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Tree Giveaway Webinar

City of Bellevue ~ Community Development







Agenda

- Overview of the Tree Giveaway
- Trees in Bellevue
- Choosing the Right Tree
- Resources





Trees in Bellevue





Tree City USA

- Since 1990
- Growth Award for the last 30 years!







Environmental Stewardship Plan

- Achieve 40% city-wide canopy by 2050
- More than 70% of tree planting area is on private property

N.1.2. Tree planting. Develop a program to incentivize residents and large property owners to plant the right tree in the right place and sustain existing trees, with reduced cost or free trees.







Meeting our Goals

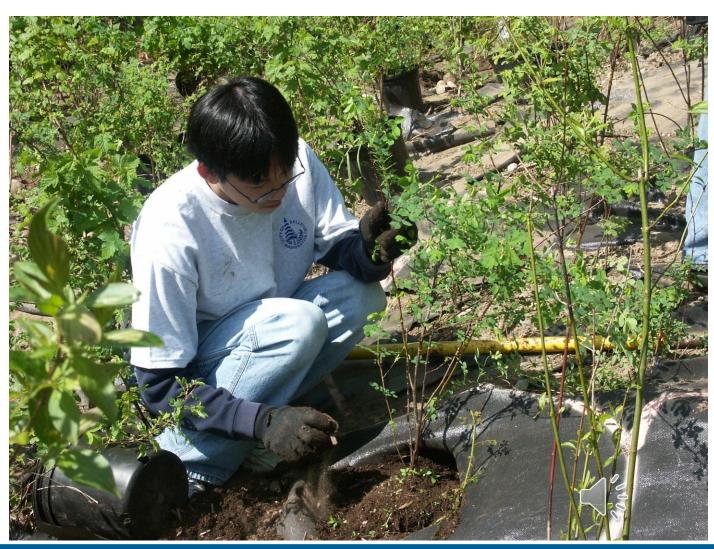
Plant (estimated) 75,000 trees by 2050

OR

Every household plants a tree

AND

Protect existing trees







Why Trees?

- Sequester carbon
- Clean air and water

 Improve physical and mental health

Cool the city





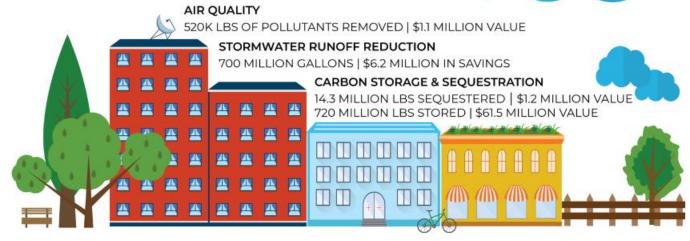


Figure 20. | Quantification of some of the monetary benefits of Bellevue's urban forest ecosystem services (based on 39% citywide tree canopy cover).





Volunteer Opportunities

- Eco-Fridays
 - Groups and businesses
- Stewardship Saturdays
 - Individuals, families, community groups





Volunteer Opportunities

- Bellevue Naturalists
 - Training on many environmental topics
 - Up to 100 hours of service over 2 years
- Neighborhood Tree Ambassadors
 - Training to help educate community members
 - 40+ hours (training, tree tour/personal project, volunteer events) over one year



Bellevue

Naturalist





Volunteer with the Giveaway!

- Pickup event in October
 - Greeting participants
 - Loading cars
- Planting assistance
- Potential parks opportunity





Tree Giveaway





Tree Giveaway Program

- Yard trees, not street trees
- A variety of trees, small to large
- Residents can receive up to 2 trees
- Businesses and community organizations can receive up to 20 trees
- A complete application by August 31st is required







What do you receive?

- Trees
- Information on Tree Care
- (optional) watering bags,
 mulch, and We Love Our Trees
 yard sign
- Reminders about watering



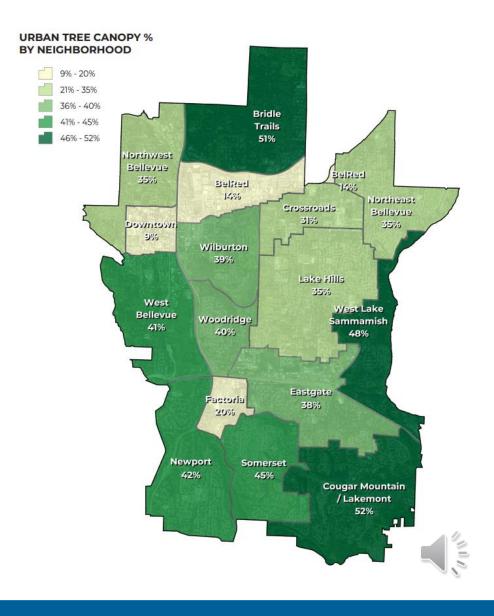




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Tree Canopy

- Goal: 40% tree canopy by 2050
- Current: 39% average
 - Varies by neighborhood
- Possible planting area (PPA) is mostly on private property
 - Suburban residential land 76% PPA
 - Urban residential land 5% PPA





Tree Equity

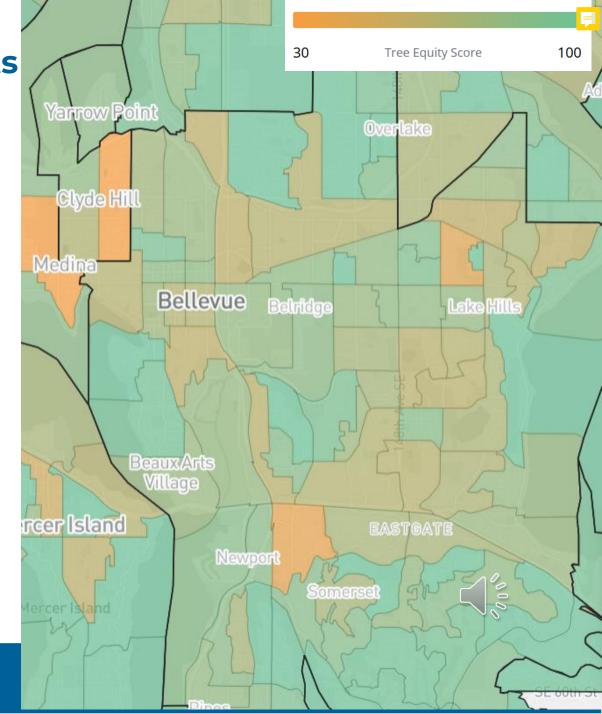
Neighborhood	Total Area (Acres)	UTC (Acres)	UTC %	% People of Color
BelRed	962	134	14%	36%
Bridle Trails	2,027	1038	51%	42%
Cougar Mountain / Lakemont	2,369	1,230	52%	45%
Crossroads	815	251	31%	66%
Downtown	433	38	9%	31%
Eastgate	1,767	668	38%	54.9%
Factoria	389	78	20%	40%
Lake Hills	2,261	801	35%	50%
Newport	1,719	725	42%	28%
Northeast Bellevue	1,415	490	35%	38.9%
Northwest Bellevue	1,327	460	35%	22%
Somerset	1,313	585	45%	54.5%
West Bellevue	1,677	695	41%	37%
West Lake Sammamish	1,126	543	48%	34.4%
Wilburton	1,113	431	39%	54.8%
Woodridge	731	294	40%	51.5%
Totals	21,444	8,460	39%	

- Trees are not equally distributed
- Neighborhoods with fewer trees usually:
 - Are high in racial diversity
 - Have poorer health outcomes
 - Are hotter (from urban heat island)
 - Less access to parks and open spaces



Tree Equity Score from American Forests

- Each census block group gets a score:
 - Percentage of people below 200% poverty
 - Unemployment rate
 - Percentage of people who are not white
 - Ratio of seniors and kids to workingage adults
 - Urban Heat Island severity
 - Composite index of neighborhood health





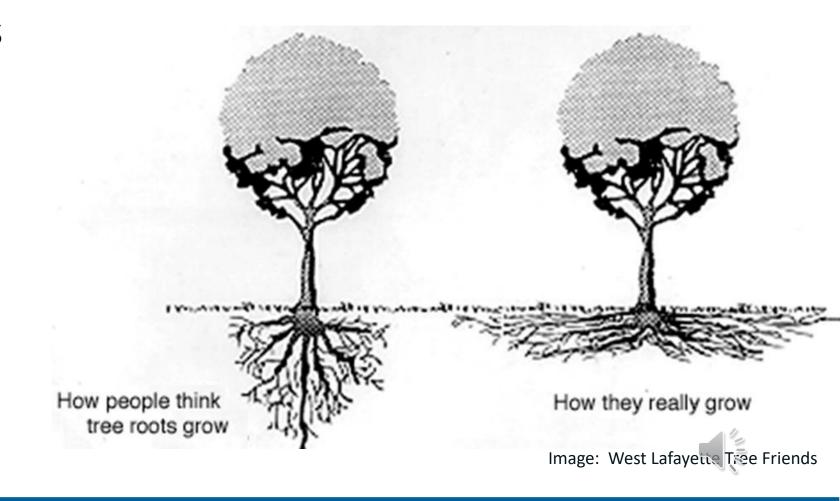
Choosing the Right Tree





How Trees Grow

- Shoots, roots, & trunks
- Seek water, nutrients, and air







How did we select trees?

- Native and future-native plants
- Current and future climate conditions
- Ease of maintenance
- Disease and insect resistance

- Adaptability to a variety of conditions
- Easy growing
- Appearance
- Regional availability
- Low likelihood of limb failure







Tree Types	Tree Species
Fruiting under 20'	Canadian reinette apple, Chicago hardy fig, Desert king fig, Lapins cherry
Decideous under 40'	Cascara, Japanese ivory silk lilac, Serviceberry
Evergreen 20'	Northern spire
Evergeen 21'- 40'	Shore pine, Southern magnolia 'Edith Bogue', Sweetbay magnolia 'Moonglow'
Evergeen over 40'	Douglas fir, Green giant arborvitae





Considerations

- Why are you planting this tree?
- What are your conditions?
- What are your preferences?







Why do you want to plant a tree?

- Aesthetics or beauty
- Cool your neighborhood
- Food
- Ensure canopy for the future
- Privacy
- Memorialize a birth, death, or other event

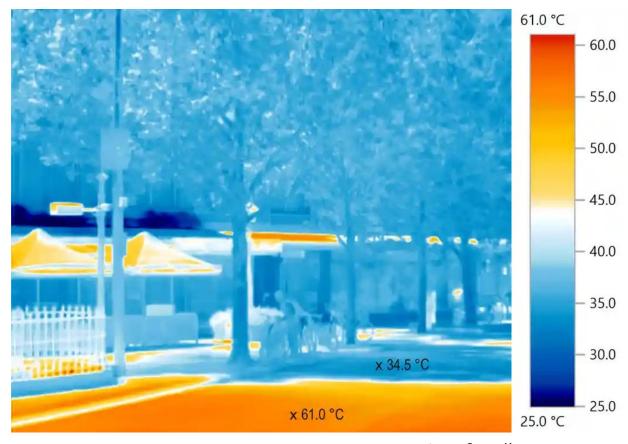


Image Source: City of Melbourne, 2017





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Privacy Screen



Green Giant Arborvitae (*Thuja standishii* × *plicata 'Green Giant'*)

Images: <u>The Spruce</u>

Native Plants

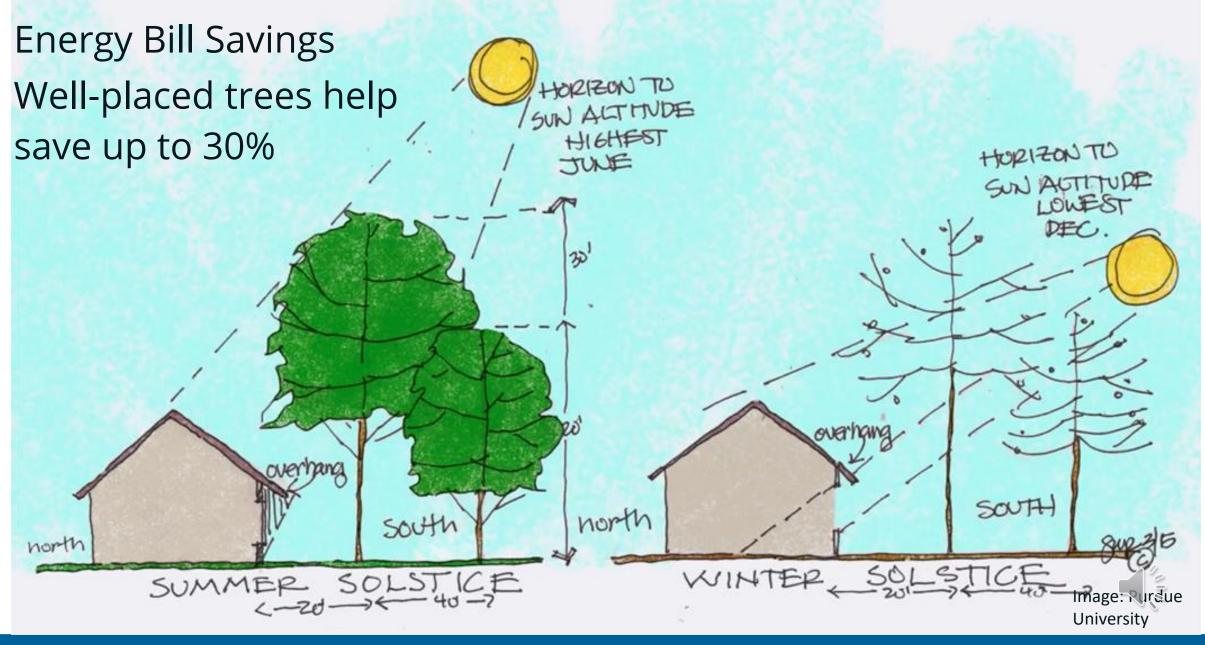


Serviceberry (*Amelanchier alnifolia*)
Images: <u>Pierce County Conservation District</u>













What are your Conditions?

- Soil: Sand, loam, clay
- Light: sun, shade, a mix
- Space: horizontal, vertical, underground
- Other conditions: wet or dry, on a slope





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Conditions: Soil

SAND LOAM CLAY







Sandy soil does not stick together and water drains quickly lmage

A healthy mix of silt, sand, and clay.
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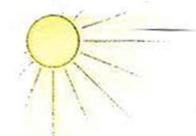
Clay soil packs together and water drains very slowly Image



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Conditions: Light

- Full Sun: 6+ hours per day
- Part Sun/Part Shade: 3-6 hours per day
- Shade: 3 or fewer hours per day



• The Sun's Position
The position of the sun varies during
the year. In midwinter, the sun is
lower and the shadows much longer.
In the height of summer, the sun is
high and the shadows are short.

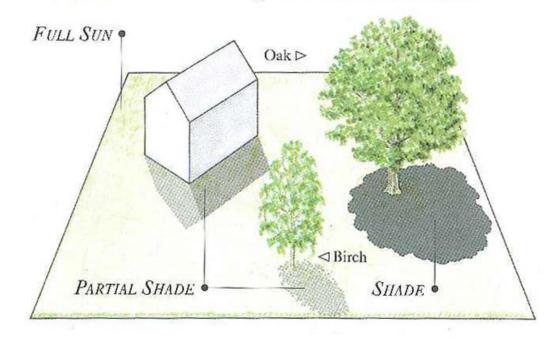


Image: McKay's Nursery Blog





Tree	Soil	Light	Water
Canadian reinette apple	All types, well draining	Full sun	Moderate – high
Chicago hardy fig	All types, well draining	Full sun to part sun	Moderate – high
Desert king fig	All types, well draining	Full sun to part sun	Moderate – high



	Soil	Light	Water
Lapins cherry	All types, well draining	Full sun	Moderate – high
	All types, tolerance for wet sites	Full sun to part shade	Moderate – high
Japanese ivory silk	All types, well draining	Full sun	Moderate



Tree	Soil	Light	Water
Serviceberry	All types, well draining	Full sun to part sun	Moderate
Northern spire	All types, tolerance for wet sites	Full sun to part shade	Low – Moderate
Shore pine	All types, well draining	Full sun	Low
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Tree	Soil	Light	Water
Southern magnolia	All types, well draining	Full sun to part shade	Moderate
Sweetbay magnolia	All types, well draining	Full sun to part shade	Moderate





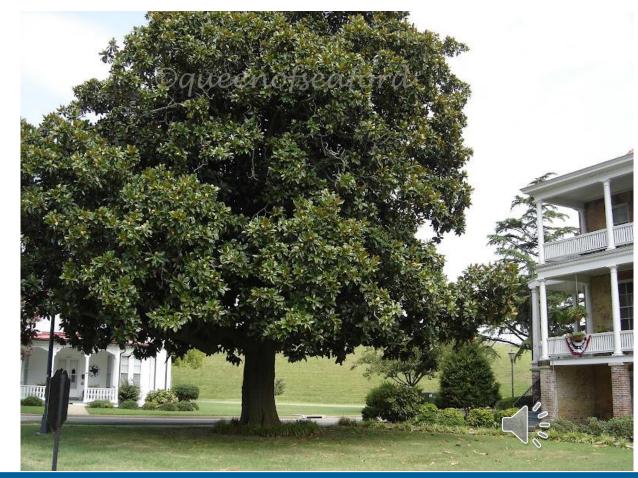
Tree	Soil	Light	Water
Douglas fir	All types, well draining	Full sun to part sun	Low
Green giant arborvitae	All types, well draining	Full sun to part shade	Low – Moderate





Conditions: Space

- Consider <u>mature</u> tree size (height & width)
- Ensure proper distance from
 - Overhead & underground utilities call 811 before you dig
 - Nearby structure
 - Roads, sidewalks, and corners
 - Other trees





Tree	Growth Per Year	Time to Reach Mature Height	Mature Height	Mature Width
Canadian reinette apple	Unknown, most apple trees grow 2 – 3 feet	Under 10 years	15 feet	Unknown
Chicago hardy fig	1 – 2 feet	30 years	12 feet	10 feet
Desert king fig	Up to 2 feet	30 years	10 feet	12 feet
Lapins cherry	About 1 foot	10 – 15 years	20 feet	15 feet
Cascara	2 feet	Within 10 years	15 – 35 feet	30 feet



Tree	Growth Per year	Time to Reach Mature Height	Mature Height	Mature Width
Japanese ivory silk lilac	1 – 2 feet	10 – 20 years	25 feet	20 feet
Serviceberry	1 – 2 feet	Within 10 years	20 feet	20 feet
Northern spire	1 – 2 feet	15 – 20 years	20 feet	6 feet
Shore pine	1 foot	20 – 40 years	45 feet	30 feet
Southern magnolia	1 – 2 feet	10 – 20 years	40 feet	16 feet
Sweetbay magnolia	2 feet	10 – 15 years	35 feet	15 feet
Douglas fir	1 – 2 feet	150 years	100 - 200 feet	20 feet
Green giant arborvitae	3 – 5 feet	10 years	60 feet	20 feet



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Wrong Tree Wrong Place





Image: US Sun

Image: Independent Tree Co.



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Wrong Tree Wrong Place



Image: The Lawn Starter



Image: The Tree Center





What are your preferences?

- Aesthetic: spring flowers, fall color, fruit, shape
- Future plans: how much shade do you want in your yard?
- Maintenance: fall raking or small tasks, pruning





What are your preferences?



Image: Oregon State Extension









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What are your preferences?



Image: Univeristy of Nebraska Lincoln



Image: Medico1849





Additional Considerations

- HOA or neighborhood association requirements
- Views: consider using trees to frame your view, not block it
- NGPA, Steep Slope, ECA, wetlands and waterways







Fruit Trees

- Full sun or your fruit won't ripen
- Trees will produce enough for a household with one tree, but will produce more with two trees
- Pruning needs of fruit trees are very different than other trees
- Need more water to produce healthy, juicy fruit



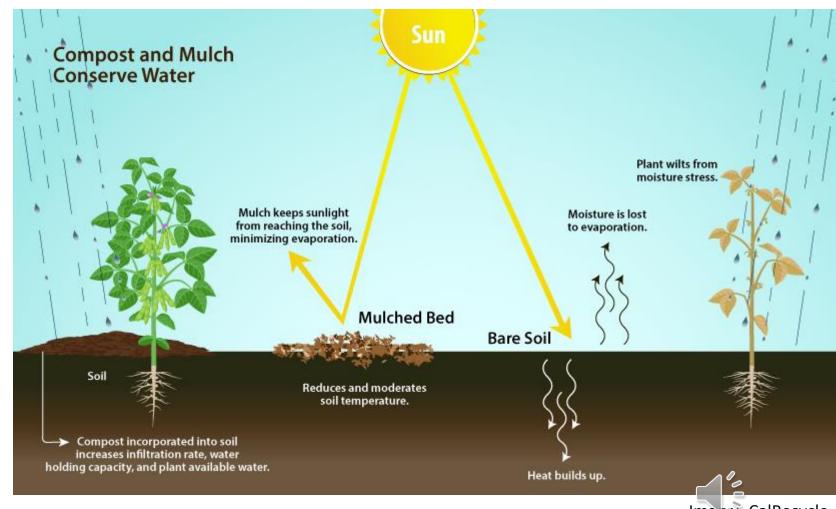






Basic Tree Care

- Learn to properly plant a tree by watching our video
- Water
- Fertilizer
- Pruning







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How to Prune Trees

- If you want to learn to prune yourself:
 - City of Bellevue guide
 - PlantAmnesty
 - Has video guides for many types of tree (including fruit trees!) in English and Spanish
- ISA Certified Arborists
 - We recommend hiring tree companies or individuals with this certification and expertise

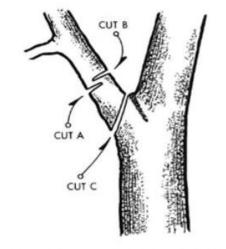


Figure 16. Three-Step
Pruning Cut

Left: City of Bellevue Pruning Guide

Bottom: Incorrectly pruned shrubs via PlantAmnesty





When to Call a Professional Arborist

- When pruning if:
 - You need a ladder or to climb
 - A branch is more than 3"
- Or if:
 - You notice new mushrooms, holes, or creaking
 - Newly moved in or don't know when the last assessment was
 - A large tree needs pruning or overhangs a building









Resources



Resources

Ask a <u>King County Master Gardener</u> or expert at the <u>Oregon State</u> <u>University Extension Service</u>

For reliable plant information in PNW: Great Plant Picks

Find an arborist through <u>PNW ISA</u> or <u>Trees are Good</u> arborist directories or get a referral from PlantAmnesty

<u>PlantAmnesty</u>: service referrals, pruning guidance videos (English and Spanish), pruning assistance





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City Resources

For tree care resources for the City of Bellevue and tree giveaway updates: www.BellevueWA.gov/Trees

If you might live in a critical area Development Services: 425-452-6800 or permits@BellevueWA.gov

Parks department volunteer opportunities can be found under "Environmental Stewardship Volunteer Opportunities"

Contact Christean by calling 425-452-7909 or email Trees@BellevueWA.gov





Fruit Tree Resources

<u>City Fruit</u> – help with pruning and care resources

Western Cascade Fruit Society: wcfs.org

Northwest Washington Fruit Research Foundation: www.nwfruit.org

Cloud Mountain Farm Center - Growing Tips







Thank you to our Partners & Sponsors

- City of Bellevue Parks & Community Services
- 300 Trees
- Amazon









Questions?

Email: trees@ bellevuewa.gov



