**Plant Selection Guide**

The following table will help you select the best plants for your erosion control or slope stabilization project. Due to the amount of information involved, the table is split into two sections. Half of the information on each plant is in the first table, half in the second. To read the second half of a plant's characteristics, simply click on its name. When you are finished, click the name again to return to your place in the first half of the table.

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| **Name** | **Form & Habit** | **Rooting Characteristics** | **Planting Condition** | **Comments** |
| **Red Alder** *(Alnus rubra)* | Deciduous tree; seeds prolifically on bare soil | Fibrous, Moderately deep | Bareroot seedlings up to 3' tall; larger plants in containers | Fast grower in poor mineral soils; typical 40-50 year lifespan; large limbs become brittle; provides food for birds |
| **Pacific Willow *(Salix lasiandra)*** | Deciduous multi-stemmed tree; does not spread | Fibrous, Moderately deep and widespread | Rooted plants to 10' tall in containers; cuttings 18" - 24"; whips 4' | Fast grower in saturated or shallowly flooded areas; 25 year lifespan - large limbs become brittle, tend to break off; stumps produce long, fast growing whips; easily rooted |
| **Scouler Willow *(Salix scouleriana)*** | Deciduous tree or shrub; does not spread | Fibrous, Moderately deep and widespread | Rooted plants to 10' tall in containers; cuttings 18" - 24"; whips 4'; whips not recommended | Of the willows listed here, this species tolerates the driest conditions |
| **Sitka Willow *(Salix sitchensis)*** | Deciduous tree or shrub; does not spread | Fibrous, Moderately deep and widespread | Rooted plants to 10' tall in containers; cuttings 18" - 24"; whips 4'; whips not recommended | Fast grower in moist to saturated soils; widely used for streambank stabilization |
| **Douglas Fir *(Pseudotsuga menziesii)*** | Coniferous tree; does not spread | Tap - Modified Tap, Shallow to deep and widespread | 12" - 18" bareroot seedlings; larger plants in containers | Generally not considered a primary species for slope face stabilization; high root strength but typical shallow rooting characteristics in thin coastal soils; can be planted in stands in slope crest greenbelts; good eagle and osprey perch and nest trees; potential for wind throw in thin or disturbed soils |
| **Northern Black Cottonwood *(Populus trichocarpa)*** | Deciduous; does not spread | Fibrous, Shallow to deep, and widespread, extensive | Rooted plants to 10' tall in containers; cuttings 18" - 24"; whips 4' tall | Fast grower in moist to saturated soils; also widely used for streambank stabilization; potential wind throw |
| **Red-Osier Dogwood *(Cornus stolonifera or Cornus sericea)*** | Deciduous shrub; does not spread | Fibrous, shallow | Rooted plants to 6' tall in containers; bareroot & cuttings 18" - 24" tall | Attractive shrub that produces bright red stems |
| **Black Twinberry *(Lonicera involucrata)*** | Deciduous shrub; does not spread | Fibrous, shallow | Rooted plants to 6' tall in containers; bareroot 18" - 24" tall | Produces yellow twin flowers and black twin berries; some success reported from cuttings |
| **Ninebark *(Physocarpus capitatus)*** | Deciduous shrub; does not spread | Fibrous, shallow | Rooted plants to 6' tall in containers; bareroot 18" - 24" tall | Produces masses of tiny white flowers which change to reddish seed clumps |
| **Cascara *(Rhamnus purshiana)*** | Deciduous tree/shrub; does not spread | Tap - Moderately deep | Rooted plants to 6' tall in containers; bareroot 18" - 24" tall | Shiny black berries are favored by Cedar Waxwings |
| **Salmonberry *(Rubus spectabilis)*** | Deciduous shrub; spreads by underground runners to form thickets | Fibrous, Shallow | Rooted plants to 4' tall in containers; bareroot 6"-8" tall; cuttings 18"-24" | Spreads quickly once established; berries provide food for a variety of songbirds |
| **Hooker Willow *(Salix hookeriana)*** | Deciduous shrub; does not spread | Fibrous, Moderately deep | Rooted plants to 6' tall in containers; bareroot & cuttings 18"-24" tall; whips 4'; whips not recommended | A horticultural variety, "Clatsop," has been developed by the Soil Conservation Service for its vigor, disease resistance & attractive foliage; salt spray tolerant |
| **Red Elderberry *(Sambucus racemosa)*** | Deciduous shrub; does not spread | Fibrous, Shallow | Rooted plants to 6' tall in containers; bareroot 18"-24" tall | Produces red, non-edible berries; some success reported from woody cuttings |
| **Douglas' Spiraea *(Spiraea douglasii)*** | Shrub; spreads by seed & underground runners to form seed | Fibrous, Shallow | Rooted plants to 6' tall in containers; bareroot & cuttings 18"-24" tall | Spreads quickly & aggressively in most sites |
| **Snowberry *(Symphoricarpos albus)*** | Deciduous shrub; spreads by underground runners to form thickets | Fibrous, Shallow | Rooted plants to 24" tall; bareroot 6"-18" tall | Tolerates high winds and often grows on vegetated slopes overlooking salt water |
| **Salal *(Gaultheria shallon)*** | Evergreen shrub; spreads by underground runners to form thickets | Fibrous, Shallow | Rooted plants 4" to 12" tall | Widely available; difficult to establish; slow growing; tolerates salt spray |
| **Ocean Spray *(Holodiscus discolor)*** | Deciduous shrub; does not always spread aggressively | Fibrous, Moderate | Rooted plants to 2' tall in containers; bareroot 6"-12" tall | Produces attractive sprays of creamy-white flowers; will root spread |
| **Vine Maple *(Acer circinatum)*** | Deciduous shrub; does not always spread aggressively | Fibrous, Moderate | Rooted plants to 4' tall in containers; balled & burlapped plants to 10' tall | Large specimens widely available; spreads by root and seed |
| **Kinnickinick *(Arctostaphylos Uva-ursi)*** | Low-growing shrub; spreads to form a dense, evergreen carpet | Fibrous, Shallow | Rooted plants in containers | Widely available evergreen ground cover; tolerates salt spray |
| **Thimbleberry *(Rubus parviflorus)*** | Deciduous shrub; spreads by underground runners to form thickets | Fibrous, Shallow | Rooted plants in containers | May be difficult to find in some native plant nurseries |
| **Indian Plum *(Oemleria cerasiformis)*** | Deciduous shrub; spreads by underground stems to form open stands | Fibrous w/horizontal, underground runners, Shallow | Rooted plants to 4' in containers; bareroot 6'-8' tall | Male and female flowers are on separate plants; only female flowers produce the attractive "plums" |
| **Evergreen Huckleberry *(Vaccinium ovatum)*** | Evergreen shrub; does not spread | Fibrous, Shallow | Rooted plants to 2' tall in containers | Attractive but slow growing; difficult to establish; tolerates salt spray |
| **Nootka Rose *(Rosa nutkana)*** | Deciduous shrub; spreads by underground runners to form thickets | Fibrous, Shallow (not extensive) | Rooted plants to 2' tall in containers; bareroot to 18" tall; cuttings 12"-18" | Thickets of spring stems create a formidable barrier; produces attractive, pink flowers followed by large, red hips; tolerates salt spray |
| **Red Currant *(Ribes sanquineum)*** | Deciduous shrub; does not spread | Fibrous, Shallow (not extensive) | Rooted plants to 4' tall in containers; bareroot to 18" tall | One of our finest ornamental natives; produces clusters of white to red flowers |
| **Wax Myrtle *(Myrica californica)*** | Evergreen shrub; does not spread | Fibrous, Moderate | Rooted plants to 10' | Tolerates salt spray; high wildlife usage |
| **Native Plant Seed Mixes** | Annual and perennial grass and forb mixes available | Fibrous, Shallow | Seed | Woody plant seeds also available (success typically low); very slow to establish; avoid exotic commercial mixes; seed mixes typically used in conjunction with other vegetation plantings; typically short-term erosion control technique |

**Other Attributes**

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| **Name** | **Mature Size** | **Water Requirements** | **Light Requirements** | **Soil Requirements** | **Recommended Spacing** |
| **Red Alder** *(Alnus rubra)* | Height: 80'+ Spread: 40' | Moist conditions, No data | Full Sun | Any soil | 10'+ |
| **Pacific Willow** *(Salix lasiandra)* | Height: 40'+ Spread: 25' | Wet conditions, Usage high? | Full Sun | Any soil - tolerates shallow flooding during the growing season | 6'+ for rooted plants, 2' for whips or cuttings |
| **Scouler Willow** *(Salix scouleriana)* | Height: 30' Spread: 15' | Dry-moist conditions, Usage high? | Full Sun | Any soil | 6'+ for rooted plants, 2' for whips or cuttings |
| **Sitka Willow** *(Salix sitchensis)* | Height: 30' Spread: 25' | Moist conditions, Usage high? | Full Sun | Any soil | 6'+ for rooted plants, 2' for whips or cuttings |
| **Douglas Fir** *(Pseudotsuga menziesii)* | Height: 200'+ Spread: 50' | Dry-moist conditions, Usage moderate | Full Sun | Any soil | 10'+ |
| **Northern Black Cottonwood** *(Populus trichocarpa)* | Height: 100'+ Spread: 40' | Moist conditions, Usage high | Full Sun | Any soil - tolerates shallow flooding during the growing season | 6'+ for rooted plants; 2' for whips or cuttings |
| **Red-Osier Dogwood** *(Cornus stolonifera or Cornus sericea)* | Height: 20' Spread:20' | Moist-Wet, No data | Full Sun Sun/Shade | Any soil - tolerates shallow flooding during the growing season | 3'+ for rooted plants, 2' for cuttings |
| **Black Twinberry** *(Lonicera involucrata)* | Height: 10' Spread: 8' | Moist, No data | Full Sun | Any soil | 4'+ |
| **Ninebark** *(Physocarpus capitatus)* | Height: 15' Spread:10' | Moist, No data | Full Sun Sun/Shade | Any soil | 4'+ |
| **Cascara** *(Rhamnus purshiana)* | Height: 25' Spread: 15' | Moist, No data | Full Sun | Any soil | 4'+ |
| **Salmonberry** *(Rubus spectabilis)* | Height: 8' Spread: 6' | Moist, No data | Sun/Shade Full Shade | Any soil | 4'+ |
| **Hooker Willow** *(Salix hookeriana)* | Height: 20' Spread: 15' | Moist-Wet, No data | Full Sun | Any soil | 3'+ for rooted plants; 2' for cuttings |
| **Red Elderberry** *(Sambucus racemosa)* | Height: 15' Spread: 10' | Moist, No data | Full Sun Sun/Shade Full Shade | Any soil | 4'+ |
| **Douglas' Spiraea** *(Spiraea douglasii)* | Height: 8' Spread: 6" | Moist-Wet conditions, No data | Full Sun | Any soil - tolerates shallow flooding during the growing season | 3' for rooted plants; 2' for cuttings |
| **Snowberry** *(Symphoricarpos albus)* | Height: 4' Spread: 3' | Dry-moist conditions, No data | Full Sun Sun/Shade Full Shade | Any soil - tolerates shallow flooding during the growing season | 2'+ |
| **Salal** *(Gaultheria shallon)* | Height: 3' Spread: 3' | Dry-moist conditions, No data | Sun/Shade Full Shade | Any soil - tolerates shallow flooding during the growing season | 2'+ |
| **Ocean Spray** *(Holodiscus discolor)* | Height: 10'+ Spread: 6' | Dry-moist conditions, No data | Full Sun Sun/Shade | Any soil - tolerates shallow flooding during the growing season | 4'+ |
| **Vine Maple** *(Acer circinatum)* | Height: 15'+ Spread: 10' | Moist conditions, No data | Sun/Shade Full Shade | Any soil - tolerates shallow flooding during the growing season | 8'+ |
| **Kinnickinick** *(Arctostaphylos Uva-ursi)* | Height: 8" Spread: 6" | Dry conditions, No data | Full Sun | Any slightly acid soil | 2' |
| **Thimbleberry** *(Rubus parviflorus)* | Height: 4' Spread: 4' | Moist conditions, No data | Full Sun Sun/Shade | Any soil | 3' |
| **Indian Plum** *(Oemleria cerasiformis)* | Height: 10' Spread: 6' | Moist conditions, No data | Full Sun Sun/Shade Full Shade | Any soil | 4'+ |
| **Evergreen Huckleberry** *(Vaccinium ovatum)* | Height: 6' Spread: 3' | Dry-moist conditions, No data | Sun/Shade Full Shade | Slightly acid | 3'+ |
| **Nootka Rose** *(Rosa nutkana)* | Height: 6' Spread: 3' | Moist conditions, No data | Full Sun | Any soil, prefers rich soils | 3' |
| **Red Currant** *(Ribes sanquineum)* | Height: 8' Spread: 6' | Dry-moist conditions, No data | Full Sun Sun/Shade | Any soil | 6'+ |
| **Wax Myrtle** *(Myrica californica)* | Height: 15' Spread: 8' | Dry-moist conditions, No data | Full Sun Sun/Shade | Slightly acid, with organic matter | 10'+ |
| **Native Plant Seed Mixes** | Height: 1'-2' Spread: varied | Dry-wet conditions, Medium-high | Species/mix dependent | Species/mix dependent | Apply as recommended |

Table 3 based on information from: Myers Biodynamics staff experience;  
Binns, 1980; Stevens & Vanbianchi, 1993; Kruckeberg, 1982.

**Footnotes**

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| **Water Requirements** | **Light Requirements** | **Rooting Characteristics** | **Planting Condition** | **Comments** |
| **Dry** - Once established, tolerates dry soil conditions during the growing season | **Full Sun** - Requires sun throughout the day | **Fibrous** - Lacks a central root; root mass composed of fibrous lateral roots | Sizes given are those that are generally found in nurseries; other sizes may also be available | Growth rate; ornamental & wildlife value; wind/salt spray tolerance; maintenance; average life span |
| **Moist** - Requires moist soil throughout the growing season | **Sun/Shade**- Requires shade for about 1/2 the day | **Tap**- With a stout, central main root |  |  |
| **Wet**- Tolerates saturated soil year-round | **Full Shade**- Requires shade throughout the day | **Shallow, Moderate, Deep** refers to relative rooting depth (influenced by soil and groundwater conditions |  |  |
| **Usage**- Relative water uptake by plant [e.g., high or no data] |  |  |  |  |