq ft to 28,800 sq ft	6 trees
28,801 sq ft to 36,000 sq ft	7 trees
36,001 sq ft to 43,560 sq ft (aka 1 acre)	8 trees
Maximum Number of Trees Exempted on One Acre to Twenty-Five Acres Exempted	
1 acre + 1 sq ft (43,561 sq ft) to 2 acres	9 trees
2 acres + 1 sq ft to 5 acres	10 trees
5 acres + 1 sq ft to 10 acres	20 trees
10 acres + 1 sq ft to 15 acres	30 trees

15 acres + 1 sq ft to 20 acres	40 trees
20 acres + 1 sq ft to 25 acres	50 trees

Maximum removal of trees on all private properties more than 25 acres is 50 trees every 36 months .

2. The removal of any tree greater than ~~30~~ 24 inches DBH, or exceeding the numbers of trees specified in the table above, shall require a clearing and grading permit
(SMC 20.50.320 through 20.50.370).

Reason for Amendment:

This revision to the existing code is to preserve, protect and maintain Shoreline's urban tree canopy on all private properties where the majority percentage of its urban tree canopy is found. Larger properties of over an acre have more trees than average-sized single- family lots. Some of these tracts of land have long, wide belts of contiguous tree canopy coverage which undoubtedly provide habitat for our urban wildlife and havens for biodiversity. These extensive tree canopies are effective wind blocks, have enormous storage capacity of stormwater runoff, stabilize slopes and soil, and according to the U.S. Dept. of Agriculture, one acre of forest absorbs six tons of carbon dioxide and produces four tons of oxygen per year. Preservation of these tracts of treed land is part of the sustainability of the environment in general and specifically for Shoreline residents. Revising this section of the Shoreline Municipal Code will send this message that it values and protects our natural urban tree canopy.

Protection and preservation of these properties will help ensure that there is no net loss of our tree canopy. Despite plantings of new trees to counter the removal of mature trees, there remains the effectiveness of a new tree versus a mature tree. The City should not only be replacing removed or lost trees, it should be combining replacement with the preservation of its mature trees. The two goals combined will produce no net loss as well as guarantee that Shoreline's beloved tall tree skyline and other natural blessings will continue for future generations.

Decision Criteria Explanation

Please describe how the amendment is in accordance with the Comprehensive Plan.

One of the 14 statutory goals as identified by the State of Washington Growth Management Act (GMA) guiding the development of a Comprehensive Plan is to: "Encourage the participation of citizens in the planning process." [The Tree Preservation Code Team], an environmental community group, stated mission is the protection of tall trees in Shoreline. This includes tall trees on private and public properties. While the [Tree Preservation Code Team] agrees there are inherent rights to private property ownership, there is also the recognition that large private properties with an extensive tree population have a responsibility to protect and preserve the mature trees on their property. The largest private property owner in Shoreline may be considered "a neighborhood".

Comprehensive Plan
Framework Goal FG7: Conserve and protect our environment and natural resources, and encourage restoration, environmental education and stewardship.

Element 1: Land Use, Supporting Analysis. Background and Context:
"One of the factors that contribute to Shoreline's high quality of life is attractive and vital residential neighborhoods. Residents often credit this aesthetic appeal to abundant and healthy trees."

Element 6: Natural Environment
Policy NE3: "Balance the conditional right of property owners to develop or alter their land with protection of native vegetation and critical areas."

Policy NE19: "Minimize the removal of healthy trees..." *Goal X:* "Maintain and improve the city's tree canopy..."

Please describe how the amendment will not adversely affect the public health, safety and general welfare.

This proposed amendment applies both to the protection of trees on residential private properties and also to trees on large private properties. As highlighted in Shoreline's *Urban Forest Strategy Plan 2014*: trees "... reduce stormwater runoff, cool heat islands, mitigate wind, provide wildlife habitat and increase property value." Not only do trees provide all of these benefits to Shoreline citizens, but they sequester carbon and release oxygen throughout the greater community. Therefore, removing trees on private properties, particularly large tracts of land, will diminish our air quality and reduce all of the benefits trees provide. Climate change is here and mature trees will help combat it. Public health, safety and welfare are intertwined with the health of our urban forest.

Please describe how the amendment is not contrary to the best interest of the citizens and property owners of Shoreline.

The intention of this proposed code amendment is to provide the essential environmental and health benefits of trees to all citizens of Shoreline. Since so many of the trees in Shoreline are located on private property it is necessary to balance the property owners' interests with those of the entire community. Due to the climate change crisis, and heat islands that have already emerged in Shoreline, maintaining the mature urban forest that exists now is crucial. The City has the opportunity to educate private property owners regarding the importance of the mature trees, while protecting these trees for the greater good. The protection and retention of trees on private property is good stewardship of the land and is in the best interest of all the citizens and property owners in Shoreline.