

Tree & Site Selection: Trees for Neighborhoods 2015

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Seattle reLeaf, City of Seattle



Agenda



1. Seattle reLeaf overview
2. Tree planting questions
3. Planting yard & street trees
4. Trees for Neighborhoods 2015
5. Questions



Seattle reLeaf



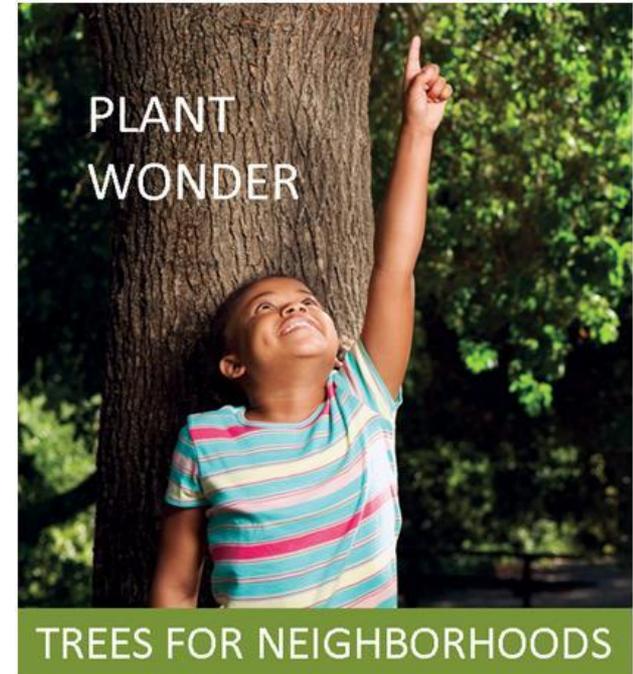
- Increase Seattle residents' engagement with our urban forest
- Increase participation in planting & maintaining trees on private property
- 2 major projects:
 - Tree Ambassador (stewardship & education)
 - Trees for Neighborhoods (planting)



Trees for Neighborhoods



- Help residents plant trees around their homes
- Participants receive: free trees, mulch, water bags, instruction, and care reminders
- Since 2009, reLeaf has helped residents plant over 5,300 trees around their homes



Trees for Neighborhoods Goals

- Grow tree canopy on residential property
- Promote right tree, right place
- Encourage large & evergreen trees, when appropriate
- Assist residents in choosing the right tree
- Provide resources for proper tree planting and care



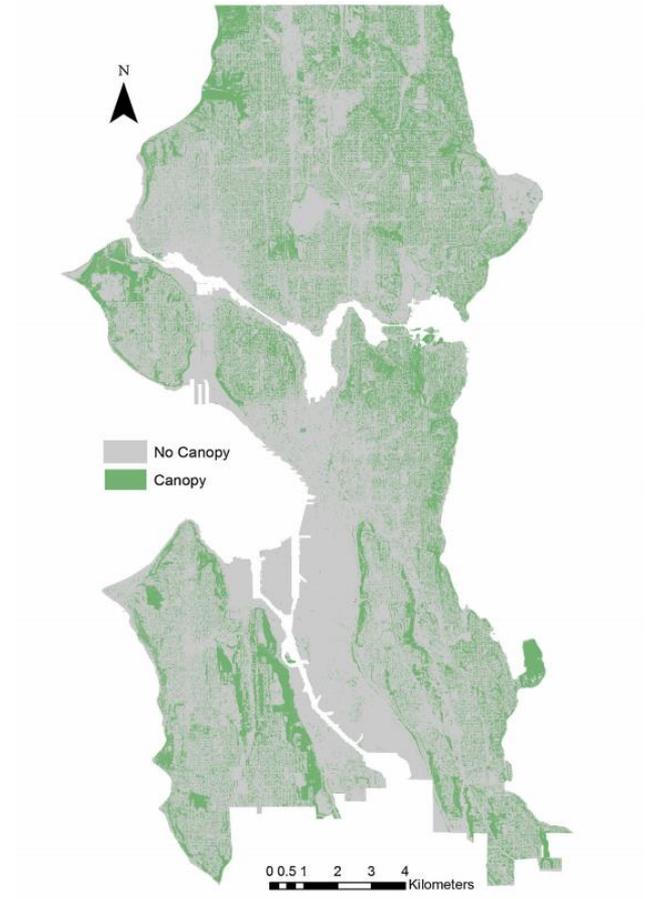
Why do we help residents plant trees?

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Grow & steward Seattle's urban forest

- City-wide canopy cover goal of 30%
- Yet, 67% of land is privately owned
- So, residential property is where we need to focus!



Why do we help residents plant trees?

Increase neighborhood benefits of trees



ENVIRONMENTAL



SOCIAL



ECONOMIC



HEALTH



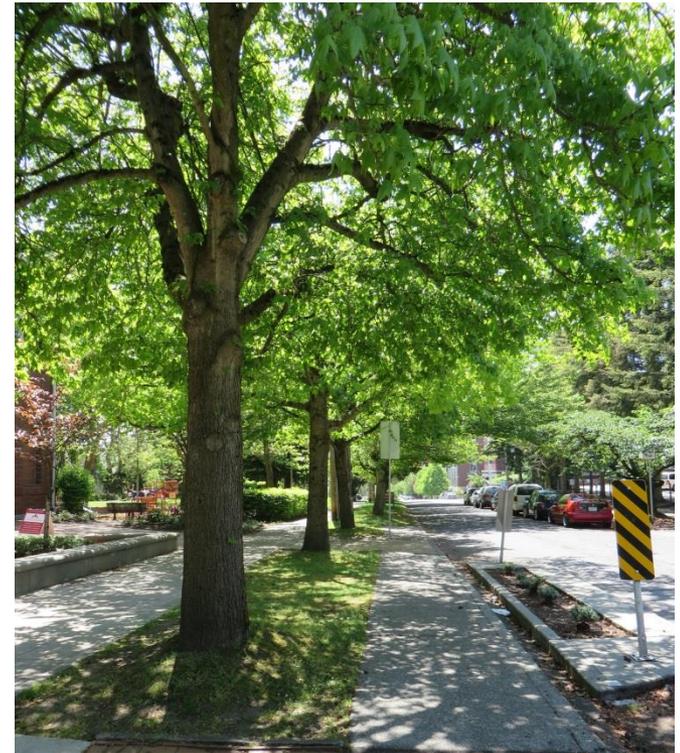
Why do we help residents plant trees?



ENVIRONMENTAL

- Reduce stormwater runoff (evergreens are best)
- Improve air quality
- Reduce heat islands
- Increase urban habitat & forest connectivity

Larger trees → Greater Benefits!



Why do we help residents plant trees?



SOCIAL

- Increase personal effectiveness
- Create greater sense of community
- Calm traffic
- Reduce crime



Why do we help residents plant trees?



ECONOMIC

- Reduced utility bills
- Increased property values (10%+)
- Increased spending in business districts

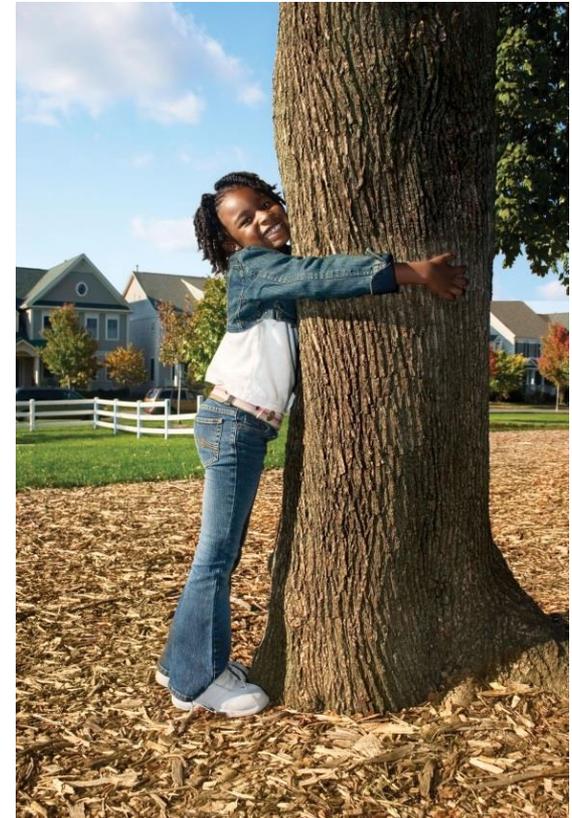


Why do we help residents plant trees?



HEALTH

- Faster healing times
- Lower stress levels
- Better public health (encouraging active lifestyle)
- Reduced asthma rates



Energy and Environment

Scientists have discovered that living near trees is good for your health



By [Chris Mooney](#) July 9   [Follow @chriscmooney](#)

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- “having 10 more trees in a city block, on average, improves health perception in ways comparable to an increase in annual personal income of \$10,000 and moving to a neighborhood with \$10,000 higher median income, or being 7 years younger”



Why do we help residents plant trees?



Make tree planting easy & fun!

- Answer questions about species selection and placement
- Help residents navigate street tree permit process
- Give residents the tools & resources to plant and care for healthy trees



Questions to Ask Yourself

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1. Why am I planting a tree?
2. What site factors will influence my tree choice?
3. What is the right tree for my site?
4. How will I care for the tree?



Question 1:

Why am I planting a tree?



Reasons for Planting

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Reasons for Planting

- Beauty
- Buffer/screen
- Seasonal interest
- Frame view
- Shade/cooling
- Energy savings
- Increase property value
- Wildlife habitat



City of Toronto





Question 2:

What site factors will influence my tree choice?

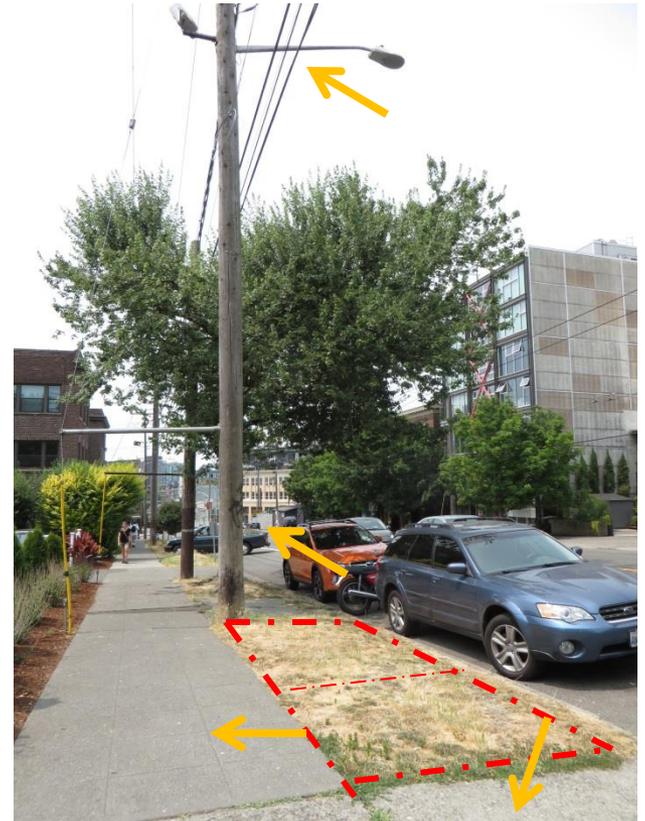


Available Space

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- How much available planting space do you have?
- Available space should directly influence your tree selection!
- Consider surrounding structures, underground utilities, planting strip width

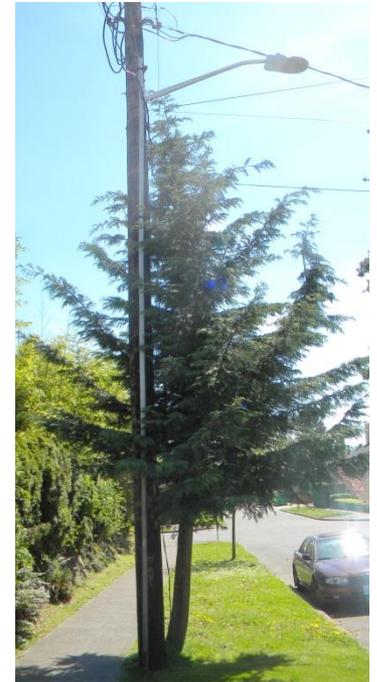


Surrounding Structures

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- Sidewalks, road, houses, fences, power infrastructure



Street or Yard Tree?

Street

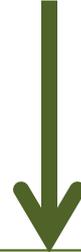


Underground utilities, sidewalks, proximity to street (salt, sand, air pollution), dogs, vandalism

Permit
Required!



Yard

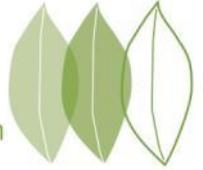


Surrounding trees, structures, shade, property line (neighbor interactions), garden proximity

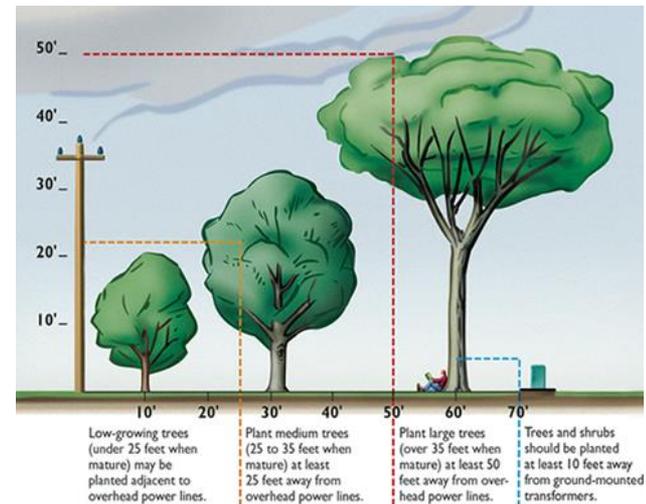


Overhead Power Lines

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- Trees must be under 25 feet at maturity
- SDOT's Small Tree List



Underground Utilities

- Gas
- Water
- Electric
- Phone/Cable
- Side sewer:



<http://web6.seattle.gov/DPD/SideSewerCardsv2/default.aspx>



Stay at least 5 feet away from all underground utilities (10 feet from sewer, if possible)



Environmental Factors

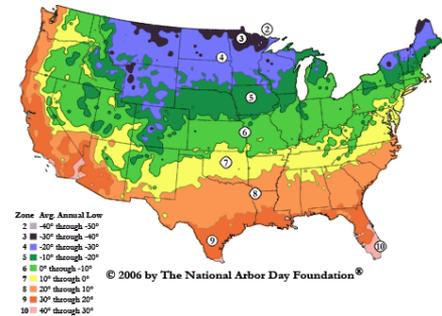
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- Light patterns (e.g. full sun, part shade, full shade)



- Temperature extremes (Zone 8)



- Air quality (microclimate)

- Street trees more susceptible to air pollution

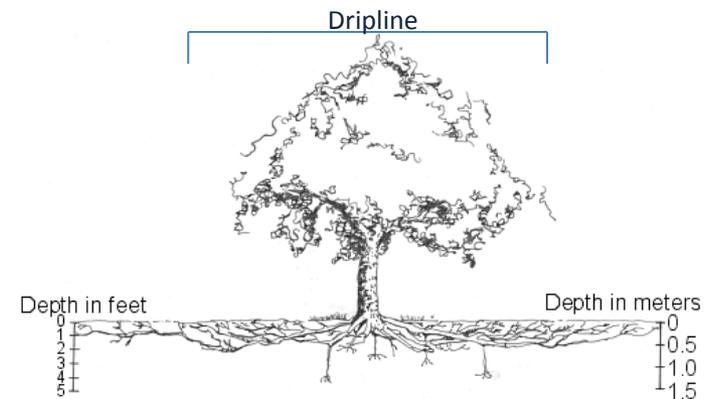


Soils: Volume

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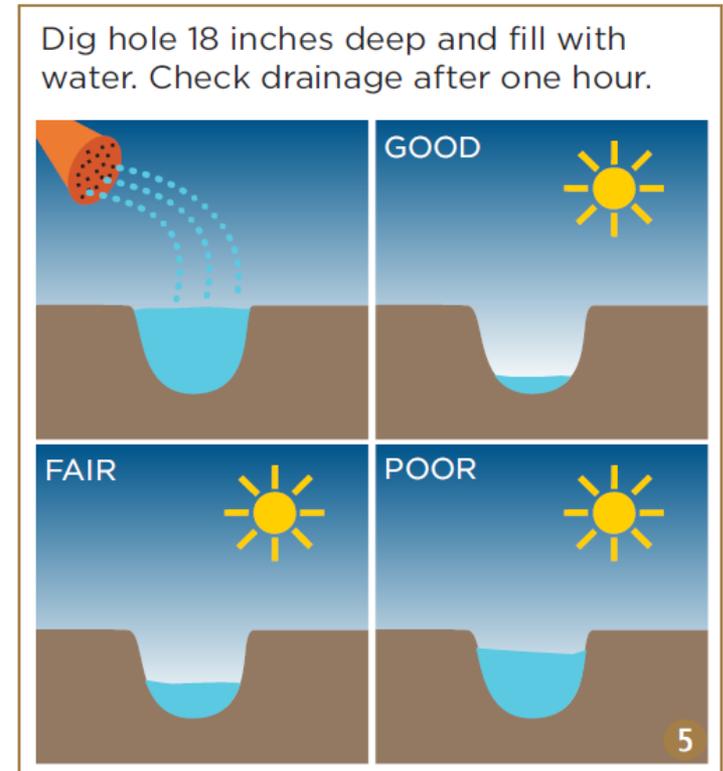


- Trees need dirt!
- Match mature tree size to the available soil volume for root growth
- Prevent sidewalk & pavement damage
- Roots 2-2 ½ times the spread of the dripline



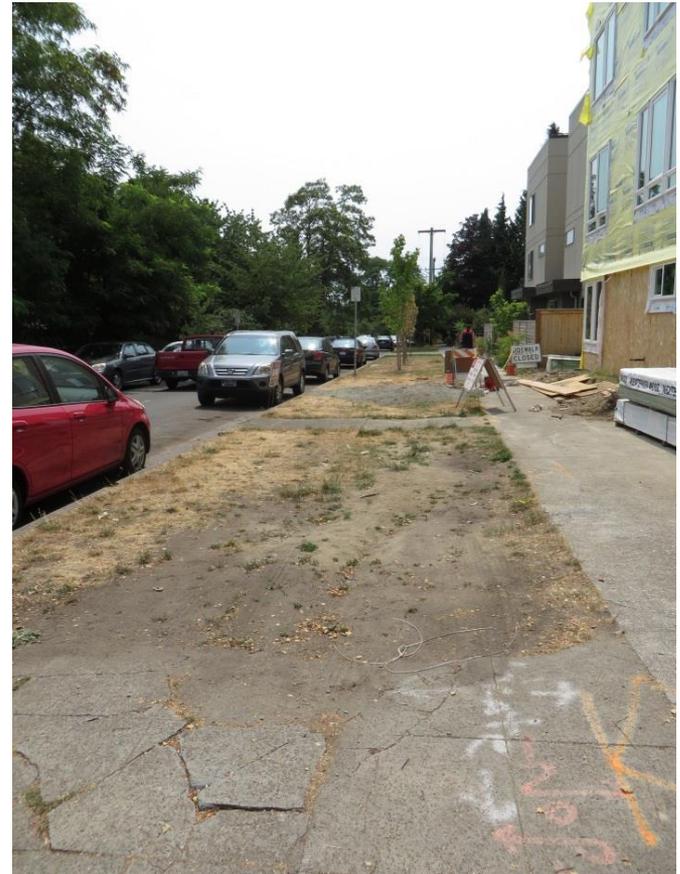
Drainage & Compaction

- Urban soils are often compacted and poorly drained (low oxygen)
- Texture also affects drainage



Human Activity

- Soil compaction (likely more on planting strip)
- Vandalism
- Maintenance (will someone be around to care for tree?)
- Future building/development projects





Question 3:

**What is the right tree for
my site?**



Right Tree, Right Place

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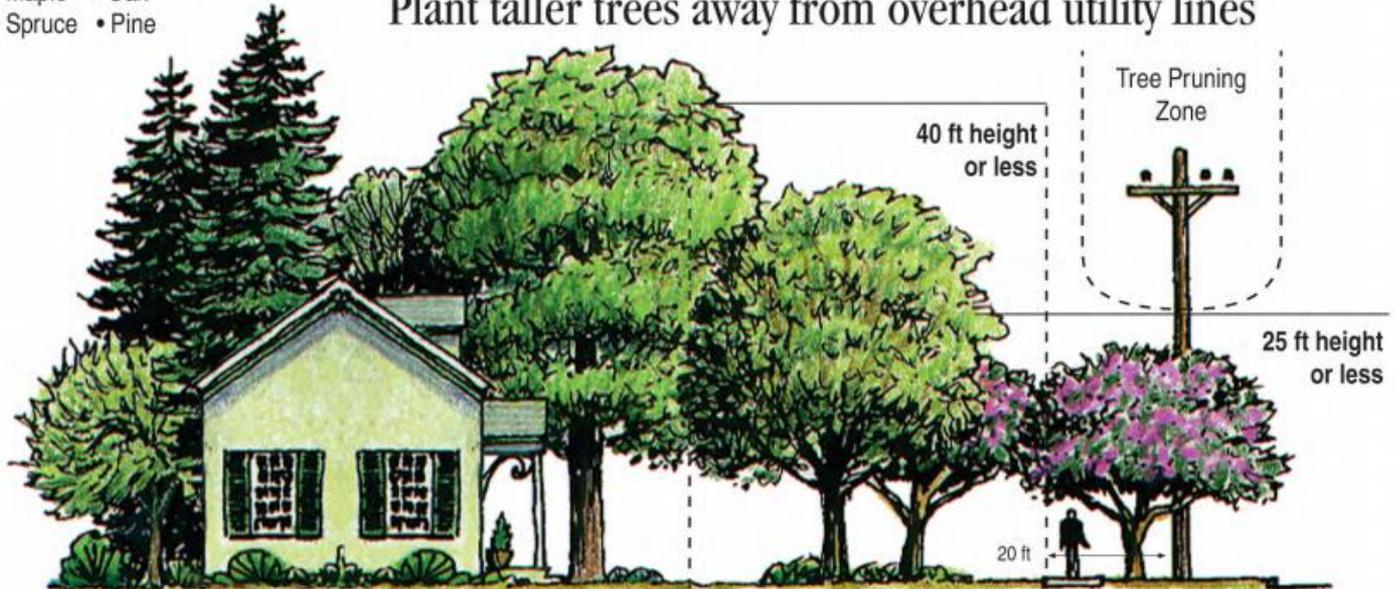


Plant the right tree in the right place

Plant taller trees away from overhead utility lines

Tall trees, such as:

- Maple
- Oak
- Spruce
- Pine



 **Arbor Day Foundation™**
arborday.org

Medium trees, such as:

- Washington hawthorn
- Goldenraintree

Small trees, such as:

- Star magnolia
- Crabapple



Tree Size at Maturity

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Small
15-25' Tall



Medium
25-40' Tall



Large
40-70' Tall

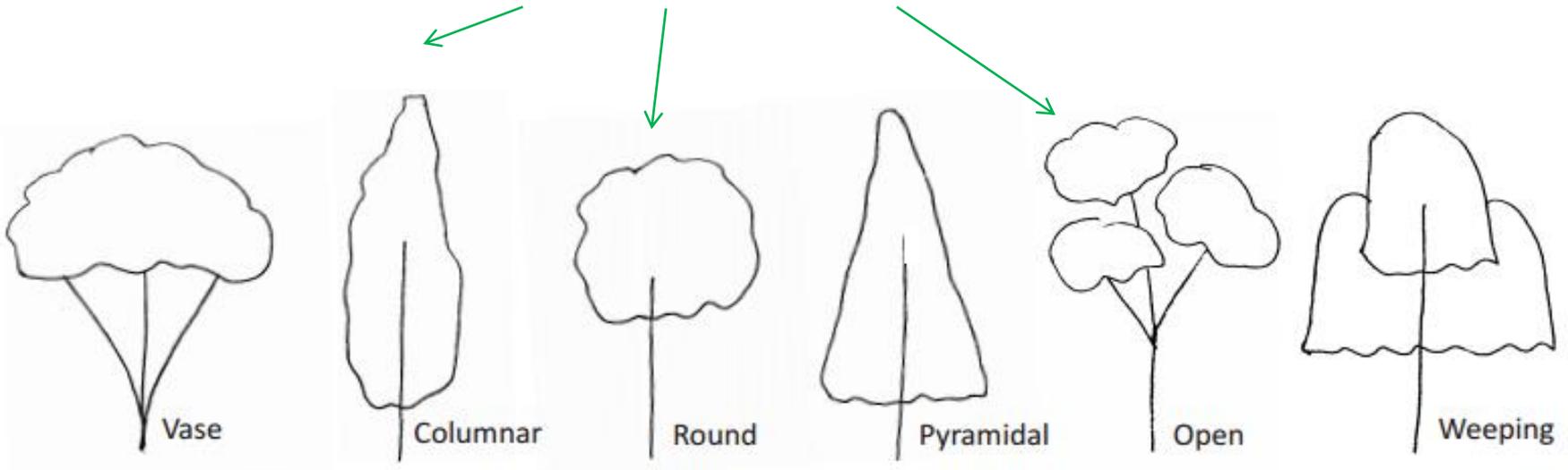


Extra Large
70'+ Tall



Tree Shape/Form

Good street tree form



Poor street tree form (because of multiple stems)



Growth Rate

- Vertical increase in tree growth
- Influenced by soil, drainage, **water**, fertility, light, exposure, + many other factors!

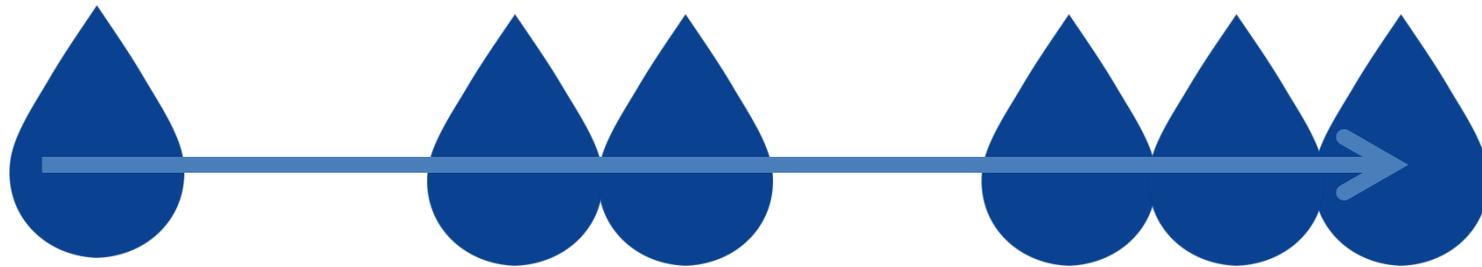
Douglas fir:
Slow growing
(~1 ft/yr)



Tulip tree:
Fast growing
(up to 6 ft/ yr)



Drought & Moisture Needs/ Tolerance



Drought tolerant

Regular

Moist

Drought tolerant trees:

- Garry oak
- Goldenrain tree*
- Persian parrotia*

Trees that thrive in wet areas:

- Pin oak
- Bald cypress*
- Red maple



Foliage

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Texture, color, season change, evergreen v. deciduous



Persian parrotia, black tupelo, Deodar cedar, bald cypress



Flowers/Fruit

Timing, color, length of flowering, wildlife benefit



Comice pear, Japanese tree lilac, Oriental spruce, apple



Bark

Rough, smooth, exfoliating, winter interest



Ponderosa pine



Pacific madrone



American beech



Native vs. Non-native

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- Some urban areas where natives cannot survive or only do so with substantial maintenance
- **Our native conifers need room to grow!**
 - Parks & larger yards
- Non-native trees are frequently more adaptable to our harsh urban conditions than native species
 - Require fewer resources to maintain
 - More diversity of small species that will fit in the urban environment
 - Can choose and plant pest resistant species



Avoid Invasives!

Help stop the spread to our natural areas, plant trees that are not considered invasive. Invasives are non-native species that spread *and* cause damage.



English holly



European hawthorn



European mountain ash



Question 4:

How will I care for the tree?



Future Maintenance

- Who will be around to maintain your tree?
 - Water! Young trees need at least 15 gallons of water 2x/week during summer months
 - Mulch
 - Rake, pick-up fallen fruit



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Planting a Tree In Seattle



Trees in Yards

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- **No permit required**
- Right tree, right place
- Call Before You Dig (811)
- Plant away from house
 - Small trees: 10 ft+
 - Medium: 15 ft+
 - Large: 20 ft+
- Plant away from structures
 - 7.5 ft from driveways
 - 5 ft+ from fences



Street Trees



- SDOT [Permits](#) all tree planting, removal & pruning (over 2”) in the right-of-way
- Tree spacing in the planting strip:
 - 10 ft. from utility poles
 - 20 ft. from streetlights & existing trees
 - 7 ½ ft. from driveways
 - 30 ft. from street intersections
 - 5 ft.+ away from underground utilities
- If you plant a street tree, you assume all future responsibility for care & maintenance
- No fruit trees in the planting strip!
- Use the [SDOT Approved Street Tree List](#)

SDOT Seattle Department of Transportation
Street Use & Urban Forestry Division
750 Fifth Avenue, Suite 2100 | PO Box 34990
Seattle, Washington 98114-0990
(206) 464-5233 | (206) 464-1983
Seattle.DOT@seattle.gov

SDOT Permit Number(s)

URBAN FORESTRY PERMIT APPLICATION
Seattle Municipal Code (SMC) 11.04.11.01

1 ATTACH STREET USE GENERAL APPLICATION
My signature indicates that I am bound by the terms and conditions outlined in Section 2 of the Street Use-General Application.
APPLICANT SIGNATURE DATE

2 PROJECT ADDRESS
Address Number Street Name (Include NE, SW, NW, SE, Blvd, etc.)

3 WORK DESCRIPTION

Tree Work Type	Number of Trees Affected	Species	Desired Start Date	Documentation Required
<input checked="" type="checkbox"/> Pruning (14)				<ul style="list-style-type: none">• Tree Pruning Checklist (page 4 of this document)• Site Diagram (page 5 of this document)



Trees for Neighborhoods

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- What do you get when you participate?
- What are your responsibilities?
- Timeline
- 2015 Trees



Participants Receive:

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- Free trees (up to 4/household)
- Tree selection help
- Street tree permitting assistance
- Watering bags
- Mulch
- Planting & care instruction
- Summer watering reminders
- Future structural pruning workshop



Your Responsibility:

- Choose trees appropriate for the space
- Indicate if the tree will be planted on the street
- Only plant trees in approved locations (at your address)
- Attend a planting & care workshop
- Properly plant the tree in the ground
- Assume all future maintenance & responsibility (watering, raking, pruning, mulching, etc.)



T4N Timeline



- Application opens [online](#): Monday, August 3rd at 10am
- Street tree requests due: August 24th
- Yard tree requests due: October 7th
- Tree pickup workshops:
 - Saturday, October 24th 9am – 2pm
 - Sunday, November 8th 10am – 2pm



Tree Pick-up/Workshop

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How the tree pick-ups work:

1. Check-in



2. Attend a tree planting and care workshop



Tree Pick-up/Workshop

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How the tree pick-ups work:

3. Drive to the nursery



4. Crew helps you load your trees & water bags



Tree Pick-up/Workshop

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5. Bring your new tree home and plant



6. Stay connected through care reminders



Application Tips



- Apply early
- Small trees & fruit trees are most popular and sell out very quickly
- If you have room, plant a larger tree!
- Only apply for the number of trees you have room for
- Ask for help in tree selection
- If you don't get approved for a tree this year, either apply again next year or visit one of our local nurseries this fall



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2015 Trees



Goldenrain Tree

(Koelreuteria paniculata)

Height/Spread: 30'/30'

Min. planting strip width: 5 feet

Features: bright, yellow flowers;
yellow fall foliage; orange lantern-
like seedpods

Great for: Under power lines, along
the street, & in smaller spaces

Prefers: Full sun



Japanese Tree Lilac

(Syringa reticulata)

Height/Spread: 25'/15'

Min. planting strip width: 5 ft

Features: lovely white flowers;
attractive reddish bark; fall color

Great for: Under power lines, along
the street, & in small spaces

Prefers: Full sun, good drainage

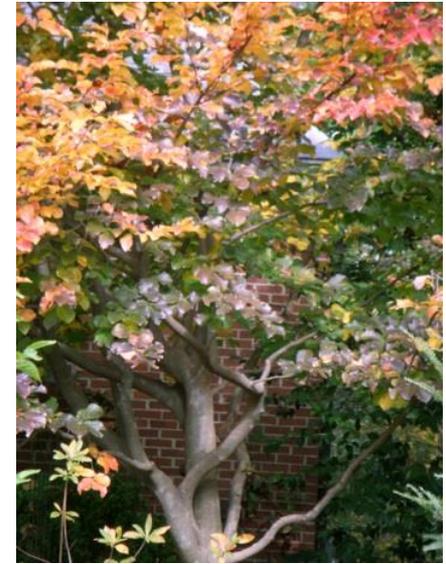
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Persian Parrotia

(Parrotia persica)

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Height/Spread: 25'/25'

Min. planting strip width: 5 ft

Features: beautiful fall foliage and exfoliating bark

Great for: Under power lines, along the street, & in smaller spaces

Prefers: full sun, well-drained soils



Galaxy Magnolia

(*Magnolia* 'Galaxy')

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Height/Spread: 25'/25'

Min. planting strip width: 5 ft

Features: red-purple flowers

Great for: Under power lines,
along the street, & in smaller
spaces

Prefers: full sun, well-drained soils



Willow Oak

(Quercus phellos)

Height/Spread: 60' / 40'

Min. planting strip width: 6 ft

Features: willow-like leaves with nice fall color

Great for: Along the street or in yard

Prefers: full sun, moist well-drained soils

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Millstone Japanese Pagoda Tree

(Sophora japonica 'Halka')

Height/Spread: 45'/35'

Min. planting strip width: 5 ft

Features: creamy white flowers and yellow fall foliage

Great for: Along the street or in yard

Prefers: well drained soil



Frontier Elm

(*Ulmus* 'Frontier')

Height/Spread: 40'/30'

Min. planting strip width: 6 ft

Features: long lasting burgandy fall color

Great for: Along the street or in yard

Prefers: partial to full sun



Bald Cypress

(Taxodium distichum)

Height/Spread: 60' / 30'

Min. planting strip width: 8 ft

Features: deciduous conifer with brilliant green foliage

Great for: along the street, yards & wet sites

Prefers: full sun; very tolerant



Great
for wet
sites!





Grand Fir

(Abies grandis)

Height/Spread: 90' / 35'

Min. planting strip width: 8 ft

Features: Shiny green foliage

Great for: yards with space

Prefers: sun or shade & wide variety of soil types



Serbian Spruce

(Picea omorika)

Height/Spread: 50'/20'

Min. planting strip width: 6 ft

Features: Bright green foliage and narrow form

Great for: Narrow spaces

Prefers: Full sun or partial shade and wide variety of soils

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Western Hemlock

(Tsuga heterophylla)

Height/Spread: 90' / 30'

Min. planting strip width: 12 ft

Features: graceful branches and feathery foliage

Great for: yards with space

Prefers: sun or shade & wide variety of soil types

Native!



Western Redcedar

(Thuja plicata)

Height/Spread: 90' / 40'

Min. planting strip width: 12 ft

Features: evergreen foliage and cinnamon-red bark

Great for: yards with space

Prefers: sun to partial shade & well drained soils

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Comice Pear

(Pyrus communis)

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Height/Spread: 35'/25'

Min. planting strip width: N/A

Features: flowers attract butterflies and pollinators; produce tasty fruit; OHxF97 rootstock

Great for: yards

Prefers: full sun; should be planted near other pear trees



Give Them Room to Grow!

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Resources



- **Seattle reLeaf:** www.seattle.gov/trees
- **SDOT Urban Forestry:**
<http://www.seattle.gov/transportation/treeplanting.htm> & (206) 684-TREE
- **Green Cities: Good Health:**
<http://depts.washington.edu/hhwb/>
- **Garden Hotline:** <http://gardenhotline.org/>



Questions?



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