



Native Plants



Workshop Outline

What is “Native”?

Microclimates

Native Plant Communities

Sample Planting Plans

Native Plant Slideshow

Planting for Success

Q & A

Evaluations

What does “Native” mean?

Plant species that were likely found historically in the Willamette Valley prior to European settlement.



What makes native plants different?

- Adapted to local soil conditions & weather patterns
- Resistant to local garden pests
- Wildlife recognize their flowering & fruiting cycles
- Drought tolerant, so they need less water once established



Benefits of Native Plants



- Less maintenance
- Conserve water = lower water bills!
- Food and shelter for wildlife
- Thrive without chemical fertilizers or pesticides = less pollution!

Benefits of Native Plants

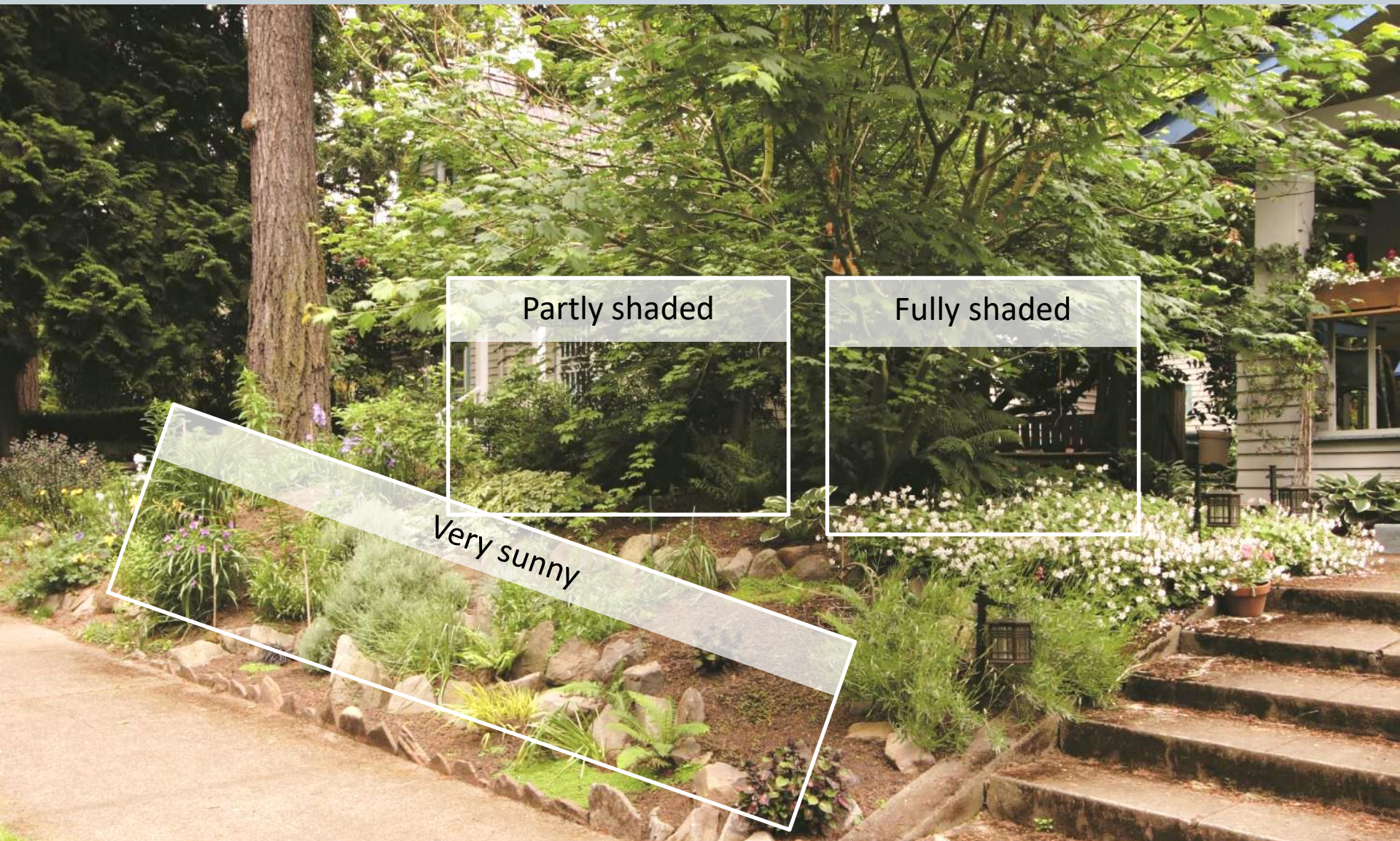


Many native plants are ***exclusive*** food sources for native invertebrates.



Microclimate

Conditions vary from one part of the yard to another.



Partly shaded

Fully shaded

Very sunny

Microclimate

Common yard features influence microclimates:

- Houses
- Fences
- Retaining Walls
- Large Rocks
- Raised beds
- Terraces and slopes
- Paved / gravel surfaces
- Trees

Microclimates create areas with different characteristics.



Microclimate

Common yard features that influence microclimates:



Microclimate

Common yard features that influence microclimates:



Full Shade



Part Shade

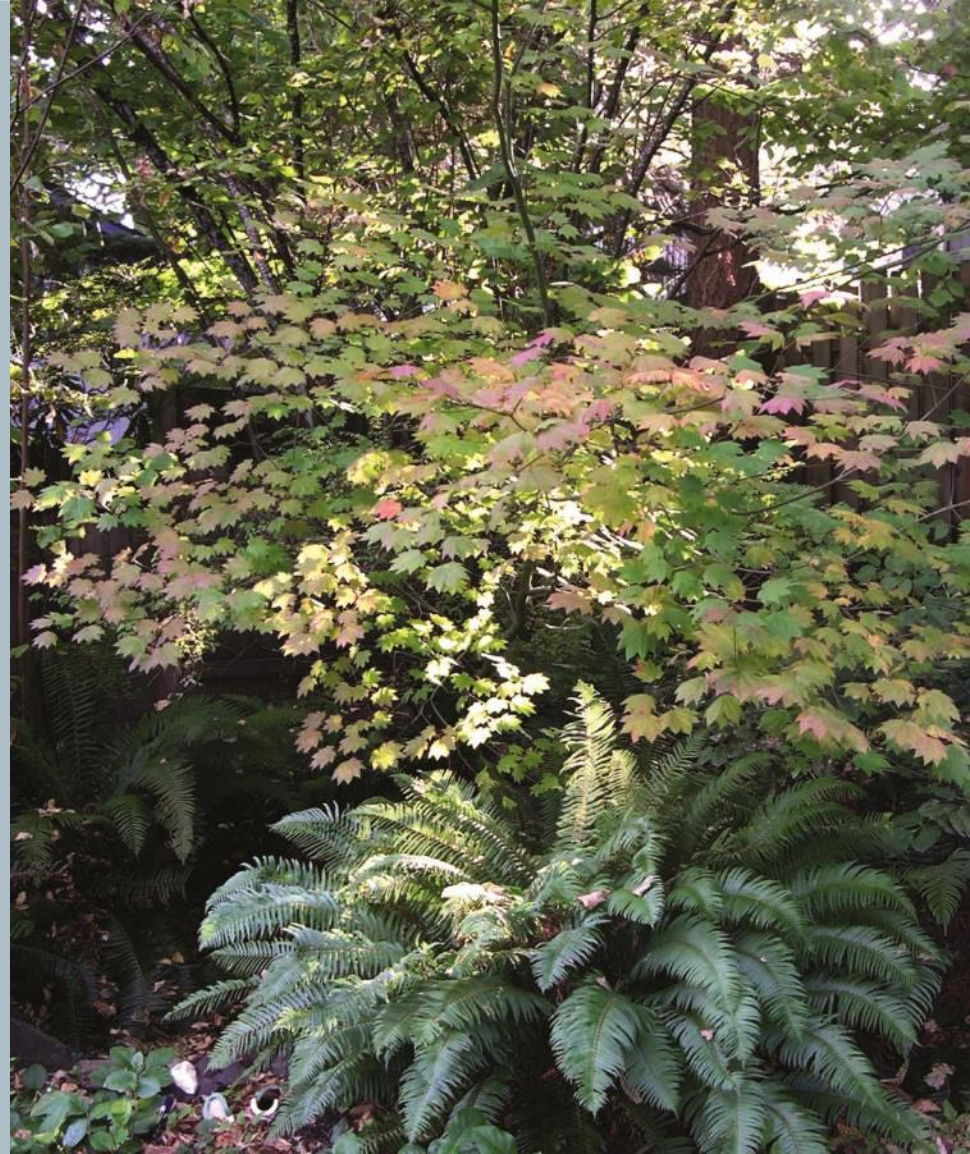


Full Sun



Native Plant Communities

- *Loose associations of plant species that succeed in similar conditions*
- *Well-adapted to particular soils, climate, moisture and landscape features.*
- *Different plant communities blend into each other, usually without sharp boundaries*



“Right Plant, Right Place”

Selecting plants to fit the various microclimates are present on your site.



How will the plant affect its environment?



How will the environment affect the plant?



Plant Associations



Overstory
Large Trees

Douglas Fir

Understory
Small Trees
Large Shrubs
Groundcovers

Vine Maple

Oxalis





Pacific Willow

Cascara

Oceanspray

Red Columbine

Lupine

Salal

Vine Maple

Sword Fern

Thimbleberry

*Oregon
Grape*

*Red-Osier
Dogwood*

*Oregon
Iris*



*Tall Oregon
Grape*

*Ornamental
Oregon Grape*

*Ornamental
Bleeding Heart*



Lady Fern

*Evergreen
Huckleberry*

*False Solomon's
Seal*

Wild Ginger



Rhododendron

Thimbleberry

Lady Fern

Oxalis



Vine Maple



*Western
Meadow
Rue*



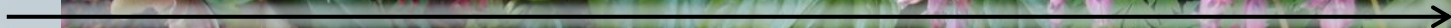
Salal



Deer Fern



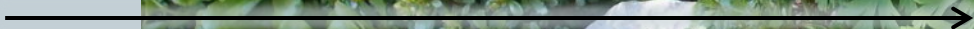
Rhododendron



Kinnikinnick



Western Bleeding Heart



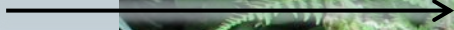
*Evergreen
Huckleberry*



Oxalis

*Western Bleeding
Heart*

Sword Fern



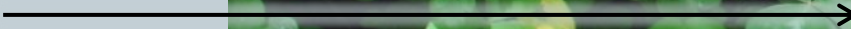
Fern (non-native)



Western Bleeding Heart



Oxalis

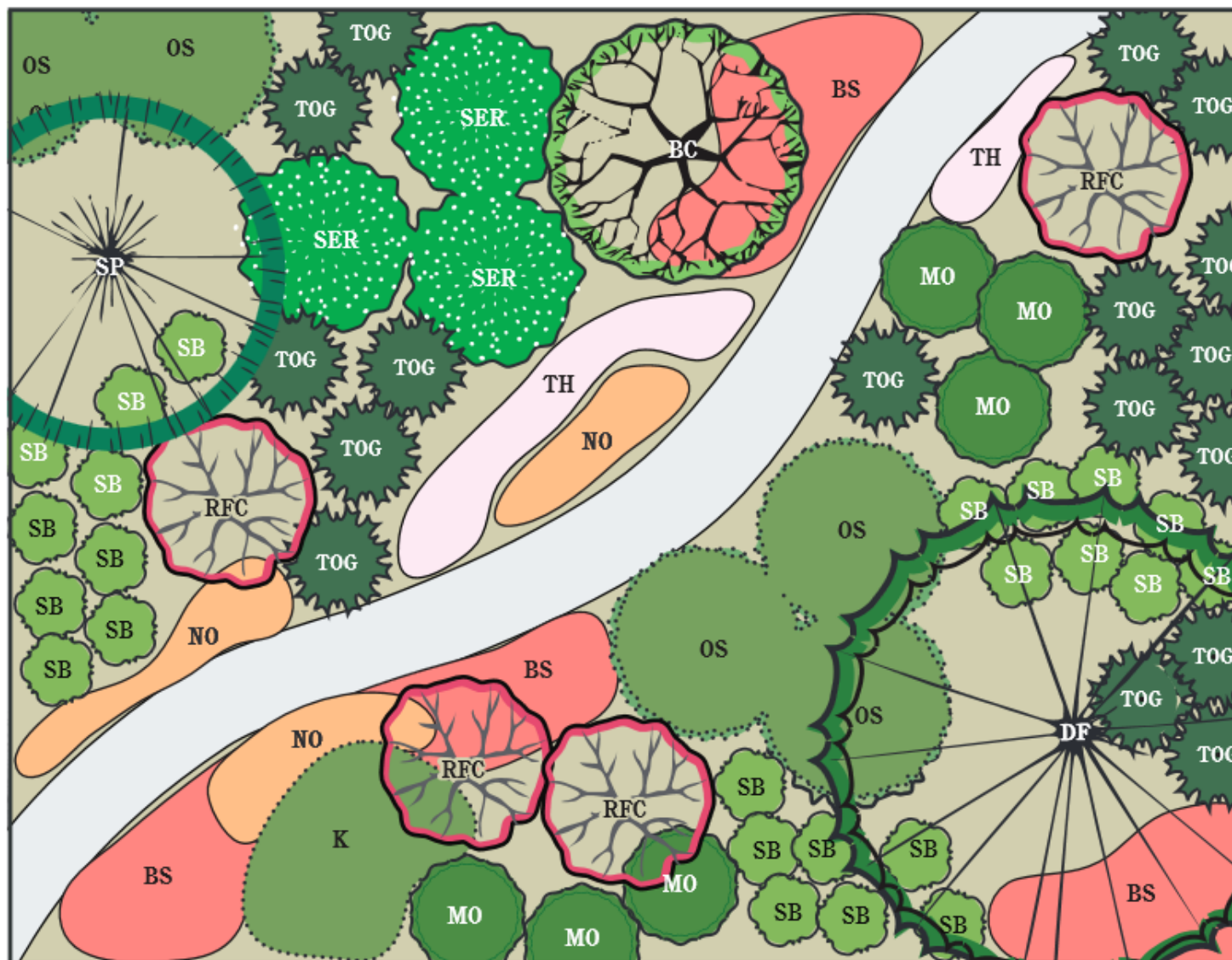




Salal

*False Lily of
the Valley*

Oxalis



SYMBOL	PLANT
	Douglas-fir
	Shore pine
	Bitter cherry
	Serviceberry
	Oceanspray
	Red flowering currant
	Mock orange
	Tall Oregon grape
	Snowberry
	Kinnikinnik
	Beach strawberry
	Thrift
	Nodding onion

PLANTING PLAN: Dry, Sunny Conditions

0 2 4 6 Feet

Produced by: DNRP GIS, Visual
Communications and Web Unit
File: 0604_DrySun.ai lprc



King County
Department of Natural Resources and Parks
Water and Land Resources Division



SYMBOL	PLANT
	Western redcedar
	Western hemlock
	Cascara
	Vine maple
	Red osier dogwood
	Evergreen huckleberry
	Sword fern
	Low Oregon grape
	Deer fern
	Wild ginger
	Western trillium
	Vanilla leaf
	Piggy back plant

PLANTING PLAN: Moist, Shady Conditions

0 2 4 6 Feet

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Communications and Web Unit
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King County

Department of Natural Resources and Parks
Water and Land Resources Division

Ideas to Inspire



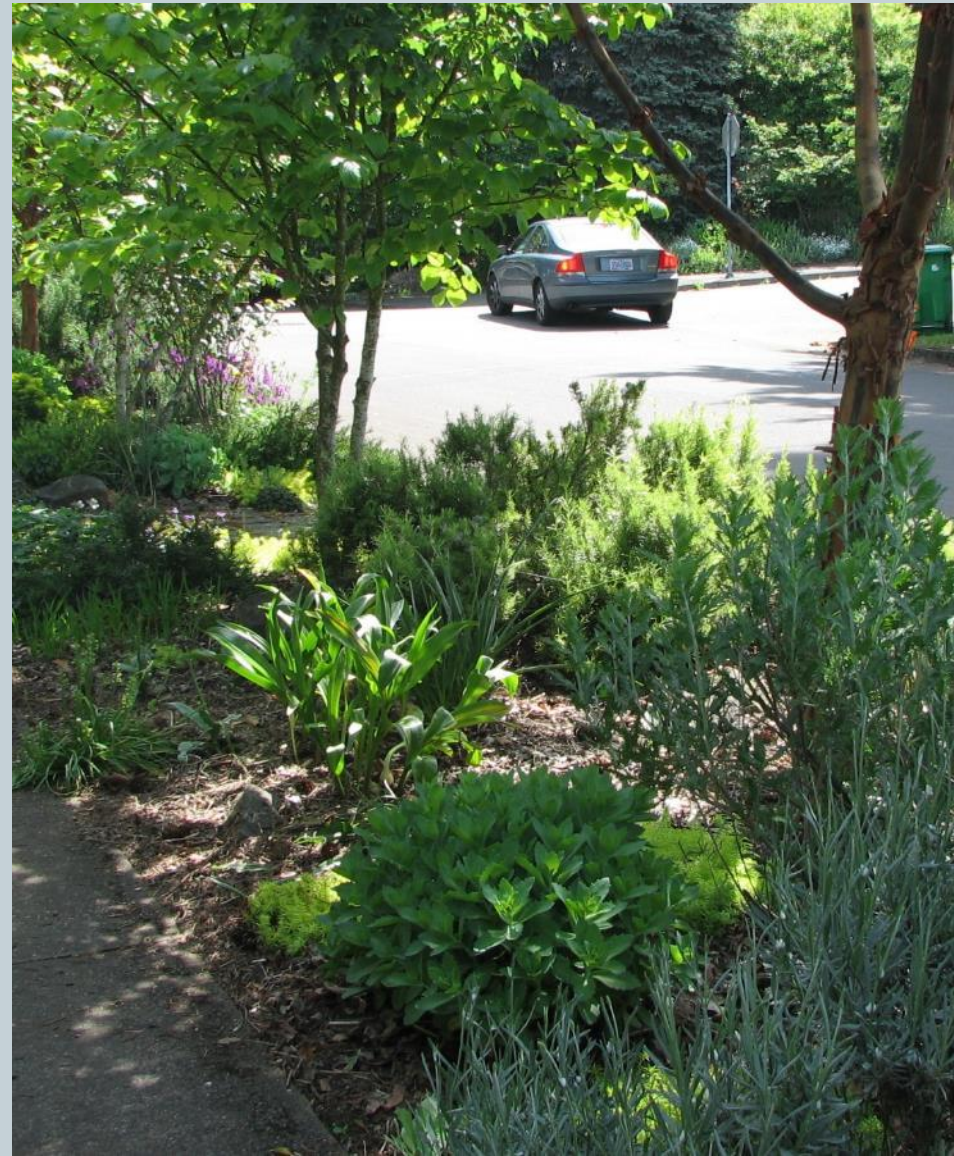
Outdoor Living Spaces



Visual Barriers



Lawn Reduction



Pathways



Groundcovers

Perennial ferns, grasses, rushes, sedges



Blue-eyed Grass

Sisyrinchium idahoense



Grows to: 1½ ft x 2 ft

Requirements:

☀ Full Sun; Part Shade

💧 Dry; Moist; Seasonally Wet



Broad-leaf Shooting Star

Dodecatheon Hendersonii



Grows to: 1ft x 6"

Requirements:

☀ Full Sun; Part Shade

💧 Moist



Cusick's Checkermallow

Sidalcea cusickii



Grows to: 4ft x 2ft

Requirements:

☀ Full Sun; Part Shade

💧 Dry; Moist



Daggerleaf Rush

Juncus ensifolius



Grows to: 1ft x 2ft

Requirements:

- ☀ Full Sun; Part Shade
- 💧 Dry; Moist; Seasonally Wet;
Perennially Wet



Deer Fern

Blechnum spicant



Grows to: 2ft x 2ft

Requirements:

- ☀ Part Shade; Full Shade
- 💧 Moist; Seasonally Wet



Douglas Aster

Aster subspicatus



Grows to: 3ft x 2ft

Requirements:

☀ Full Sun

💧 Moist



False Lily-of-the-Valley

Maianthemum dilatatum



Grows to: 1ft x 1ft

Requirements:

☀ Part Shade

💧 Dry; Moist



False Solomon's Seal

Smilacena racemosa

Grows to: 2-3ft x 1-2ft

Requirements:

☀ Part Shade; Full Shade

💧 Moist



Goat's Beard

Aruncus diocus



Grows to: up to 5ft x 1-2ft

Requirements:

☀ Part Shade

💧 Moist



Hooker's Fairy Bells

Disporum hookerii



Grows to: 1ft x 1ft

Requirements:

☀ Part Shade; Full Shade

💧 Moist



Kinnikinnick

Arctostaphylos uva-ursi



Grows to: 6" x 3ft

Requirements:

☀ Full Sun

💧 Dry; Moist



Lady Fern

Athyrium filix-femina



Grows to: 3ft x 2ft

Requirements:

- ☀ Part Shade; Full Shade
- 💧 Moist; Seasonally Wet



Larkspur

Delphinium trollifolium



Grows to: 4ft x 2ft

Requirements:

- ☀ Part Shade; Full Shade
- 💧 Moist; Seasonally Wet



Narrow-leaved Mule's Ear

Wyethia angustifolia



Grows to: 2ft x 1ft

Requirements:

☀ Full Sun; Part Shade

💧 Dry; Moist



Oregon Iris

Iris tenax



Grows to: 1ft x 1ft

Requirements:

☀ Full Sun; Part Shade

💧 Dry; Moist



Oregon Oxalis

Oxalis oregana

Grows to: 1ft x 1ft

Requirements:

☀ Full Sun; Part Shade

💧 Dry; Moist



Red Columbine

Aquilegia formosa



Grows to: 2ft x 1ft

Requirements:

☀ Full Sun; Part Shade

💧 Moist



Slough Sedge

Carex obnupta

- **Grows to:** 2ft x 1ft
- **Requirements:**
 - ☀ Full Sun; Part Shade
 - 💧 Seasonally Wet; Perennially Wet; Tolerates submerged conditions



Star-flowered Solomon Seal

Smilacina Stellata



Grows to: 2ft x 1ft

Requirements:

☀ Part Shade

💧 Dry; Moist



Sword Fern

Polystichum munitum



Grows to: 3ft x 3ft

Requirements:

- ☀ Part Shade; Full Shade
- 💧 Dry; Moist; Seasonally Wet



Tufted Hairgrass

Deschampsia cespitosa



Grows to: 2ft x 1ft

Requirements:

- ☀ Full Sun; Part Shade
- 💧 Dry; Moist; Seasonally Wet; Perennially Wet



Western Bleeding Heart

Dicentra formosa



Grows to: 2ft x 1ft, spreads

Requirements:

☀ Part Shade; Full Shade

💧 Prefers Moist



Wild Ginger

Asarum caudatum



Grows to: 1ft x 3ft

Requirements:

☀ Full Shade

💧 Moist



Wood Strawberry

Fragaria vesca



Grows to: 6" x 1ft

Requirements:

☀ Full Sun; Part Shade

💧 Dry; Moist



Yellow Wood Violet

Viola glabella

Grows to: 1ft x 6"

Requirements:

☀ Part Shade; Full Shade

💧 Moist



Shrubs



Baldhip Rose

Rosa gymnocarpa



Grows to: 5ft x 8ft

Requirements:

☀ Full Sun; Part Shade

💧 Dry; Moist



Black Twinberry

Lonicera involucrata



Grows to: 10ft x 8ft

Requirements:

- ☀ Full Sun; Part Shade
- 💧 Moist; Seasonally Wet



Douglas Spirea

Spiraea douglassi



Grows to: 6ft x 3ft

Requirements:

☀ Full Sun; Part Shade

💧 Dry; Moist; Seasonally Wet



Evergreen Huckleberry

Vaccinium ovatum



Grows to: 8ft x 6ft

Requirements:

☀ Full Sun; Part Shade; Full Shade

💧 Dry; Moist



Golden Currant

Ribes aureum var. *aureum*



Grows to: 6ft x 6ft

Requirements:

☀ Full Sun; Part Shade

💧 Dry; Moist



Long-Leaf Oregon Grape

Mahonia nervosa



Grows to: 2ft

Requirements:

☀ Part Shade; Full Shade

💧 Dry; Moist



Mockorange

Philadelphus lewisii



Grows to: 12ft x 10ft

Requirements:

☀ Full Sun; Part Shade; Full Shade

💧 Dry; Moist



Nootka Rose

Rosa nutkana



Grows to: 10ft x 8ft

Requirements:

☀ Full Sun; Part Shade

💧 Dry; Moist; Seasonally Wet



Oceanspray

Holodiscus discolor



Grows to: 12ft x 12ft

Requirements:

☀ Full Sun; Part Shade

💧 Dry; Moist; Seasonally Wet



Oval-Leaved Viburnum

Viburnum ellipticum



Grows to: 10ft x 8ft

Requirements:

☀ Full Sun; Part Shade; Full Shade

💧 Dry; Moist



Pacific Ninebark

Physocarpus capitatus



Grows to: 12ft x 12ft

Requirements:

☀ Part Shade; Full Shade

💧 Moist; Seasonally Wet



Red Flowering Currant

Ribes sanguineum



Grows to: 9ft x 9ft

Requirements:

☀ Full Sun; Part Shade

💧 Dry; Moist



Salal

Gaultheria shallon



Grows to: 6ft x 3ft

Requirements:

- ☀ Full Sun; Part Shade; Full Shade
- 💧 Dry; Moist; Seasonally Wet



Salmonberry

Rubus spectabilis



Grows to: 10ft x 10ft

Requirements:

☀ Part Shade

💧 Moist; Seasonally Wet



Snowberry

Symphoricarpos albus



Grows to: 5ft x 3ft

Requirements:

☀ Part Shade; Full Shade

💧 Dry; Moist; Seasonally Wet



Tall Oregon Grape

Mahonia aquifolium



Grows to: 6ft x 3ft - spreads

Requirements:

☀ Full Sun; Part Shade

💧 Dry; Moist



Thimbleberry

Rubus parviflorus



Grows to: 5ft x 3ft

Requirements:

☀ Full Sun, Part Shade, Full Shade

💧 Dry; Moist; Seasonally Wet



Small Trees / Large Shrubs



Bitter Cherry

Prunus emarginata



Grows to: 6ft – 45ft

Requirements:

☀ Full Sun; Part Shade

💧 Dry; Moist



Black Hawthorn

Crataegus douglasii



Grows to: 30ft x 25ft

Requirements:

☀ Full Sun; Part Shade

💧 Moist



Blue Elderberry

Sambucus cerulea



Grows to: 20ft x 10ft

Requirements:

☀ Full Sun; Part Shade

💧 Moist; Seasonally Wet



Cascara

Rhamnus purshiana



Grows to: 30ft x 25 ft

Requirements:

☀ Full Sun; Part Shade

💧 Moist; Seasonally Wet



Chokecherry

Prunus virginiana



Grows to: 20ft x 15ft

Requirements:

☀ Full Sun; Part Shade

💧 Dry; Moist



Indian Plum

(aka Osoberry)

Oemleria cerasiformis



Grows to: 15ft x 8ft

Requirements:

☀ Full Sun; Part Shade; Full Shade

💧 Dry; Moist



Pacific Crabapple

Malus fusca



Grows to: 30ft x 35ft

Requirements:

☀ Full Sun

💧 Moist; Seasonally Wet



Pacific Serviceberry

Amelanchier alnifolia



Grows to: 18ft x 10ft

Requirements:

☀ Full Sun; Part Shade

💧 Dry; Moist; Wet



Red Elderberry

Sambucus racemosa

Grows to: 20ft x 20ft

Requirements:

☀ Full Sun; Part Shade; Full Shade

💧 Moist; Wet



Red-Osier Dogwood

Cornus sericea



Grows to: 18ft x 10ft

Requirements:

- ☀ Full Sun; Part Shade
- 💧 Moist; Seasonally Wet;
Perennially Wet



Red Stem Ceanothus

Ceanothus sanguineus



Grows to: 10ft

Requirements:

☀ Full Sun; Part Shade

💧 Dry; Moist



Vine Maple

Acer circinatum



Grows to: 25ft x 20ft

Requirements:

☀ Part Shade; Full Shade

💧 Moist; Seasonally Wet



Large Trees

Deciduous & Evergreen



Big Leaf Maple

Acer macrophyllum



Grows to: 90ft x 75ft

Requirements:

- ☀ Full Sun; Part Shade
- 💧 Moist; Seasonally Wet



Black Cottonwood

Populus trichocarpa

Grows to: 175ft x 40ft

Requirements:

- ☀ Full Sun; Part Shade
- 💧 Dry; Moist; Seasonally Wet;
Perennially Wet



Douglas Fir

Pseudotsuga menziesii



Grows to: 200ft x 50 ft

Requirements:

- ☀ Full Sun; Part Shade
- 💧 Dry; Moist; Seasonally Wet



Grand Fir

Abies Grandis



Grows to: 150ft x 40 ft

Requirements:

☀ Full Sun; Part Shade; Full Shade

💧 Moist; Seasonally Wet



Incense Cedar

Calocedrus decurrens



Grows to: 200ft x 25ft

Requirements:

☀ Full Sun; Part Shade

💧 Dry



Noble Fir

Abies procera



Grows to: 250ft x 30ft

Requirements:

☀ Full Sun; Part Shade

💧 Prefers Moist



Oregon Ash

Fraxinus latifolia



Grows to: 75ft x 25ft

Requirements:

☀ Full Sun; Part Shade

💧 Moist; Seasonally Wet



Oregon White Oak

Quercus garryana



Grows to: 65ft x 45ft

Requirements:

☀ Full Sun

💧 Dry



Ponderosa Pine

(Willamette Valley)

Pinus ponderosa



Grows to: 200ft x 30ft

Requirements:

☀ Full Sun

💧 Dry



Western Hemlock

Tsuga heterophylla



Grows to: 150ft x 40ft

Requirements:

☀ Full Sun; Part Shade

💧 Moist



Western Redcedar

Thuja plicata



Grows to: 100ft x 30ft

Requirements:

☀ Part Shade; Full Shade

💧 Moist; Seasonally Wet



White Alder

Alnus rhombifolia



Grows to: 90ft x 40ft

Requirements:

- ☀ Full Sun; Part Shade
- 💧 Moist; Seasonally Wet



Planting for Success

Timing & Preparation

Plant Selection

Placement

Planting 101: Step-by-Step

Care & Maintenance

Timing & Preparation

Timing:

- Fall or winter is best

Preparation:

- Observe, note, sketch

Right Plant, Right Place

Consider microclimates ***before*** purchasing plants!



Plant Selection

- Consider yard conditions
- *Have fun and experiment!*
- Use resources:
 - EMSWCD Native Plant Database
 - Portland Plant List
 - King County Sample Planting Plans

**List of websites is provided at end of slideshow.*



Placement

- Remember, “*right-plant, right-place*”
- Spacing – *your preference*
 - Visualize future growth
- Do it in stages
 - Start with larger trees/shrubs
 - Then fill with shrubs and groundcovers



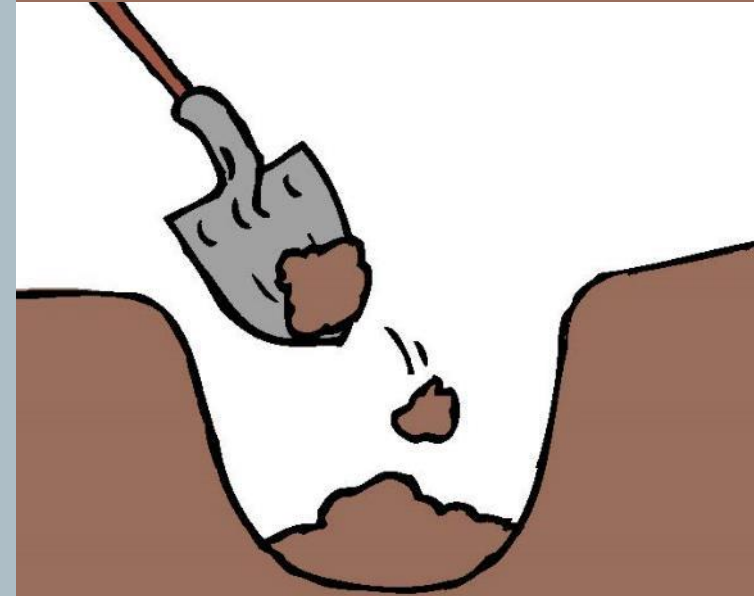
Placement

- Deciduous trees on S & W
 - Summer shading
 - Winter warming
- Evergreen trees on N & E
 - Winter wind break
- Tree/shrub can shade air conditioner for efficiency
- Consider the view from inside and outside



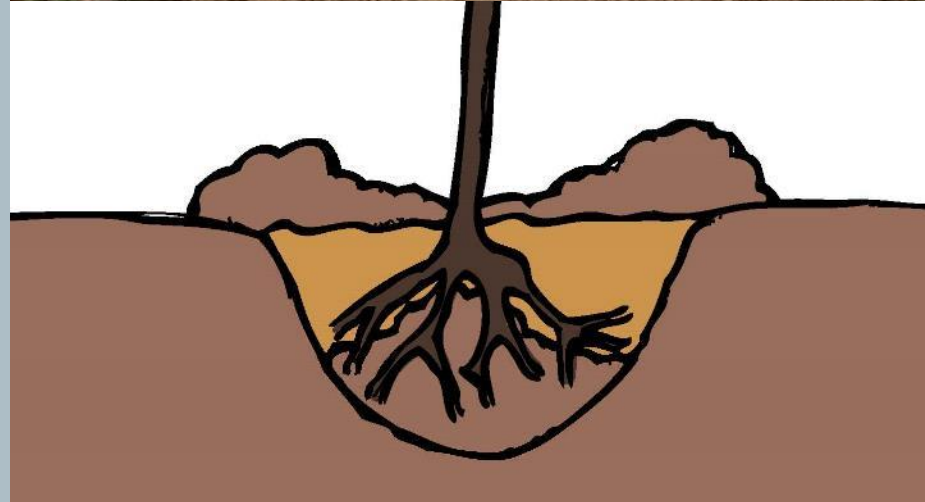
Planting 101: Step-by-step

- Select planting location
- Dig hole 2-3 times width of root mass and about as deep
- Fill hole with water and let drain
- Backfill bottom of hole with small mound of native/existing soil
- Spread roots evenly over soil mound



Planting 101: Step-by-step

- Place the plant so the root flare is at the soil surface
- Use remaining soil to fill the spaces between the roots, all the way up to the root flare
- Create a soil berm around the perimeter to retain moisture
- Water generously
- Add compost to surface only



Common Mistakes

Too deep



Too shallow



Air pocket



"L" roots



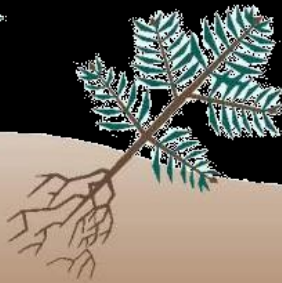
"J" roots



Compacted roots



Not vertical



Too loose



Past planting soil



Well done!



Care and Maintenance

- **Water:** Early morning is best
- **Mulch:** Retains moisture, prevents weeds
- **Weed early and often:** Always a good practice



Learn More



Attend a ***Naturescaping Basics*** or ***Rain Garden 101*** workshop!

<http://emswcd.org/workshops-and-events/>

Useful Websites

- EMSWCD Native Plant Resources Page:
<http://emswcd.org/about/documents/native-plants/nts/>
- EMSWCD Native Plant Database:
<http://emswcd.org/native-plants/native-plant-database/>
- Portland Plant List:
<http://www.portlandonline.com/auditor/index.cfm?&a=322280&c=34460>
- King County Landscape Plans:
<https://green.kingcounty.gov/gonative/Plan.aspx?Act=list>