



Memorandum

DATE: October 21, 2010

TO: Shoreline Planning Commission

FROM: Joseph W. Tovar, FAICP, Planning and Development Services Director
Paul Cohen, Senior Planner *PLC*

RE: Proposed Amendments to Tree Conservation, Land Clearing, and Site Grading Standards – Section 20.50.290

At the July 1 meeting staff, presented proposed tree code amendments at a study session (Attachment 1). During that meeting key issues were raised regarding the administration of tree removal permits, adequacy of the tree replacement, and incentives for existing, large tree preservation. Staff will address these October 21st as well as other relevant information and clarifications.

Tree Removal Permits – Based on the proposed minimum tree size of 2 inch diameter, the Commission discussed the difficulty with requiring permits for small tree removal. This could mean relatively large fees and possibly more tree removal without a permit and subsequently more code enforcement.

One approach is that all tree removal involving trees less than 8 inches in diameter would not require a permit and fee but would require submitting a simple declaration of code compliance and survey of tree credits remaining on the property. (Currently, the City does not regulate conifers under 8 and deciduous 12 inches in diameter.) These declarations would be in the City's data base and provide staff with information responding to future complaints about illegal tree removal. Removal of trees 8 inches or more would require a permit that is based on one hour fee. The fee could be greater if review of the permit becomes more time-consuming.

A second approach is to not regulate or require any application of submittal the removal of trees less than 8 inches in diameter. Even an over-the-counter (OTC) permit to handle these declarations, file them, and respond if there is a complaint or violation would cost the applicant about an hour of staff time. Staff recommends exempting trees less than 8 inches and allow them to be used as part of the minimum tree credits.

Incentives for Large Trees - The proposed incentive would give disproportionately greater credit to larger tree retention. Beyond that, the City does not propose a

preservation requirement. The concept of OTC tree removal permits become less practicable if existing trees are required to be retained because the time and dollar costs of the review, inspection, arborist reports, and bonding. Such expense may be reasonable for new development, but we believe is out of proportion for existing properties whose owners want to remove a few trees.

If the City wants to substantiate and require existing trees to be retained it will require more extensive review. This reduces the home owner's tree choice and the flexibility of the credit system. How long would the designated tree be protected? If a property owner applies to remove an existing tree a year later or, if applicable, after a maintenance bond has expired then the initial requirement to retain the tree could prove ineffective because the conditions and the Director could change.

Staff believes that the City should decide which is a higher priority the preservation of large trees or to increase the city-wide canopy. Large trees are a part of the canopy but smaller trees provide the secondary canopy that will replace dying tall trees in the next generation. Older and taller trees are more likely to be diseased and damaged and therefore are more likely to be considered hazardous. Staff recommends keeping the proposed incentives or increasing the credits for larger trees.

Tree Replacement – The proposed tree replacement requirement is not based on the trunk mass of the removed tree. This is because the tree credit table is biased to give disproportionately more tree credits for preserving larger, existing trees as an incentive. The table in reverse calculates tree replacement, which is biased to smaller trees so that the tree trunk mass of the removed tree will be greater than the sum total of the replacement trees. However, over time the growth of replacement trees will exceed the growth of an existing tree. Staff recommends keeping the proposed replacement table.

Hazardous Trees – The Commission suggested that trees removed in emergency situations due to natural causes should not require replacement trees. Also, the proposed draft no longer needs to address potentially hazardous trees because they are part of the tree credit calculation. However, the Critical Area Ordinance (CAO) references the tree code to address potentially hazardous trees in Critical Areas. Staff recommends that the CAO no longer reference the tree code and be amended to address hazardous trees separately because those trees cannot be removed unless they are hazardous to life and property.

Circumference Not Diameter - Staff recommends converting the proposed tree diameters sizes to tree circumference sizes because it will be much easier for the homeowner to measure their trees with a common tape measure rather than a specialized arborist tool.

Tree Definition – Smaller trees tend to cross over with large shrub species or hybridized ornamentals and taller trees are likely to have larger canopies. Many species will be about 15 feet in height when the tree diameter is 2 inches. This will mean that more small ornamental species will be discouraged as a replacement tree. Staff recommends that the definition of a tree include the potential for a 15-foot height rather than the proposed 10-foot height.

Forest Management Plans – A city-wide forest management plan had been mentioned by some Commissioners as an alternative to a tree code amendment. The City has spent \$50,000 on 4 plans for the parks department. At this point there is no funding to implement these plans. Plans usually included an inventory of all vegetation types, test plots, and make 15 to 20 year recommendations to implement. These plans are feasible because they involve one property owner and one manager.

A city-wide plan is not feasible because of the cost and the issues that would arise as the city tries to inventory, classify, and implement on private properties. Because the vegetation mosaic, canopy type, and conditions vary from site to site it is problematic and not equitable to implement on private property.

Staff recommends that the Commission first complete the tree code amendments and, if a city-wide management plan remains important, make recommendations to the Council to pursue a city-wide forest management plan as a separate project.

Shoreline's Engineering Development Guide - As an incentive to plant or retain trees, the City's proposes development guidelines that use new and existing trees as credit toward flow control calculations. This will apply to larger development projects and not single family development.

In addition, the guide will recommend specific construction standards (species and spacing) for the planting, placement, and protection of trees in the Rights-of-Way. Currently, trees may be removed from the right-of-way in conjunction with development proposals to accommodate required utility or driveway improvements. Tree removal is not allowed unless there are unsafe conditions that require corrective action. Trees that may be hazardous are assessed by an independent arborist and can be removed if so determined. Trees impacting pedestrian pathways (up-lifting of sidewalks) will be reviewed by an independent arborist for root pruning first. The City makes an effort to replace that tree with a new one in the same location, or if not possible, nearby. If the tree cannot be retained then it will be removed and replaced.

Street trees and trees in the rights-of-way are not addressed in either the current or proposed tree codes because both codes required calculations based on lot area, percentages, and tree inventories. The City's rights-of-way are all connected and considered one property. The Public Works Department takes the reasonable and compatible approach of not removing or pruning trees unless they are a hazard or damaging to infrastructure and then replacing any removed trees. Street trees are only included in the development code as a substitute for front setback landscaping. Otherwise, street trees are administered using the Engineering Development Guide.

Canopy Survey – Staff is starting the selection process for a consultant to measure tree canopy using state grant money. We are hoping for the survey to be completed by the end of 2010.

Public Education - Staff recommends that the City provide outreach education to the community on tree health and the new tree code through community meetings, City's Currents and website, and information handouts.

Next

Staff would like the Commission's direction on the above issues prior to revising the proposal. The Parks Board will be informed of the above issues and invited to submit comments and to testify at the Commission's public hearing. Staff would like to plan a November public hearing.

Attachment

1. July 1, 2010 Staff Memorandum to Planning Commission (only includes attachment 1)



Memorandum

DATE: July 1, 2010

TO: Shoreline Planning Commission

FROM: Joseph W. Tovar, FAICP, Planning and Development Services Director
Paul Cohen, Senior Planner

RE: Proposed Amendments to Tree Conservation, Land Clearing, and Site Grading Standards – Section 20.50.290

At the July 1 meeting, staff will present its proposed tree code amendments at a study session. Depending on the complexity of discussion and the Commission's direction, staff may return for additional study sessions prior to setting a public hearing on the draft code amendments.

The last time the Planning Commission held a study session regarding the tree code amendments was September 2009. This report will contain some of the earlier background information because it has been several months since the topic was last discussed and two new commissioners have been appointed in the interim. Though the amendments focus on the Tree code there are amendments to the Clearing and Grading portion of the same subsection. In addition, staff proposes ancillary and consistency amendments to the Definition, Landscaping, and Critical Areas codes because they address trees or clearing and grading.

Background

January 2009 – City Council direction to resolve 9 tree code issues.

February through September 2009 - 5 Planning Commission study sessions were held on this topic. The minutes and staff reports are online at <http://www.cityofshoreline.com/index.aspx?page=501>. In summary, the Commission discussed:

- Council direction for 9 decision-modules (Attachment 1);
- Tree codes from Lake Forest Park, Bellevue, and Edmonds as well as proposals from the Innis Arden Club and a shoreline citizens group;

- Attributes of vegetation, tree coverage potential, solar access, large tree specimens, natural systems, transfer of tree replacements, canopy coverage, park land, hazardous trees, and landmark trees;
- Recommended language for the purpose section of the code; and
- Attributes of a tree credit system.

April 22, 2010 - Joint Planning Commission and Parks Board Meeting: Discussed the tree code as it affects the City's park property.

May 10, 2010 - Council Code Amendment Update.

Public Comments

The City has received public comments at two community meetings with approximately 75 attendees, 5 Planning Commission study sessions, and through approximately 60 comment letters. All these comments are available on the City's website links <http://www.cityofshoreline.com/index.aspx?page=501> . Below is a summary of the comments from the 2 community meetings.

- Trees make property more valuable.
- Views make property more valuable.
- Want the right to cut trees on my property if I want.
- Prefer more sunlight and don't want to live in a dark forest.
- Greater housing density with greater tree preservation is going to force buildings to be too tall.
- Trees are essential to the health of the environment.
- Hazardous trees will kill people and be a liability.
- Topping trees will force trees with multiple leaders and become dangerously top heavy.
- Trees have a positive effect on the entire community.
- Use scientific data of tree attributes to determine their value and regulation.
- Different tree standards are needed for different neighborhoods or zones.
- Deal with trees that affect property but are outside property line.
- Retain large trees.
- Consider tree functions.
- Exempt exotic trees.
- Recognize covenants.
- Don't recognize covenants.

Context and Indicators

- Natural Resource Regulation –Natural resources are difficult to regulate when there are many thousands of trees that are growing or dying in Shoreline and that most property owners are unaware of the tree code. The tree code only regulates tree removal on private property and public lands – but not in city rights-of-way. Since there is no real certainty of the condition of trees in the City it is important

to have confidence that we are keeping and replenishing a reasonable tree canopy while allowing people to build on the property and manage their trees.

- Vegetation and Trees – All vegetation have the same environmental attributes and, though weighted differently, they all contribute to the environmental health of the City. Plants such as grasses, vines, shrubs, and trees have the same attributes of erosion control, water absorption, carbon sequestration, wildlife habitat, oxygen producing, etc. Trees have an important role in the diversity of plant communities along with other types of vegetation. A recent city study showed that the potential, city-wide impervious surfaces could be 60%. This allows the remaining 40% to have vegetative coverage including trees.
- Canopy Net Loss or Net Gain – Whether there is a net loss or net gain in Shoreline's tree canopy, at this point, is difficult to determine. A lot depends on the canopy survey and which time period that is compared to. Prior to Native American settlements the City was covered with trees. Native Americans burned and cleared large (not the majority) areas for agriculture. 85% of Shoreline was logged between 1887 and 1910. Stump farms emerged with some tree canopy rebounding between 1910 and the 1930's.

According to the 2000 U.S. Census, 5% of existing housing stock was built before 1940. 60% of the City's existing housing stock was built between 1940 and 1970. Another 29% was added between 1970 and 1990. Another 6% was added between 1990 and 2000. By the year 2000 Shoreline's first tree code was adopted and 95% of our housing stock had been built.

This year the City conducted preliminary canopy surveys using GIS aerial photography. Each survey was based on 600 random samplings. Unclear samplings resulted in a +/-3% margin of error. The City surveyed the canopy in 1999 and 2009 aeriels because they have same high-resolution and the same person analyzing the samples. The surveys showed that both years resulted in a city-wide tree canopy of 36%. Though the tree canopy percentage is not definitive, the lack of change between the 1999 and 2009 Shoreline surveys indicates that the canopy may not have declined over the last 10 years.

Some of the survey's indicators may be supported by another factor - the rate canopy removed each year versus the rate of canopy growth from the thousands of trees in Shoreline. A tree being cut is a striking image. Tree growth is slow, widespread, and hardly noticed. In 2008 approximately 160 known, significant trees were removed including approved, hazardous, and illegal trees. In 2003 the City's rights-of-way, alone, were surveyed with 14,226 trees comprising 19% of the City land area. Again, the indicators are not definitive but the data may support the two city-wide surveys.

- Trees in Rights-of-Way – The tree code does not apply to the City's rights-of-way. The planting and replacement of street trees are administered by the City engineering standards and guidelines. The current policy is to plant street trees when frontage improvements are made and replaced street trees when they are removed for street improvements, utility maintenance, and public safety.

The City conducted a street tree inventory (14,226) and management plan in 2003. It recommended a program to replace and plant additional trees in the City's rights-of-way. However, there is no street tree planting program nor funding to actively plant trees beyond what is required with frontage improvements and replacements.

- City Park Property – All park properties are in either R-4 or R-6 zones. Tree canopy on Park property can vary widely from all playfields (Paramount Park) to completely wooded (Innis Arden Reserve). The Planning Commission has expressed that the City should set a higher example of tree retention and that parks are a large part of the City's tree resource.

Clear and Grading Amendments Goal and Objectives

The proposed amendments to the development code address the conflicts that exist in the current code language and integrate terminology from the Stormwater Manual. The issues that are being addressed are as follows:

1. Permit requirements for trees, clearing, and grading were enmeshed in the current code. Changes to the permit requirements and exemptions are necessary because there are different criteria for tree removal than for land disturbing activities. Many citizens are only interested in tree removal and need to clearly separate what is required.
2. Current code language does not clearly differentiate between tree removal and pruning, clearing, and land disturbing activities.
3. The Stormwater Manual adopted in 2009 uses the more comprehensive term "land disturbing activity." To keep regulations consistent use "land disturbing activity in the Development Code.
4. "Basic operating conditions and standards of performance" subsection was mostly removed because its standards are piecemeal, intended for a county gravel pit with benching, and not applicable to Shoreline. A more comprehensive set of criteria are required through the grading application checklist and completed by a professional engineer.

Tree Amendment Goal and Objectives

The overall goal is to amend the tree code to address the Council's 9 directions and to be more clear, equitable, and flexible.

1. Survey the city-wide tree canopy possibly every 5 years for a big-picture assessment of changes and the effectiveness of the tree code.
2. Assign each parcel minimum tree credits that are proportional to parcel size and the amount of pervious surface required by zoning. Tree credits could be met in a variety of ways and would remain consistent no matter a property's history or future development plans.

3. With the wide range of opinions on trees in the community, the proposed flexibility allows a property owner to decide which trees they want to retain or replace in the locations that they want on their property. This allows them to create solar access, remove trees that appear hazardous, or trees that clog their gutters. It also does not limit a property owner to retain and plant more trees than would be required.
4. Staff anticipates that the rate of tree removal will not increase because of the proposed code amendments. If property owners are more able to choose their trees and their locations then the trees are more likely to thrive and less likely to violate provisions of the code.

Draft Amendment Organization

The proposed code amendments (Attachment B) will look very different from the existing code (Attachment C). The existing code has a number of overlapping good intentions but ultimately it is confusing and redundant. The portions that administered just clearing and grading regulations were separated into their own subsection. The proposed amendments have changed the existing code to a point where the proposal is clearer to read without legislative marks.

The approach is similar to staff's earlier proposal to use minimum tree credits as the core to the tree code. The Definitions, Critical Areas, and Landscaping code sections were also reviewed to look for consistencies and conflicts with the Tree code.

Administration of Proposed Code

Currently, staff expends a lot of unquantifiable time administering and trouble-shooting tree issues that do not generate permit revenue for the City. The proposed code amendments should greatly improve staff's administration and the public understanding of the tree code.

A major City Council concern was that trees were being removed without permit and with little record. Tree removal and replanting will normally be a part of the review of a larger development permit. However, the proposed code requires a permit to remove trees that are 2 inches in diameter or larger. The reason for the 2-inch size is that 2-inch replacement trees, as proposed, have tree credit value, are protected, and therefore do not need bonding to reach a larger size. This will have a larger, contextual explanation on July 1.

This means that property owners who want to remove one, 2-inch diameter tree would need the City's approval. If the City decides not want to create an exempt classification, then staff recommends that the submittal requirements, over-the-counter review, and associated fee for tree removal to be minimal. Submittal requirements could be limited to a declaration that the information is accurate (no consultant survey) and that minimum tree credits are met with the list of the trees to be removed and replaced.

If you have any questions prior to the meeting, contact Paul at (206) 801 2551 or at pcohen@shorelinewa.gov.

Attachments

1. City Council 9 Decision Modules and Staff Responses
2. Proposed Amendments for Land Clearing, Site Grading, and Tree Conservation - Section 20.50.290 (Ancillary Amendments for Definitions, Critical Areas, and Landscaping Code Sections).
3. Existing Tree Conservation, Land Clearing and Site Grading – Section 20.50.290

ATTACHMENT 1

Council's Decision Modules and Staff Responses

DM-1 Establish a baseline urban forest canopy city wide. This baseline would provide the context for the Council to make a policy decision, most likely in 2010, about a long-range City target for desired tree canopy. With such a baseline and target in place, the City could then monitor the overall City canopy, perhaps every 5 years, to assess its health and identify any further programs or code amendments as needed.

Staff – The City-wide survey will build the City's confidence in the proposed amendment's simplicity and flexibility as it applies to individual parcels. A city-wide canopy survey would not be part of the development code but a separately funded program.

DM-2 Reorganize SMC 20.50.290 to separate clearing and grading provisions into a different subsection because the intent, purpose, and exemptions are entangled. Though they affect each other, clearing and grading have different development standards than trees.

Staff – The proposed amendment has separated the clearing and grading regulations within its own subsection of the code. It has been amended mostly to remove redundant language and provisions. The content and requirements are clarified but unchanged.

DM-3 Delete the exemption in SMC 20.50.310.B.1 that allows the removal of 6 significant trees every 36 months without permit. This is potentially a huge loss in our city-wide tree canopy because we don't regulate or monitor this provision.

Staff – This current code exemption has been eliminated because it could not be tracked without a permit and therefore no history of removed trees in the previous 36 months. The amendments account for all trees to be considered in a parcel's tree requirements, which clears up whether a tree can be removed and fills in gaps in the city records.

DM-4 Amend SMC 20.50.310.A to establish clear criteria and thresholds when a hazardous tree is reviewed by a City third party arborist. Add requirements for replacement trees when hazardous trees are removed. Currently, property owners use their own arborists to determine a hazardous tree without thresholds to determine when it is hazardous. If the City doesn't agree with the assessment then we can require a third party assessment. This costs the property owner twice and prolongs a decision. Requiring the use of a City's arborist makes the assessment more objective and less costly for everyone.

Staff - If there is evidence of an emergency hazardous tree that needs to be cut then an arborist is not required. The proposed amendments eliminate the need to regulate potentially hazardous trees separately and to include them as part of

minimum tree credits to be decided by the property owner if it is hazardous. Both of these situations eliminate the need for a certified arborist. In general, where an arborist is needed will be drawn from a City-approved list of arborists that removes the potential of involving two arborist, their costs, and potential bias.

DM-5 Amend SMC 20.50.360 to allow for reasonable tree replacement ratios and the possibility to replace trees on other land within the City. Many development sites do not have the room to plant all the replacement trees. These replacement trees are easily cut down because they are not defined as significant trees after the 3-year protection period.

Staff - The amendments base the tree replacement on the minimum tree credits assigned to a parcel. There should be no excess replacement trees to locate elsewhere. The transfer of tree replacements to other parcels is problematic because of the transfer of the legal responsibility.

The amendments instead require trees to be retained and replaced to meet the minimum tree credits. In this way, the City is not administering many, small tree bonds or requiring expensive title notifications.

DM-6 Amend SMC 20.50.350.B.2 to remove code provisions for 30% preservation of significant trees if a critical area is on site because trees in critical area trees are already protected under the Critical Area provisions of SMC 20.80. A relatively small critical area could trigger 30% preservation on the entire site when the intent is to preserve the critical area and its trees. The change would keep the base significant trees preserved as well as all trees in the critical areas.

Staff – This provision created confusion to calculate 30% because it was unclear whether it included all trees on site or if it assumed that the critical area had significant trees. This provision is unnecessary if the CAO protects all trees in its areas. This provision added to the inequity of those parcels with large critical areas.

DM-7 Amend SMC 20.50.350.B.1 to remove and replace the flat code provision for 20% preservation of significant trees. The existing rule is inequitable because, for example, a site that is covered with 100 trees would have to retain 20 trees, while a small site with only 5 trees would only have to save one. We could devise a more equitable system that requires tree preservation based at least partially on lot size.

Staff – Retention of 20% significant trees does not promote larger trees and diminishes each time a property owner applies for development or improvement. The amended system is based on a parcel's minimum tree credits that remain the same no matter its building and tree history or future. These credits are proportional and therefore equitable to the parcel size and the maximum lot coverage (building and hardscape) allowed.

DM-8 Reorganize and clarify code provisions SMC 20.50.350.B-D that gives the Director flexible criteria to require less or more trees to be preserved so that site design can be more compatible with the trees. For example, the current code

requires that all trees with the following qualities shall be preserved - in groves, above 50 feet in height, continuous canopy, skyline features, screen glare, habitat value, erosion control, adjacent to parks and open space, and cottonwoods. In general, these are good qualities but if all these requirements are applied the result would prevent development on many lots.

Staff - The current code for the directors allowance to increase or decrease tree retention and decreasing tree replacement were rarely used because they were not requested, clear, or consistent. The flexibility and equitability of the proposed amendments make this section unnecessary.

DM-9 Amend SMC 20.30.770(D) to provide greater clarity and specificity for violations of the tree code. Currently, code enforcement has difficulty proving violation intent and therefore exacting penalties.

Staff – The City’s code enforcement officer recommends the amendments because it provides clarity to the regulations which results in better enforcement.