Council Meeting Date: August 7, 2017 **Agenda Item:** 9(b)

CITY COUNCIL AGENDA ITEM

CITY OF SHORELINE, WASHINGTON

AGENDA TITLE:	Discussing the Shoreline Municipal Code as it Relates to Right-of-Way Tree Policies and Regulations
PRESENTED BY:	Eric Friedli, PRCS Department Director
ACTION:	____ Ordinance ____ Resolution ____ Motion ____ Public Hearing __X_ Discussion

PROBLEM/ISSUE STATEMENT:

Ordinance No. 617, adopted in 20112, created Shoreline Municipal Code (SMC) Chapter 12.30: *Public Tree Management*. SMC 12.30 places the responsibility for all City-owned trees with the Director of Parks, Recreation and Cultural Services and authorized the Parks, Recreation and Cultural Services Board to serve as the City's Tree Board. The purpose of this presentation is to update the City Council on procedures and activities undertaken by City staff to manage the City-owned trees in the right-of-way. Mayor Roberts requested this presentation after an inquiry from Councimember Salomon.

FINANCIAL IMPACT:

There is no financial impact related to this discussion.

RECOMMENDATION

No formal action is required; this is a discussion item only.

Approved By: City Manager ***DT*** City Attorney ***MK***

BACKGROUND

The City Council's 2011/2012 work plan included a priority goal of becoming a Tree City USA. In order to become a Tree City USA, an individual or entity had to be codified as the legally responsible entity for the care and management of the community's public trees. In conjunction with that designation, staff proposed that a Tree Board be created to provide advice on tree maintenance and urban forestry issues.

Ordinance No. 617, adopted in 2012, created SMC Chapter 12.30: *Public Tree Management*. SMC 12.30 places the responsibility for all city-owned trees with the Director of Parks, Recreation and Cultural Services and authorized the Parks, Recreation and Cultural Services Board to serve as the City's Tree Board.

Ordinance No. 627, which was also adopted in 2012, created SMC Section 12.30.040: *Right-of-way street trees.* SMC 12.30.040 requires a permit issued by the PRCS Director for the planting, pruning or removing of trees in the right-of-way adjacent to the applicant's property. SMC Chapter 12.30 is attached to this staff report as Attachment A.

Earlier this year, the City Council received a number of citizen comments about the removal of trees in the right-of-way in conjunction with a City Public Works project to repave and repair sidewalks along Meridian Avenue N. Mayor Roberts requested that staff provide Council with a general update on the management of trees in the right-of-way.

DISCUSSION

In order to meet the responsibilities under SMC Chapter 12.30, the PRCS Director relies on staff in the Public Works Department and Park Operations Division to carry out key components of managing the City's right-of-way trees. These include:

- Parks Operations is responsible for the maintenance, removal and planting of trees.
- Public Works staff, in consultation with Parks staff, approve permits for issuance for the planting, pruning or removing of trees in the right-of-way adjacent to an applicant's property.
- Public Works staff manages street and sidewalk maintenance projects and consults with Parks staff when those projects impact right-of-way trees.

The Tree Board is advisory to the City Council and charged with making policy recommendations concerning the management of trees located on City-owned public property and in City right-of-way. The Tree Board has not been called upon to provide advice to the City Council on tree related matters except for the development of the City's Street Tree List.

After a public process, the Tree Board adopted the Street Tree List on December 4, 2014. The street tree list can be found on the City's website: http://www.shorelinewa.gov/home/showdocument?id=15604. The Street Tree List is used by staff to determine what trees are appropriate for planting in the right-of-way. It

is also used when issuing permits for property owners to plant trees in the right-of-way adjacent to their homes.

The City uses its asset management system to help manage trees in the right-of-way. A limited tree inventory is available in the City's geographic information system (GIS). It is limited because not all trees have been entered into the system. As new trees are added staff enters them into the system so their maintenance can be tracked into the future. This gives staff a more efficient tool to track street tree maintenance.

A summary of five key components of right-of-way tree management is provided below. These key components are:

1. General tree maintenance,
2. Removal of hazardous trees,
3. Removal of trees as part of a public works street or sidewalk maintenance project,
4. Permits for planting, pruning or removing trees in the right-of-way, and
5. Planting trees in the right-of-way.

General Tree Maintenance

Parks staff is responsible for the general maintenance of trees in the right-of way. This entails regular pruning of trees for health and safety. There are an estimated 12,000+ trees in the City's right-of-way.

Prior to 2014 most tree pruning was done primarily when tree branches blocked street signs, traffic signals, sidewalks, etc. Parks staff prioritizes this type of pruning and works closely with staff in the Public Works Department to identify this type of need. If trees are not in close proximity to utility lines, then Parks staff can do the work; otherwise contractors with special licenses are called upon to do it.

In 2015, the Parks Department began a program to proactively maintain trees in the right-of-way. An initial wave of pruning was done using a one-time State grant that funded limited, hand pruning of approximately 300 trees along 15th Avenue NE, NE 155th Street and NE 185th Street. In 2016, the Council approved a reduction in Parks funding for lawn irrigation and increased funding for tree maintenance. In 2016, $30,000 was budgeted to do more complete pruning of 82 trees along 15th Avenue NE between 145th and 175th Streets. This year, the Parks Department will award a contract to prune 75 trees along 155th Street between Meridian and Wallingford Avenues and along 185th Street from Meridian to 9th Avenue.

Removal of Hazardous Trees

Parks staff is also responsible for identifying and removing hazardous trees from the right-of-way. The general process for identification and removal of hazardous trees is as follows:

A. Contact by Citizen: Citizens are the most frequent way staff is alerted to hazardous trees. They use various ways to reach out to City staff (SeeClickFix, email, telephone, or approach in the field) to alert staff to issues regarding hazardous trees. Citizens are most often concerned about a tree adjacent to or close to their home. At times, citizens will alert staff to hazardous trees in a park

or on other public property. In many cases the trees are not hazardous, but the citizens may have some other concerns about the tree as well.

B. Determine tree ownership: If property boundaries or ownership is in question, the Customer Response Team (CRT) will determine if it is a publicly owned tree or if it is a private property concern. If the tree is on private property, the owner of the tree is informed and asked to resolve the issue.
C. Public tree investigation: If the tree is publicly owned, then Parks Department staff investigates the concern. Upon investigation, if the tree looks like it could be hazardous, then an International Society of Arboriculture (ISA) Hazardous Tree Evaluation Form (see Attachment B) is used to determine the health of the tree. The form is a scientific rating system that determines the urgency for the possible removal of a tree based upon the rating.
D. Tree Removals: If City staff can safely remove the tree, then they schedule and complete the work. Trees in the right-of-way are often located under power lines and may also be large trees that are beyond staff's ability to remove. In these cases, a contractor is hired to remove the tree.

Approximately 35 hazardous trees are removed each year. The Parks Department has an annual budget of $70,000 for hazardous tree removal.

Removal of Trees as Part of a Public Works Street or Sidewalk Maintenance Project

Installation of capital projects often leads to the potential need to remove trees. This is most evident with installing new sidewalk or repairing existing sidewalk. The basic workflow utilized in managing tree removal on capital projects is as follows:

A. Identify trees in jeopardy: As part of the preliminary design of a capital project, staff identifies trees that will be impacted as a result of the project improvement.
B. Review opportunities to save trees/mitigate impacts or replace trees: Several strategies are used to avoid or minimize tree removal including, root pruning, weaving the sidewalk around a tree, or narrowing the sidewalk for short sections.
C. Review and discuss need for tree removal with Parks Department staff: This includes discussing options and opportunities to protect and/or replant trees and general communication for awareness and tracking of trees.
D. Review and discuss tree impact with adjacent property owners: Staff reach out to each adjacent property owner to talk about the impact of the project, including on trees. This is to make the adjacent property owners aware of the impacts and explore options for minimizing the impacts.
E. Post trees for removal at least two (2) weeks before removal. Signage posted on trees includes project and point of contact information so that staff can respond to questions from public about the project and the needed tree removal.
F. Remove trees and replant where appropriate: Trees are fully removed, including roots, and the area where the tree is removed from is prepared for plantings, where appropriate.
G. Update asset management system for removal and replacement: Trees are an important asset to the community and removals and replacements need to be tracked within the asset management system. This helps for reporting and planning for maintenance activities.

Since 2015, 92 trees have been removed as part of sidewalk and road improvement projects. This includes tree removal on the following capital projects: Einstein Safe Routes to School, Aurora Avenue N - 192nd-205th, and Meridian Avenue Sidewalk Repair. Within this same time frame, 275 new trees have been planted by the City.

Issuing Permits for Planting, Pruning or Removing Trees in the Right-of-way

There are times when property owners would like to remove or maintain a tree in the right-of-way adjacent to their property. This may be for aesthetics, safety, etc. Tree removal permits are regulated by SMC Section 12.30.040(B) (Attachment A). The general process for processing a permit request is as follows:

A. A resident contacts the Public Works Department and requests to remove or prune a tree in the City's right-of-way.
B. City staff review the City's GIS maps to confirm that the tree is in fact in the right-of-way and not on private property.
C. The applicant is provided an application for tree removal or pruning.
D. The application is reviewed, which includes a site inspection, for the following:
   - to make sure the application is in compliance with SMC Section 12.30.040(B),
   - that it includes the appropriate number of replacement trees,
   - that the replacement trees are on the approved street tree list, and
   - that the replacement trees are proposed for appropriate locations.
E. Staff will then apply any conditions to the permit (including a maintenance and survivability requirement for replacement trees) that are needed and approve the permit if appropriate.
F. Finally, staff log the permit for tree removal/replacement tracking.

Since 2012, 34 permits have been processed for tree removal or pruning in the right-of-way. Seventy-six (76) trees have been removed and 123 trees have been planted in the right-of-way pursuant to those permits. One (1) permit has resulted in payment of a fee in lieu of replacement.

City of Shoreline Planting Trees in the Right-of-way

In recent years, removal of trees from the right-of-way as part of City Public Works Projects has largely been mitigated by the installation of new trees associated with the Aurora Avenue project, which installed 249 new trees in 2015 and 2016. Parks Department staff is undertaking a new effort to plant 40 to 60 trees in the right-of-way to continue to mitigate for capital project tree removal and to enhance the City's tree canopy. This effort is expected to begin this fall following the process generally described below.

A. Planting location will be selected by availability of the 5-foot wide amenity zone approved by the City. However, staff will be able to plant in smaller amenity zones if the right tree is selected.
B. Parks staff will review optional locations with public works staff to avoid utilities and traffic sightlines.
C. Parks will develop a public outreach plan for streets/neighborhoods where new trees will be planted. Neighbors will be consulted about tree selection and final location decisions.
D. Trees will be planted in the fall (late September or early October)

FINANCIAL IMPACT

There is no financial impact related to this discussion.

RECOMMENDATION

No formal action is required; this is a discussion item only.

ATTACHMENT

Attachment A: SMC Chapter 12.30
Attachment B: ISA Hazardous Tree Evaluation Form

Chapter 12.30
PUBLIC TREE MANAGEMENT

Sections:

12.30.010 Jurisdiction and administration.

It shall be the responsibility of the director of the parks, recreation and cultural services department (hereafter “director”) to manage and oversee the planting, care, maintenance and removal of all trees on all streets, rights-of-way, and city-owned public property within the city limits in accordance with the provisions of this chapter. [Ord. 617 § 1, 2012]

12.30.020 Tree board.

The parks, recreation and cultural services board is authorized to serve as the city’s tree board. The tree board shall be advisory to the city council. The primary responsibility of the tree board shall be to make policy recommendations concerning the management of trees located on city-owned public property and in city rights-of-way. The tree board shall be comprised of all members of the parks, recreation and cultural services board acting in an ex officio capacity, and the roles, officers and terms of the tree board shall be the same as the parks, recreation and cultural services board. [Ord. 617 § 1, 2012]

12.30.030 Adoption of administrative procedures.

The director is authorized to prepare and adopt after public notice and opportunity for public comment procedures, technical standards, and standard plans necessary to facilitate implementation of this chapter, including a list of approved street trees in the Engineering Development Guide after notice and opportunity for public comment. The director shall make recommendations for the fee in lieu of replacement street trees for adoption in the city fee schedule in Chapter 3.01 SMC. [Ord. 617 § 1, 2012]

12.30.040 Right-of-way street trees.

A. A right-of-way use permit shall be required and issued by the director of the parks, recreation and cultural services department (hereafter “director”) for planting street trees in rights-of-way adjacent to the applicant’s property according to the variety and spacing approved in the Engineering Development Guide if such activity does not physically disturb the existing or planned public use of the right-of-way. Planted street trees shall be maintained by the applicant in accordance with the issued right-of-way use permit.

B. A right-of-way use permit shall be required and shall only be issued by the director for the nonexempt pruning or removal of trees in rights-of-way adjacent to the applicant's property in compliance with the following:

1. Limits on removal under critical area regulations.

2. No permit shall be issued for removal of trees on rights-of-way that have not been opened with public improvements, including, but not limited to, streets, sidewalks, pathways, and underground or overhead utilities.

3. No trees listed in the Engineering Development Guide as approved street tree varieties shall be removed regardless of size unless the tree is removed by the city as hazardous or causing damage to public or private infrastructure.

4. All existing trees six inches in diameter at breast height or greater allowed to be removed under clearing and grading regulations shall be replaced with an approved variety of street tree in the area of removal according to the replacement formula in SMC 20.50.360(C)(1) through (3). Replacement trees shall be maintained by the applicant in accordance with the issued right-of-way use permit. If the director determines there is no suitable space for replanting street trees in the vicinity of removal, the applicant shall replant at public sites approved by the director or pay a fee in lieu of replacement according to the current city fee schedule to be used exclusively for planting public trees in rights-of-way, parks or other public places.

5. All removed trees or pruned material shall be removed from the right-of-way and the right-of-way shall be restored in accordance with the issued right-of-way use permit. [Ord. 627 § 1, 2012]

A Photographic Guide to the Evaluation of Hazard Trees in Urban Areas

TREE HAZARD EVALUATION FORM 2nd Edition

Site/Address: _____

Map/Location: _____

Owner: public _____ private _____ unknown _____ other _____

Date: _____ Inspector: _____

Date of last inspection: _____

HAZARD RATING:

_____ + _____ + _____ = _____

Failure Potential + Size of part + Target Rating = Hazard Rating

_____ Immediate action needed

_____ Needs further inspection

_____ Dead tree

TREE CHARACTERISTICS

Tree #: _____ **Species:** _____

DBH: _____ **# of trunks:** _____ **Height:** _____ **Spread:** _____

Form: ☐ generally symmetric ☐ minor asymmetry ☐ major asymmetry ☐ stump sprout ☐ stag-headed

Crown class: ☐ dominant ☐ co-dominant ☐ intermediate ☐ suppressed

Live crown ratio: _____ % **Age class:** ☐ young ☐ semi-mature ☐ mature ☐ over-mature/senescent

Pruning history: ☐ crown cleaned ☐ excessively thinned ☐ topped ☐ crown raised ☐ pollarded ☐ crown reduced ☐ flush cuts ☐ cabled/braced ☐ none ☐ multiple pruning events Approx. dates: _____

Special Value: ☐ specimen ☐ heritage/historic ☐ wildlife ☐ unusual ☐ street tree ☐ screen ☐ shade ☐ indigenous ☐ protected by gov. agency

TREE HEALTH

Foliage color: ☐ normal ☐ chlorotic ☐ necrotic **Epicormics?** Y N

Foliage density: ☐ normal ☐ sparse **Leaf size:** ☐ normal ☐ small

Annual shoot growth: ☐ excellent ☐ average ☐ poor **Twig Dieback?** Y N

Woundwood development: ☐ excellent ☐ average ☐ poor ☐ none

Vigor class: ☐ excellent ☐ average ☐ fair ☐ poor

Growth obstructions:

☐ stakes ☐ wire/ties ☐ signs ☐ cables

☐ curb/pavement ☐ guards

☐ other _____

Major pests/diseases: _____

SITE CONDITIONS

Site Character: ☐ residence ☐ commercial ☐ industrial ☐ park ☐ open space ☐ natural ☐ woodland\forest

Landscape type: ☐ parkway ☐ raised bed ☐ container ☐ mound ☐ lawn ☐ shrub border ☐ wind break

Irrigation: ☐ none ☐ adequate ☐ inadequate ☐ excessive ☐ trunk wettled

Recent site disturbance? Y N ☐ construction ☐ soil disturbance ☐ grade change ☐ line clearing ☐ site clearing

% dripline paved: 0% 10-25% 25-50% 50-75% 75-100% **Pavement lifted?** Y N

% dripline w/ fill soil: 0% 10-25% 25-50% 50-75% 75-100%

% dripline grade lowered: 0% 10-25% 25-50% 50-75% 75-100%

Soil problems: ☐ drainage ☐ shallow ☐ compacted ☐ droughty ☐ saline ☐ alkaline ☐ acidic ☐ small volume ☐ disease center ☐ history of fail ☐ clay ☐ expansive ☐ slope _____° aspect: _____

Obstructions: ☐ lights ☐ signage ☐ line-of-sight ☐ view ☐ overhead lines ☐ underground utilities ☐ traffic ☐ adjacent veg. ☐ _____

Exposure to wind: ☐ single tree ☐ below canopy ☐ above canopy ☐ recently exposed ☐ windward, canopy edge ☐ area prone to windthrow

Prevailing wind direction: _____ Occurrence of snow/ice storms ☐ never ☐ seldom ☐ regularly

TARGET

Use Under Tree: ☐ building ☐ parking ☐ traffic ☐ pedestrian ☐ recreation ☐ landscape ☐ hardscape ☐ small features ☐ utility lines

Can target be moved? Y N **Can use be restricted?** Y N

Occupancy: ☐ occasional use ☐ intermittent use ☐ frequent use ☐ constant use

TREE DEFECTS

ROOT DEFECTS:

Suspect root rot: Y N **Mushroom/conk/bracket present:** Y N **ID:** _____

Exposed roots: ☐ severe ☐ moderate ☐ low **Undermined:** ☐ severe ☐ moderate ☐ low

Root pruned: _____ distance from trunk **Root area affected:** _____% **Buttress wounded:** Y N **When:** _____

Restricted root area: ☐ severe ☐ moderate ☐ low **Potential for root failure:** ☐ severe ☐ moderate ☐ low

LEAN: _____ deg. from vertical ☐ natural ☐ unnatural ☐ self-corrected **Soil heaving:** Y N

Decay in plane of lean: Y N **Roots broken** Y N **Soil cracking:** Y N

Compounding factors: _____ **Lean severity:** ☐ severe ☐ moderate ☐ low

CROWN DEFECTS: Indicate presence of individual defects and rate their severity (s = severe, m = moderate, l = low)

DEFECT	ROOT CROWN	TRUNK	SCAFFOLDS	BRANCHES
Poor taper				
Bow, sweep				
Codominants/forks				
Multiple attachments				
Included bark				
Excessive end weight				
Cracks/splits				
Hangers				
Girdling				
Wounds/seam				
Decay				
Cavity				
Conks/mushrooms/bracket				
Bleeding/sap flow				
Loose/cracked bark				
Nesting hole/bee hive				
Deadwood/stubs				
Borers/termites/ants				
Cankers/galls/burls				
Previous failure				

HAZARD RATING

Tree part most likely to fail: _____

Inspection period: _____ annual _____ biannual _____ other _____

Failure Potential + Size of Part + Target Rating = Hazard Rating

_____ + _____ + _____ = _____

Failure potential: 1 - low; 2 - medium; 3 - high; 4 - severe
Size of part: 1 - <6″ (15 cm); 2 - 6-18″ (15-45 cm);
3 - 18-30″ (45-75 cm); 4 - >30″ (75 cm)
Target rating: 1 - occasional use; 2 intermittent use;
3 - frequent use; 4 - constant use

HAZARD ABATEMENT

Prune: ☐ remove defective part ☐ reduce end weight ☐ crown clean ☐ thin ☐ raise canopy ☐ crown reduce ☐ restructure ☐ shape

Cable/Brace: _____ **Inspect further:** ☐ root crown ☐ decay ☐ aerial ☐ monitor

Remove tree: Y N **Replace?** Y N **Move target:** Y N **Other:** _____

Effect on adjacent trees: ☐ none ☐ evaluate

Notification: ☐ owner ☐ manager ☐ governing agency **Date:** _____

COMMENTS