

Selecting & Establishing Plants for a Changing Climate

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Step 1 – Understand Your Garden’s *Non-Living Matter* (Sand / Silt / Clay)

= soil texture / type

- Indicates how readily water moves into & through it
- Formed over millennia ... you cannot change it

Methods include:

- ✓ Soil “jar test”
 - Various online videos;
 - Simple instructions at <https://clemsun.edu> > Search: Jar Test;
 - Enter results into downloadable “soil texture calculator” spreadsheet, <https://www.nrcs.usda.gov/resources/education-and-teaching-materials/soil-texture-calculator>
- ✓ “ribbon test” (online videos)
- ✓ Send sample to soil lab and request soil texture analysis

Step 2 – Improve Your Soil’s Structure (*Living Matter*) ... to:

- Improve soil’s water holding capacity *and* drainage
- Grow healthier plants & deeper roots

Method ...

- ✓ If the area is *not yet* planted
 - TIMING: *when the soil is moist but not soggy*
 - Dig 2 to 4 inches of compost into the soil to a depth of 8 to 10 inches. Afterwards, cover the area with mulch
- ✓ If the area already has roots growing there –
 - TIMING: *October – May ... when soil is moist*
 - Simply cover the soil with **mulch**...

Planting Area	Mulch to Use (<i>depth matters</i>)	
shrubs, trees, woodland plants	Woodchips* (3 to 4")	Leaves (2 to 3")
ferns, perennials, bulbs	Leaves (2 to 3")	Coarse compost (1 to 1.5")
vegetables	Straw (1 to 1.5")	Coarse compost (1 to 1.5")

**Woodchips* – sign up to receive an entire load FREE: www.chipdrop.com

Step 3 – Match Plants to Your Soil + Light Exposure

The Plant List..... www.savingwater.org, Lawn & Garden
 King County Native Plant Guide www.kingcounty.gov, Native Plant Guide
 Bellevue Botanical Garden www.bellevuebotanical.org, Collections Search
 Great Plant Picks www.greatplantpicks.org, Plant Lists

Helpful Observations:

Soil:	Match to plants:	Tip:
Sandy to sandy loam texture Drainage is good	Drought tolerant Suited to dry sites Mediterranean plants	Consider plants in the “Drought Tolerant” section of The Plant List (www.savingwater.org) Consider plants with leaves that are: <ul style="list-style-type: none"> ✓ greyish green ✓ waxy ✓ thick or leathery ✓ narrow, small, or tiny
Sandy – Loamy – with some clay Easy to dig & “friable” ... full of clods Rainwater soaks in; soil is moist without being soggy Drainage is moderate to good	Many Avoid moisture-loving plants	Keeping soil covered with coarse mulch will help create friable soil.
Hard to dig, especially when dry in summer	Suited to wet winter / dry summer soils but NOT tolerant of	If the soil is compacted, “scarify” it and use coarse mulch
Wet in winter / dry in summer Drainage is poor to moderate	Suited to wet winter/dry summer soils	Consider plants in the “Wet Winter/Dry Summer” section of The Plant List (www.savingwater.org) Plants listed as “Zone 1” in the Rain Garden Handbook for Western WA Avoid walking on or working it when soil is wet. For pathways, use coarse mulch, pavers, or crushed gravel
Soggy much of the year Drainage is poor	Moisture-loving Tolerant of inundated or saturated soils	Consider plants in the “Moisture-Loving” section of The Plant List (www.savingwater.org) Seek out plants that thrive in moist soils and the lighting your garden area has. Consider our PNW native plants that thrive in these conditions

Step 4 –Plant Right ... waiting until fall rains begin

Method:

1. Find the root flare ... keep it exposed & above ground
2. Tussle the roots
3. Use your native soil
4. Apply mulch (keep it the width of your palm away from the stem)
5. Water deeply

Step 5– Practice Smart Watering

Methods:

- Water Deeply, and less frequently
 - 1” of water per week ... vegetables, lawns (to stay green)
 - 1” of water per month ... “golden” lawns (dormant)
- Make every drop count
 - Soaker hose
 - Drip system
 - Quick-disconnect couplers
 - Straight-sided cans to measure water depth
 - Irrigation audit

Resources – local & reliable

Natural Yard Care..... <https://cascadewater.org/water-efficiency/natural-yard-care/>
Garden Hotlinehelp@gardenhotline.org, (206) 633-0224, www.gardenhotline.org
Tilth Alliance (edible gardening)..... www.tilthalliance.org
Find an ecoPRO Sustainable Landscape Professional..... www.ecoprocertified.org

Books for Gardening West of the Cascades

Grow Your Own Native Landscape, MISC0273, Washington State University Extension Publications, (Current cost in spring 2025 to download PDF is \$6.05) <https://pubs.extension.wsu.edu/grow-your-own-native-landscape-a-guide-to-identifying-propagating-landscaping-with-wwa-native-plants-2>

Maritime Northwest Garden Guide, Tilth Alliance (edible gardening)

Pacific Northwest Month-by-Month Gardening, Christina Pfeiffer

Rain Garden Handbook for Western WA, Ecology (free download), <https://apps.ecology.wa.gov/publications/documents/1310027.pdf>