

Seattle Permits

— part of a multi-departmental City of Seattle series on getting a permit

Hazard Trees

Application Instructions and Submittal Requirements

April 1, 2009

Removal of a hazard tree is allowed in all circumstances under Tree Protection and Environmentally Critical Area (ECA) tree and vegetation requirements when an applicant demonstrates a significant risk exists. This CAM details the process for assessing whether a hazard exists and submitting a Hazard Tree Removal Application. See CAM 331, ECAs: Tree and Vegetation Overview, for more general information about trees in ECAs or CAM 242: Tree Protections in Seattle, for tree protection requirements outside of these areas.

Designation of a hazard tree must be done by a qualified professional and will require approval by DPD prior to removal except in emergency situations (see Clarification of Terms, pg. 3). A hazard tree must meet the following criteria:

- the tree has a combination of structural defects and/or disease which makes it subject to a high probability of failure;
- there is a potential target such as a permanent structure or an area of moderate to high use within a tree length and a half of the tree; AND
- the danger cannot be mitigated through pruning or moving potential targets

Hazard tree removal in ECAs also requires replacement with new trees unless the tree is retained as a wildlife snag.

STEPS FOR TREE ASSESSMENT

Trees with serious defects may be potential hazards to people and property. Systematic, annual, documented inspections of trees in urban areas and corrective action are recommended to reduce risk to property

and the public. Regular maintenance and inspection of trees may thus prevent tree defects from leading to a hazard tree situation.

A tree assessment flow chart is provided on p. 4 of this CAM to aid applicants in the tree assessment process.

The first step in a tree assessment is to consider potential targets that may be present. Mature trees provide substantial benefits such as habitat and slope stability and should be preserved where possible, particularly in ECAs. Accordingly, trees are not considered a hazard if there is no potential target within a distance equal to one and a half times the height of the tree in question.

A potential target is defined as a permanent structure or an area of moderate to high use. Permanent structures include houses, garages, decks and other non-movable construction. Areas of moderate- to high-use include public sidewalks, public walking trails, patios, regularly used sections of yards, and parking spots which cannot be relocated. If a potential target does not exist, applicants should undertake routine pruning and maintenance to help maintain the health of a tree and mitigate significant hazards (see Clarification of Terms).

When a potential target exists, applicants should contact a qualified professional to undertake a tree assessment. Qualified professionals undertaking tree risk assessment must have Tree Risk Assessor certification as established by the Pacific Northwest Chapter of the International Society of Arboriculture (ISA) or equivalent qualifications. A qualified professional will assess tree architecture, root system, signs of disease and decay, previous damage, and environmental conditions to determine whether a combination of defects exists that indicates a high probability of failure.

If a tree is found to constitute a hazard tree and mitigation of the risk through pruning or moving of potential targets is not possible, the qualified professional will be required to gain approval from DPD before the tree can be removed as a hazard tree as detailed in Application Instructions. Removal of a hazard tree without prior approval is allowed in an emergency situation as defined in the Clarification of



Terms section. Individuals that remove a hazard tree in an emergency situation are still required to submit documentation of the hazard tree and the emergency situation, including a hazard tree removal application form and a replanting plan where required, after the situation has been mitigated.

Hazard Trees and Wildlife Habitat in ECAs and ECA Buffers

Dead and deteriorating trees often provide essential habitat for wildlife. When a dead or deteriorating tree is removed, it can negatively impact wildlife populations and species that are dependent on these trees. Accordingly, applicants are encouraged to address the hazard to reduce the threat to human life and property to an acceptable level while leaving a portion of the tree intact as a wildlife snag. When leaving the tree as a wildlife snag is not possible, removal of a hazard tree in an ECA or an ECA buffer will require replanting to offset lost environmental function as appropriate for the site. Replanting with conifers native to the Puget Sound is generally preferable. Conversion of a hazard tree to a wildlife snag will still require prior approval by DPD.

APPLICATION INSTRUCTIONS

Hazard tree removal applications are filed with DPD at the Public Resource Center (PRC), located on the 20th floor of the Seattle Municipal Tower at 700 Fifth Ave.. For assistance on procedural requirements, applicants should visit the PRC or call (206) 684-8467.

Removal of an exceptional tree as part of a development permit will be reviewed as part of the permit application rather than through this application process.

Submittal Requirements

The following information must be submitted when requesting to remove a hazard tree:

1. Hazard Tree Removal Application (Attached)
2. Tree Assessment Form. A Tree Assessment Form documenting the condition of the tree or trees in question. (Attached)
3. Report by a qualified professional. A brief letter style report on each tree summarizing data describing why the tree is a hazard. This should include information on the overall health of the tree, targets, and height of the tree. The report should also include analysis of tissue samples where necessary to determine root rot or other issues.

4. Photos. Photos should include pictures of the whole tree, defects and potential targets.
5. Site Plan/Revegetation Plan that is legible, to scale and shows the following:
 - site address
 - site tax parcel number
 - site configuration
 - area of ECA and/or buffer
 - location of existing structures or other potential targets
 - location of hazard tree(s)
 - specific trees proposed to be replanted as part of restoration, noting plant size, species, spacing and location

Applicants proposing removal of a hazard tree in an ECA should use the DPD Tree and Vegetation Standard Mitigation Plan Form to show proposed tree removal and any required replanting. CAM 331A, ECAs: Vegetation Restoration, provides guidance on restoration activities. Standard mitigation plans can be obtained from the PRC or online at www.seattle.gov/dpd/Publications/Forms.

OTHER CONSIDERATIONS

Hazard Tree(s) in the Right-of-Way

Property owners have the responsibility to contact the Seattle Department of Transportation (SDOT) before removing a hazard tree within the right-of-way. Seattle City Ordinance #90047 requires that all persons who prune and/or remove privately maintained trees within the public right-of-way area obtain a street use permit. This includes open and unopened rights-of-way. The City Arborist office issues the permit. For further information call (206) 684-TREE (8733).

Seasonal Restrictions

Tree removal is prohibited within ECA landslide-prone and steep slope areas as defined in SMC 25.09.020A between Oct. 31 and April 1 unless the cutting is necessary due to an emergency situation involving immediate danger to life or property.

Approval may also be granted if the applicant demonstrates to the Director that the proposed tree removal will not adversely impact the ECA. The Director may require, at a minimum, a geotechnical evaluation of

the slope, erosion control, restoration measures and an indemnification agreement.

CLARIFICATION OF TERMS

Emergency - A situation in which there is an immediate danger to life and property that requires preventive action in a timeframe too short to allow compliance with permit requirements. For ECAs, the term emergency is defined in SMC 25.09.045E.

Normal pruning and maintenance - practices that are necessary to maintain existing pathways and landscaping, ensure the health of existing vegetation, or achieve limited pruning to allow windowing, reduce tree mass or redirect tree growth. In ECAs and ECA buffers, pruning shall conform to ANSI A300 Pruning Standards as outlined in The American National Standard for Tree Care Operations - Tree, Shrub and Other Woody Plant Maintenance - Standard Practices and no more than 25 percent of foliage shall be removed in any five-year period. Normal pruning and maintenance of an area up to 750 square feet, which has been lawfully maintained in the past is allowed in ECAs and ECA buffers without DPD approval.

Privately maintained tree - This refers to any tree found growing within the public right-of-way area that has not been planted, nor is being maintained, by the City of Seattle.

Pruning - The pruning of a tree through crown thinning, crown cleaning, windowing or crown raising but not including crown topping of trees or any other practice or act which is likely to result in the death of or significant damage to the tree.

Qualified professional - must be qualified by professional certification, education, and a minimum of three years experience in the area of maintenance, restoration and/or tree risk assessment as appropriate to ensure expertise in the work undertaken. To undertake tree risk assessment, a qualified professional must have a Tree Risk Assessor certification as established by the Pacific Northwest Chapter of the International Society of Arboriculture (ISA) or equivalent qualifications.

Topping - The reduction of a tree's size using heading cuts that shorten limbs or branches back to a predetermined crown limit. Topping is not an acceptable pruning practice.

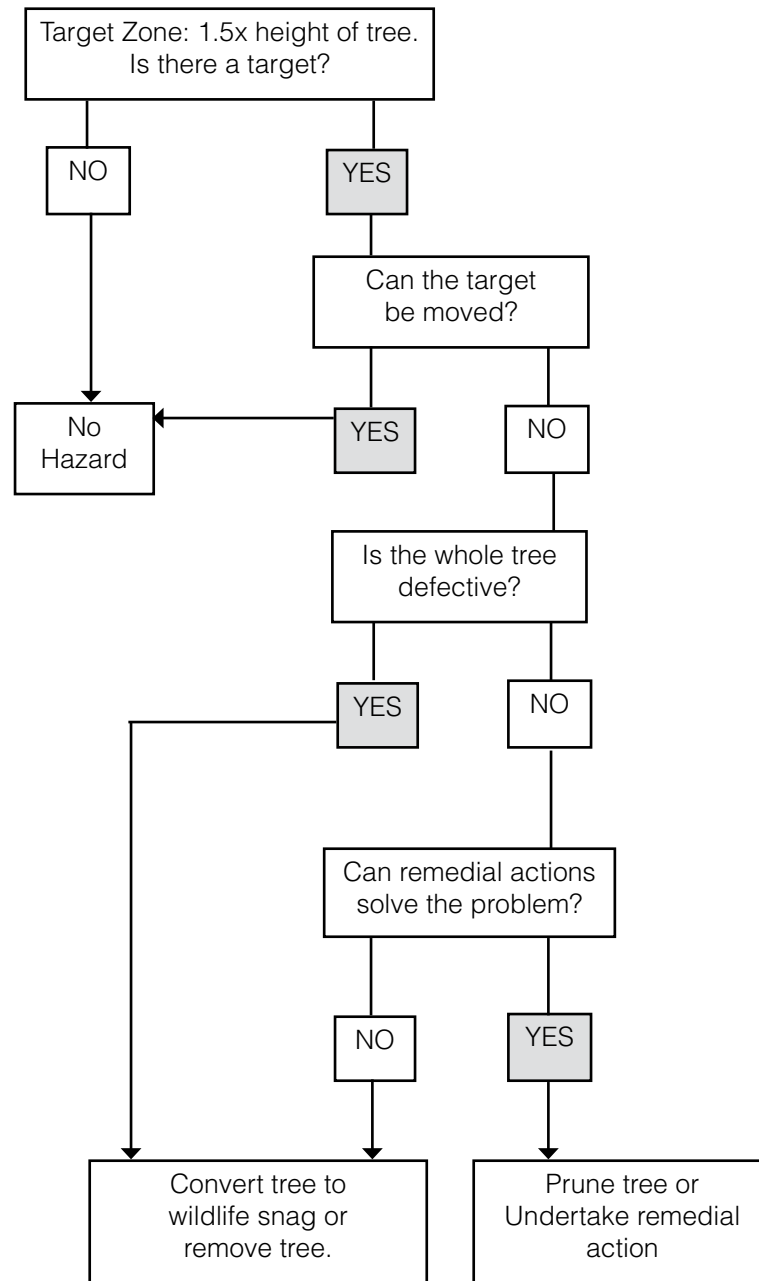
HELPFUL RESOURCES

- Seattle Department of Transportation
www.seattle.gov/transportation/forestry.htm
- Colorado Tree Coalition - Hazard Trees
www.coloradotrees.org/hazard.htm
- Forest and Shade Tree Pathology
www.forestpathology.org/hazard.html
- International Society of Arboriculture
www.treesaregood.com
- International Society of Arboriculture - Hazard Trees
www.treesaregood.com/treecare/hazards.aspx
- Northeast Center for Urban & Community Forestry
www.umass.edu/urbantree/hazard/index.shtml
- TreeLink.org - Hazard Trees
www.treelink.org/linx/?navSubCatRef=21
- University of Florida - How to Recognize and Prevent Hazard Trees
www.agen.ufl.edu/~foodsaf/dh102.html
- USDA Forest Service's i-Tree website
www.itreetools.org
- USDA Plants Database
<http://plants.usda.gov>
- USDA - Hazard Trees website
www.na.fs.fed.us/fhp/hazard_tree
- USDA - How to Recognize Hazardous Defects in Trees
www.na.fs.fed.us/spfo/pubs/howtos/ht_haz/ht_haz.htm

Access to Information

Links to electronic versions of DPD **Client Assistance Memos (CAMs), Director's Rules, and Forms** are available on the "Publications" and "Codes" pages of our website at www.seattle.gov/dpd. Paper copies of these documents are available from our Public Resource Center, located on the 20th floor of Seattle Municipal Tower at 700 Fifth Ave. in downtown Seattle, (206) 684-8467.

TREE ASSESSMENT FLOWCHART



Note: Trees are not considered a hazard if there are no potential targets within a tree length and a half of the tree in question. Pruning does not mean crown reduction/topping. Hazard trees shall be converted to a snag for wildlife unless it is determined by the Director that it poses a health safety issue. If a bigleaf maple or like tree is removed, the trunk should be treated or removed so that it does not re-sprout and become a maintenance issue in the future.



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TREE ASSESSMENT FORM

All sections of this form must be fully completed by a qualified professional.

(A hazard tree must have a target within 1.5x the height of the tree.)

Site/Address: _____

Map/Location: _____

Owner: public _____ private _____ unknown _____ other _____

Date: _____ Name of Tree Assessor: _____ ISA# _____

Other Professional Certificates and Qualifications: _____

TREE CHARACTERISTICS

Tree #: _____ **Species:** _____

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

Form: generally symmetric minor 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 Cover: normal chlorotic necrotic **Epicormies?** Y N **Growth obstructions:**

Foliage Density: normal sparse **Leaf size:** normal small stakes wire/ties signs cables

Annual shoot growth: excellent average poor **Twig Dieback?** Y N curb/pavement guards

Woundwood development: excellent average poor none other _____

Vigor class: excellent average fair poor

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 wetted

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 fall
 clay expansive slope _____? aspect: _____

Obstructions: lights signage line-of-site 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: _____ **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 hold/bee hive				
Deadwood/stubs				
Borers/termites/ants				
Cankers/galls/burls				
Previous failure				

RATING

Tree part most likely to fall: _____

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" 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

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: _____

SIGNATURE OF PROFESSIONAL

_____ signed

_____ dated



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HAZARD TREE REMOVAL APPLICATION

T O B E C O M P L E T E D B Y A P P L I C A N T

Date: _____

AP Number: _____

Tax Parcel Number: _____

Site Address: _____

Contractor Name: _____

Address: _____

Phone: _____

Property Owner: _____

Address: _____

Phone: _____

Legal Description: _____

Is this application for a hazard tree that was already removed under an emergency situation? If so, describe the emergency situation: _____

HAZARD TREE(S) PROPOSED TO BE REMOVED				
Tree ID#	Type or Species	DBH in Inches	Height in Feet	Reason for Removing

Is the site developed or vacant? If developed, what is the current use of the site? (Single family, multi-family, commercial) _____

Are there any environmentally sensitive areas present on or adjacent to the site? Yes ___ No ___**

Environmentally Critical Area(s) on or adjacent to the site:

___ Geologic Hazard Area (steep slopes, landslide prone, known slides)

___ Fish and Wildlife Habitat Conservation Area (creeks, shorelines, etc.)

___ Flood Prone

___ Wetlands

___ Abandoned Landfill

___ Other _____

****If Yes, then replanting is required if the tree(s) will not be maintained as wildlife snags.**

Description of Replanting Work (replanting must also be noted in a site plan or separate revegetation plan):

How many trees over 6-inches in diameter are located on the site? _____

Are any of the identified hazard trees designated as:

___ Heritage Tree (You may contact the Public Resource Center at 206-684-8275 or
prc@seattle.gov and they can check if a particular tree has been designated.)

___ Exceptional Tree (See Director's Rule 6-2001 for exceptional tree criteria.)

Is the hazard tree located in the Right-of-way (Open or unopened)? Yes ___ No ___

(If yes must contact SDOT for Street Use Permit)

T O B E C O M P L E T E D B Y D P D S T A F F

Tracking Number: _____

Screening Complete (date): _____

Sreening Completed by: _____
