

URBAN FORESTRY AND TREE REGULATIONS

PRESENTATION TO TUKWILA TREE AND ENVIRONMENT ADVISORY COMMITTEE
BY BROOKE ALFORD, FEBRUARY 27, 2013



SAMPLE MUNICIPALITIES

- Kirkland, WA
- Lacey, WA
- Renton, WA
- Vancouver, WA
- Portland, OR

TOPICS COVERED

Overall Program Structure

- Program Elements
- Administrative Structure

TOPICS COVERED

Targets and Oversight

- Target Canopy Coverage
- Periodic Review
- Board, Committee, or Task Force
- Dedicated Funding Sources for UF

TOPICS COVERED

Main Regulatory Issues for Trees

- What is regulated
- Where it is regulated
- When it is regulated

TOPICS COVERED

Some Specific Regulatory Issues

- Maintenance requirements
- Tree protection during construction
- Definition of a hazard tree
- Definition of "removal"
- Enforcement provisions

MUNICIPALITY REPORTS

Program Elements and Administrative Structure

PROGRAM STRUCTURE: KIRKLAND

Elements

- Comprehensive Plan, Natural Environments

Goal NE-3: Manage the natural and built environments to protect and, where possible, to enhance and restore vegetation.

Policy NE-3.1: Work toward increasing Kirkland's tree cover to 40%.

Policy NE-3.2: Preserve healthy mature native vegetation whenever feasible.

Policy NE-3.3: Ensure that regulations, incentives, and programs maximize the potential benefits of landscaping.

PROGRAM STRUCTURE: KIRKLAND

Elements, cont.

- Natural Resource Management Plan, 2003
- KZC Chapter 95: Tree Management and Required Landscaping
- Urban Tree Canopy Assessment Report, 2011
- Urban Forest Strategic Management Plan (currently in draft form)

PROGRAM STRUCTURE: KIRKLAND

Administrative Structure

- Urban forestry programming is managed by the Urban Forester in the Planning Dept.
- The program is administered by Planning, in partnership with Public Works.

PROGRAM STRUCTURE: LACEY

Elements

- Comprehensive Plan, Environmental Protection and Resource Conservation Plan, Land Use Element
- Urban Forest Management Plan, 2005
- LMC CH. 14.32 Tree and Vegetation Protection and Preservation

PROGRAM STRUCTURE: LACEY

Administrative Structure

Parks and the Planning Dept work together to administer most of the urban forestry program.

PROGRAM STRUCTURE: **RENTON**

Elements

- Comprehensive Plan, Environmental Element, 2009 and Community Design Element, 2011
- Urban and Community Forestry Plan, 2009
- Urban Tree Canopy Assessment Report, 2011
- RMC 4-4 through 4-11 Landscaping, Tree Cutting and Land Clearing regulations

PROGRAM STRUCTURE: **RENTON**

Administrative Structure

- The Urban Forestry Program resides in Community Services, Dept. of Parks and Rec and is managed by the Urban Forestry & Natural Resources Manager
- The tree regulation is administered by the Planning Dept.

PROGRAM STRUCTURE: **VANCOUVER**

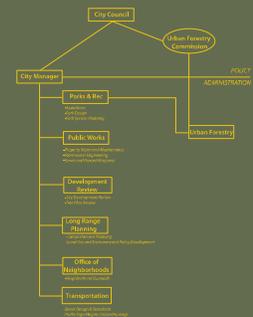
Elements

- Comp plan, Environment Chapter, EN-9: Trees and Vegetation
- Vancouver Urban Forestry Management Plan, 2007
- Urban Tree Assessment 2011 (2003)
- Canopy Restoration Program
- Urban Forestry Commission (VMC 12.02)
- Street Tree Ordinance (VMC 12.04)
- Tree Conservation Ordinance (VMC 20.770)
- Heritage Tree Program

PROGRAM STRUCTURE: **VANCOUVER**

Administrative Structure

- The Vancouver Urban Forestry Division, housed within the Vancouver-Clark Parks & Recreation Department, provides three major services: planning, education, and management.
- Urban Forestry has strong ties to the Public Works, Transportation, and Development Review departments and ensures that the City's tree-related management is coordinated and cohesive.



PROGRAM STRUCTURE: **PORTLAND**

Elements

- Comprehensive Plan
- Urban Forest Management Plan, 2004
- Canopy Report, 2007
- Urban Forest Action Plan, 2007

PROGRAM STRUCTURE: **PORTLAND**

Elements, cont.

- PCC Ch. 33.630 Tree Preservation
- PCC Ch. 20.40 Street Tree and Other Public Tree Regulations
- PCC Ch. 20.42 Tree Cutting

Title 11: Citywide Tree Policy Review and Regulatory Improvement Project
(adopted 2011, but not implemented)

PROGRAM STRUCTURE: PORTLAND

Administrative Structure

- Urban forestry is housed in the Bureau of Parks and Recreation, however the UFMP is a multi-bureau effort.
- Bureau of Planning and Sustainability drafted the tree title.
- Bureau of Developmental Services administers the land use code.
- Bureau of Environmental Services supports incentive and tree planting projects—as part of their green stormwater infrastructure (wastewater management).

TARGETS AND OVERSIGHT

- Target Canopy Coverage
- Periodic Review
- Board, Committee, or Task Force

TARGETS AND OVERSIGHT: KIRKLAND

- Canopy coverage target: 40% (met)
- 2002 and 2010 canopy mapping, 2011 Canopy Assessment Report.
- No current specific UF Commission, however, Forterra led a series of stakeholder focus groups to collect comprehensive input for the Strategic Mgmt Plan.

TARGETS AND OVERSIGHT: LACEY

- Canopy review is conducted by the contracted urban forester and informs the urban forestry planning. Target is not explicit in the documentation.
- Revise the Urban Forest Management Plan every 5 years.
- The Planning Commission functions as the citizen advisory board.

TARGETS AND OVERSIGHT: RENTON

- Target canopy coverage: 40% recommended in canopy report, yet to be adopted to comp plan.
- No tree commission currently, but considering tasking the Parks Commission with urban forestry advisory responsibilities.
- *Annual State of the Urban Forest Report.*
- *Urban and Community Forestry Task Force* was a team comprised of staff from various departments and a consulting team of landscape architecture, urban planning and community forestry professionals.

RENTON'S COORDINATION



TARGETS AND OVERSIGHT: VANCOUVER

Vancouver's canopy target is 28% comprehensively and broken down by land use:

Land Use Type	Current Average Canopy	Canopy Goal
Residential: Low Density	35.6%	52.0%
Residential: Medium Density	29.3%	36.0%
Residential: High Density	20.8%	26.0%
Commercial	11.2%	15.0%
Industrial	6.4%	14.0%
Right-of-Way	11.6%	14.0%
Public Lands	19.1%	38.0%

TARGETS AND OVERSIGHT: VANCOUVER

- Urban Forestry Commission (VMC 12.02) 7 members
- Urban Tree Assessment 2011 (2003)
- City Council approved a funding program for Urban Forestry in 2004, utilizing a portion of its surface water management fees in recognition of the green infrastructure and stormwater management benefits of trees. (resulted in growth from .75 UF staff to 3.0).
- Update the Urban Forestry Management Plan on a 5-year cycle or as needed to adjust to changing circumstances.

TARGETS AND OVERSIGHT: PORTLAND

Canopy Targets based on Urban Land Uses

Urban Land Environment	Target Canopy	Current (2002) Canopy
Residential	35-40%	30%
Commercial	15%	7%
Developed parks and OS	30%	28%
Rights-of-Way	35%	17%
Natural Areas and Streams	----	79%
Overall Canopy	----	26%

TARGETS AND OVERSIGHT: PORTLAND

- Canopy Assessment occurs every 5 years by the urban forestry staff via aerial imagery.
- The Urban Forestry Commission (PCC 20.40.030)
- Annual Urban Forestry Report
- Funds for UF come from the general fund, 2 trusts (in lieu fees and damages fund), and the wastewater division.

WHAT IS REGULATED

What is a tree?

WHAT IS REGULATED: KIRKLAND

- Individual trees--a significant tree is at least 6" in DBH (4.5' off of the ground)
- Grove – A group of three (3) or more significant trees with overlapping or touching crowns.
- Specimen Tree – A viable tree that is considered in very good to excellent health and free of major defects, as determined by the City's Urban Forester
- Native vegetation in critical areas.

WHAT IS REGULATED: LACEY

- Individual trees (single trunk 4"+DBH) and groves of trees
- Historical trees. Trees designated as historical trees under LMC 14.32.072.
- Specimen trees. Unusual, rare, or high quality trees.
- Critical area and critical area buffer.
- Significant wildlife habitat. Trees located within or buffering significant wildlife habitat.

WHAT IS REGULATED: RENTON

- Individual trees and groves of trees
Significant trees are considered those 6"+ DBH
- Trees in critical areas

WHAT IS REGULATED: VANCOUVER

- Individual trees (6"+ DBH) and groves
- Heritage trees
- Specimen trees
- Critical areas trees

WHAT IS REGULATED: PORTLAND

- Individual trees, defined as
 - Title 33: trees 6"+ DBH or listed as significant per Significant Tree List.
 - Title 20: 12"+ DBH
- Heritage Trees
- Historical Landmark Trees (diff commission)
- Trees in critical areas

WHAT IS REGULATED: PORTLAND

**Table 630-1
Significant Trees**

Common Name	Scientific Name	Diameter
All trees not listed in this table except trees listed as nuisance or prohibited on the Portland Plant List		
Big-leaf Maple	<i>Acer macrophyllum</i>	18 inches
Bitter Cherry	<i>Prunus emarginata</i>	10 inches
Black Cottonwood	<i>Populus balsamifera</i> ssp. <i>trichocarpa</i>	18 inches
Black Hawthorn	<i>Crataegus douglasii</i> var. <i>douglasii</i>	8 inches
Black Hawthorn	<i>Crataegus siskadoffii</i>	8 inches
Calceola	<i>Rhamnus purshiana</i>	6 inches
Douglas Fir	<i>Pseudotsuga menziesii</i>	18 inches
Garry Oak	<i>Quercus garryana</i>	4 inches
Grand Fir	<i>Abies grandis</i>	10 inches
Madrone	<i>Arbutus menziesii</i>	4 inches
Oregon Ash	<i>Fraxinus latifolia</i>	10 inches
Pacific Yew	<i>Taxus brevifolia</i>	2 inches
Ponderosa Pine	<i>Pinus ponderosa</i>	8 inches
Red Alder	<i>Alnus rubra</i>	18 inches
Scouler Willow	<i>Salix scouleriana</i>	6 inches
Western Flowering Dogwood	<i>Cornus nuttallii</i>	6 inches
Western Hemlock	<i>Tsuga heterophylla</i>	10 inches
Western Red Cedar	<i>Thuja plicata</i>	10 inches

WHERE TREES ARE REGULATED

Considerations

- Public land, private land
- Varied land uses
- Developed land, undeveloped land

WHERE TREES ARE REGULATED:
KIRKLAND, LACEY, RENTON

- Public Right of Way
- Commercial, industrial and multi-family parcels
- Single family residential parcels (Renton has some SF exceptions)
- Undeveloped, developed and developing parcels

WHERE TREES ARE REGULATED:
VANCOUVER

- Public right of Way
- Commercial, industrial and multi-family parcels
- Single family residential parcels larger than one acre and that can be further sub-divided
- Undeveloped, developed and developing parcels

WHERE TREES ARE REGULATED:
PORTLAND

- Public Right of Way
- Commercial, industrial and multi-family parcels
- Single family is exempt, IF it is solely used as SF residence and cannot be further subdivided or partitioned.*
- Undeveloped or developing parcels

*Title 11 eliminates SF exemption.

WHEN (AND HOW) TREES ARE REGULATED

Are trees only regulated when development takes place, or outside of development as well?

These are often regulated differently.

WHEN TREES ARE REGULATED:
KIRKLAND

Outside of development:

- Any private property owner of developed property may remove up to two (2) significant trees from their property within a 12-month period without having to apply for a tree removal permit; provided, that:
 - There is no active application for development activity for the site;
 - The trees were not required to be retained or planted as a condition of previous development activity; and
 - At least 2 trees remain.

WHEN TREES ARE REGULATED:
KIRKLAND

During development standards:

- Minor Single Family: 2 tree minimum
- Major Single Family: tree density requirement
- Short plat, subdivisions, cottages: tree density requirement
- Multi-family, commercial, industrial: landscaping requirements

WHEN TREES ARE REGULATED: KIRKLAND

**Tree Density for Existing Significant Trees
(Credits per minimum diameter – DBH)**

DBH	Tree Credits	DBH	Tree Credits	DBH	Tree Credits
3 – 5"	0.5				
6 – 10"	1	24"	8	38"	15
12"	2	26"	9	40"	16
14"	3	28"	10	42"	17
16"	4	30"	11	44"	18
18"	5	32"	12	46"	19
20"	6	34"	13	48"	20
22"	7	36"	14	50"	21

WHEN TREES ARE REGULATED: LACEY

Tree requirements during development

Type of Development	Lot Size	Required New or Saved Trees	Tree Size **
Developing Single and Multi-Family Lots	Less than 3,500 ft ²	2	2.0" Caliper Deciduous 7-8' Tall Conifers
	3,500 ft ² to 4,999 ft ²	3	2.0" Caliper Deciduous 7-8' Tall Conifers
	5,000 ft ² to 6,499 ft ²	4	2.0" Caliper Deciduous 7-8' Tall Conifers
	6,500 ft ² or over	5	2.0" Caliper Deciduous 7-8' Tall Conifers

WHEN TREES ARE REGULATED: LACEY

Tree requirements outside of development

Type of Development	Lot Size	Required New or Saved Trees	Tree Size **
Developed Single Family and Multi-Family Lots	All	4 trees per 5,000 ft ²	2.0" Caliper Deciduous 7-8' Tall Conifers
Developed Commercial/Industrial/Multifamily proposing an addition, tree removal, or other site disturbance	All	2 Trees per 10,000 ft ²	2.0" Caliper Deciduous 7-8' Tall Conifers
Class IV Forest Practice Activity	All	Replanting required when average stocking (basal area) falls below 80 ft ² per acre - Tree spacing required is 10 ft on center	Seedlings or transplants 1-1, 2-0, 2-1, P-1, or 1-2

WHEN TREES ARE REGULATED: RENTON

Outside of development

- Parcels ½ acre and less: any number of trees can be removed without a permit.
- Parcels over ½ acre:
 - 35,000 sf or less, can remove 3 trees in any 12 month period.
 - Over 35,000 sf, can remove 6 trees in any 12 month period.

WHEN TREES ARE REGULATED: RENTON

During development

- General landscaping requirements
- Exempt: Single family residential building permits, when not a part of a subdivision, are exempt from all but the maintenance provisions of the landscaping requirements.
- Tree survey required for all significant trees (6"+ DBH). Trees to be retained shall be indicated on a clearing and grading plan, and on a conceptual and detailed landscape plan. The grading and clearing plan shall indicate *tree protection methods to be used during construction*.

(New draft of code due in 2014)

WHEN TREES ARE REGULATED: RENTON

The PURPOSE of these landscape requirements is to :

- establish *consistent and comprehensive* landscape provisions to preserve and enhance the landscape character of the City;
- improve the aesthetic quality of the built environment;
- minimize erosion and reduce the impacts of development on natural areas within the City and on storm drainage systems and water resources in particular;
- provide shade, reduce noise and glare, and establish a healthier environment;
- provide transitions between various land uses;
- increase privacy and protection from visual or physical intrusion, and to maintain and
- protect property values, and generally enhance the overall image and appearance of the City and quality of life for its citizens.

WHEN ARE TREES REGULATED: VANCOUVER

Outside of development

- *On undeveloped land:* A removal of up to a total of 6 trees from an undeveloped parcel is allowed within any consecutive 36 months IF the parcel is intended to remain undeveloped for the next 6 years. Such an intent must be recorded in a covenant, provided to the planning official.
 - Under one acre, an allowance of 6 trees per acre (ie 3 on ½ an acre)
 - Tree removal permit is required for private property, except

WHEN ARE TREES REGULATED: VANCOUVER

Development activities and the level tree plan required for each.

1.	Proposed single-family residence, short plat, and multi-family (1-4 units); Applicable existing single-family residence proposing site disturbance	I
2.	Existing commercial/industrial/multi-family(over 4 units)/parks/conditional use, proposing a building addition or other site disturbance	II
3.	Nuisance or hazard tree removal permit	III
4.	Proposed residential subdivisions, planned developments, commercial/industrial/multi-family (over 4 units)/parks/conditional use with no impact on trees.	IV
5.	Proposed residential subdivisions, planned developments, commercial/industrial/multi-family (over 4 units)/parks/conditional use in which trees are removed or will be impacted.	V
6.	Conversion option harvest permit	VI
7.	Undeveloped parcels	VII

WHEN ARE TREES REGULATED: VANCOUVER

- Development standards include tree density requirements.
- For proposed additions or site disturbances to commercial, industrial, or multifamily , a 30 tree per acre density is required.
 - Trees required to meet the minimum density are to be planted with priority to:
 - Onsite
 - Offsite
 - City tree account

WHEN TREES ARE REGULATED: PORTLAND

During Development

- Land divisions in all zones where:
 - A. There is at least one significant tree on the site that is not in an Environmental Overlay Zone; or
 - B. There is at least one tree that is at least 6 inches in diameter on the site that is not in an Environmental Overlay Zone.

WHEN TREES ARE REGULATED: PORTLAND

- Option 1: Preserve at least 35 percent of the total tree diameter on the site;
- Option 2: Preserve at least 50 percent of the significant trees on the site and at least 30 percent of the total tree diameter on the site;
- Option 3: Preserve at least 75 percent of the significant trees on the site and at least 25 percent of the total tree diameter on the site;
- Option 4: Preserve all of the significant trees on the site and at least 20 percent of the total tree diameter on the site; or
- Option 5: If the site is larger than one acre, preserve at least 35 percent of the total tree canopy area on the site.

WHEN TREES ARE REGULATED: PORTLAND

Outside of development

- Trees may be cut on *unregulated property* without a permit, except where the tree has been expressly protected by another code or approval condition, or is a heritage or historic landmark tree.
- Trees need a permit to be cut on regulated property.
- Criteria are described in PCC 20.42.

SOME SPECIFIC REGULATORY ITEMS

- Definition of "removal"
- Maintenance requirements
- Tree protection during construction
- Definition of a hazard tree
- Enforcement provisions

"REMOVAL": LACEY

"Land clearing" means the direct and indirect removal of trees and/or ground cover from any public or private undeveloped, partially developed, or developed lot, public lands or public right-of-way. This shall also include any destructive or inappropriate activity applied to a tree that will result in its death or effectively destroy the trees appearance and/or functionality, such as topping.

"REMOVAL": VANCOUVER

"Removal" means the act of taking out or reducing a part of an entire tree or shrub so that the tree or shrub will not regain its mature size or function.

MAINTENANCE REQUIREMENTS:
KIRKLAND

- All required landscaping is to be maintained for the life of the development. Plants that die must be replaced in kind.
- After 5 years, trees are subject to KMC 95.23 (removal and retention code), with some exceptions, such as preserved groves, critical areas and landscape requirements.
- Street tree maintenance is the requirement of the abutted landowner.

MAINTENANCE REQUIREMENTS:
RENTON

1. Maintenance Required: Landscaping required by this Section shall be maintained by the owner and shall be subject to periodic inspection by the Department of Community and Economic Development. Plantings are to be maintained in a healthy, growing condition and those dead or dying shall be replaced. Property owners shall keep the planting areas reasonably free of weeds and litter.
2. Failure to Maintain Landscaping: The Department of Community and Economic Development is authorized to notify the owner that any required landscaping is not being adequately maintained and the specific nature of the failure to maintain. The Department shall send the property owner written notice, specifying what corrections shall be made. (Ord. 5676, 12-3-2012)

MAINTENANCE REQUIREMENTS:
VANCOUVER

- All trees diseased that are diseased, damaged, dying or dead shall be removed and replaced with a tree of the same size.
- For a trees covered on a tree plan, maintenance is to be continued in perpetuity. Commercial, industrial and MF with over 4 units shall execute a maintenance covenant, agreeable with the city and passed on to any successors.
- A required three year pruning schedule for deciduous and evergreen trees is provided.

TREE PROTECTION REQUIREMENTS



TREE PROTECTION REQUIREMENTS

All municipalities require tree protection measures during construction. These include

- Protected area around individual or groups of trees (specified by critical root zone)
- Area to be protected by a barrier (ie fencing) until authorized removal
- The grade shall not be elevated or reduced within the critical root zone of a tree without approval and no impervious surface applied
- Directional felling

HAZARD TREE

Vancouver

➤ "Hazard tree" means any street tree, or part thereof, that the City Forester determines is subject to a high probability of failure, due to structural defect or disease, and which poses a potential threat to persons or property in the event of failure. Hazard trees are not in danger of imminent failure, [such as those requiring emergency removal].

HAZARD TREE

Kirkland

- A tree with a combination of structural defects and/or disease which makes it subject to a high probability of failure;
- Is in proximity to moderate to high frequency targets (persons or property that can be damaged by tree failure); and
- The hazard condition of the tree cannot be lessened with reasonable and proper arboricultural practices nor can the target be removed.

ENFORCEMENT PROVISIONS

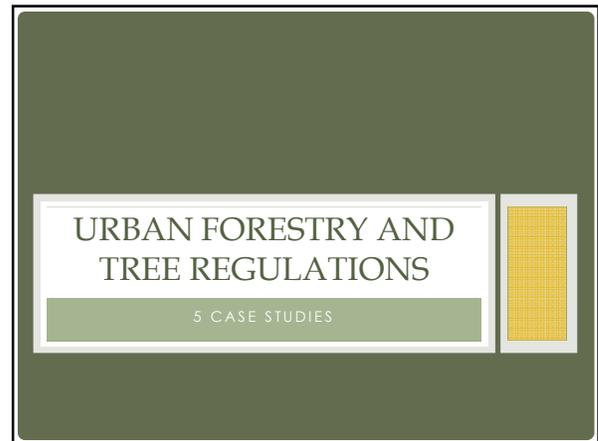
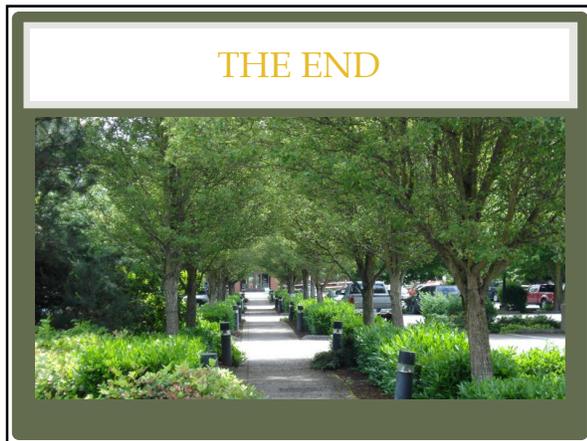
Penalties can come in the form of:

- Stop work orders/permit revocation
- Restoration
- Prohibition of further approvals
- Civil penalties
- Criminal penalties

Restoration costs are most often based on the City appraised value of unapproved trees removed using the latest edition of the *Guide for Plant Appraisal (International Society of Arboriculture, Council of Tree and Landscape Appraisers)*. The amount of costs above the approved restoration plan can be paid into a tree account.

WRAP UP

- A potential added section to this report would be 'Exemplary Incentive Programs'
- Questions?



COMP PLAN: RENTON

Objective EN-J: Create a sustainable urban forest that enhances the livability of the community.

- Policy EN-27. Promote development of Renton's urban forest through tree planting programs, tree maintenance programs that favor the use of large healthy trees along streets, in parks, in residential, commercial, and industrial areas, and through the protection and restoration of forest ecosystems.
- Policy EN-28. Require trees and other vegetation along newly constructed or reconstructed streets to reduce impacts from development.
- Policy EN-29. Establish canopy cover goals for public and private development through the survey of forested areas and the development of site specific forest management plans.
- Policy EN-30. Integrate urban forestry plans with other City plans and projects to maximize environmental, economic, and health benefits.

COMP PLAN: RENTON

Objective EN-K: Protect, restore and enhance environmental quality through land use plans and patterns, surface water management programs, park master programs, urban forestry programs, transportation planning, development reviews, incentive programs and work with citizens, land owners, and public and private agencies.

- Policy EN- 38. Develop the urban forestry program to maintain and expand vegetation on public and private property in order to minimize the impact of development on natural systems such as forests and individual trees and increase canopy cover to increase the ecosystem services that trees and other vegetation provide.