

**Table F.5. Plant Species Appropriate for Rarely Inundated Areas of Bioretention Facility.**

Species   Common Name	Exposure	Mature Size	Time of Bloom	Comments
<b>Trees</b>				
<i>Arbutus unedo</i>   Strawberry tree	Sun/ partial shade	8 to 35 feet 8- to 20-foot spread	November – December	Tolerant of extremes; tolerant of urban/ industrial pollution; white or greenish white flowers.
<i>Calocedrus decurrens*</i>   Incense cedar	Sun	75 to 90 feet 12-foot spread		Tolerant of poor soils; drought tolerant after established; fragrant evergreen with a narrow growth habit; slow growing.
<i>Chamaecyparis obtusa</i>   Hinoki false cypress	Sun/ partial shade	40 to 50 feet 15- to 30-foot spread		Moist, loamy, well-drained soils; very slow growing; prefers sun, but tolerates shade; does not transplant well or do well in alkaline soils. Note there are many alternative varieties of false cypress of varying sizes and forms from which to choose.
<i>Cornus</i> spp.   Dogwood	Sun/ partial shade	20 to 30 feet 30-foot spread	May	Reliable flowering trees with attractive foliage and flowers; may need watering in dry season; try <i>C. florida</i> (Eastern dogwood), or <i>C. nuttallii*</i> (Pacific dogwood) or hybrid "Eddie's White Wonder." Also, <i>C. kousa</i> for small tree/ shrub that is resistant to anthracnose.
<i>Pinus mugo</i>   Swiss mountain pine	Sun/ partial shade	15 to 20 feet 25 to 30-foot spread		Prefers well-drained soil; slow growing, broadly spreading, bushy tree; hardy evergreen.
<i>Pinus thunbergiana</i>   Japanese black pine	Sun	To 100 feet 40-foot spread		Dry to moist soils; hardy; fast growing.
<i>Prunus emarginata*</i>   Bitter cherry	Sun/ partial shade	20 to 50 feet 20-foot spread	May – June	Dry or moist soils; intolerant of full shade; bright red cherries are attractive to birds; roots spread extensively.
<i>Prunus virginiana</i>   Choke cherry		15 to 25 feet 15- to 20-foot spread	Late spring – early summer	Dry or moist soils; deep rooting; attractive white fragrant flowers; good fall color.
<i>Pseudotsuga menziesii*</i>   Douglas-fir	Sun	100 to 250 feet 50- to 60-foot spread		Does best in deep, moist soils; evergreen conifer with medium to fast rate of growth; provides a nice canopy, but potential height will restrict placement.
<i>Quercus garryana*</i>   Oregon white oak	Sun	To 75 feet		Dry to moist, well-drained soils; slow growing; acorns.

**Table F.5 (continued). Plant Species Appropriate for Rarely Inundated Areas of Bioretention Facility.**

Species   Common Name	Exposure	Mature Size	Time of Bloom	Comments
<b>Shrubs</b>				
<i>Holodiscus discolor</i> *   Oceanspray	Sun/ partial shade	To 15 feet	June – July	Dry to moist soils; drought tolerant; white to cream flowers; good soil binder.
<i>Mahonia aquifolium</i> *   Tall Oregon grape	Sun/ partial shade	6 to 10 feet	March – April	Dry to moist soils; drought resistant; evergreen; blue-black fruit; bright yellow flowers; “Compacta” form averages 2 feet tall; great low screening barrier.
<i>Philadelphus lewisii</i> *   Mock-orange	Sun/ partial shade	5 to 10 feet	June – July	Adapts to rich moist soils or dry rocky soils; drought tolerant; fragrant flowers.
<i>Pinus mugo pumilio</i>   Mugo pine	Sun	3 to 5 feet 4- to 6-foot spread		Adapts to most soils; slow growing and very hardy; newer additions with trademark names such as “Slo-Grow” or “Lo-Mound” are also available.
<i>Potentilla fruticosa</i>   Shrubby cinquefoil	Sun	To 4 feet	May – September	Moist to dry soils; several cultivars available with varying foliage and flower hues; try “Tangerine” or “Moonlight.”
<i>Ribes sanguineum</i> *   Red-flowering currant	Sun/ partial shade	8 to 12 feet	March – April	Prefers dry soils; drought tolerant; white to deep-red flowers attract hummingbirds; dark-blue to black berries; thornless.
<i>Rosa gymnocarpa</i> *   Baldhip rose	Partial shade	To 6 feet	May – July	Dry or moist soils; drought tolerant; small pink to rose flowers.
<b>Shrubs – Evergreen</b>				
<i>Abelia x grandiflora</i>   Glossy abelia	Partial sun/ partial shade	To 8 feet 5-foot spread	Summer	Prefers moist, well-drained soils, but drought tolerant; white or faintly pink flowers.
<i>Arbutus unedo</i> “Compacta”   Compact strawberry tree	Sun/ partial shade	To 10 feet	Fall	Prefers well drained soils; tolerant of poor soils; good in climate extremes; white to greenish-white flowers; striking red-orange fruit.
<i>Cistus purpureus</i>   Orchid rockrose	Sun	To 4 feet	June – July	Moist to dry well-drained soils; drought resistant; fast growing; reddish purple flowers.
<i>Cistus salvifolius</i>   White rockrose	Sun	2 to 3 feet 6-foot spread	Late spring	Moist to dry well-drained soils preferred, but can tolerate poor soils; tolerant of windy conditions and drought; white flowers.
<i>Escallonia x exoniensis</i> “fradesii”   Pink Princess	Sun/ partial sun	5 to 6 feet	Spring – Fall	Tolerant of varying soils; drought tolerant when established; pink to rose colored flowers; good hedge or border plant; attracts butterflies.

**Table F.5 (continued). Plant Species Appropriate for Rarely Inundated Areas of Bioretention Facility.**

Species   Common Name	Exposure	Mature Size	Time of Bloom	Comments
<b>Shrubs – Evergreen (continued)</b>				
<i>Osmanthus delavayi</i>   Delavay osmanthus	Sun/ partial shade	4 to 6 feet	March – May	Tolerant of a broad range of soils; attractive foliage and clusters of white fragrant flowers; slow growing.
<i>Osmanthus x burkwoodii</i>   Devil wood	Sun/ partial shade	4 to 6 feet	March – April	Drought tolerant once established; masses of small, white fragrant flowers.
Rhododendron   “PJM” hybrids	Sun/partial shade	To 4 feet	Mid – late April	Moist to fairly dry soils; well drained organic soil; lavender to pink flowers.
<i>Stranvaesia davidiana</i>	Sun	6 to 20 feet	June	Moist soils; white flowers in clusters; showy red berries.
<i>Stranvaesia davidiana</i>   undulata	Sun	To 5 feet	June	Moist soils; lower growing irregularly shaped shrub; great screening plant.
<i>Vaccinium ovatum</i> *   Evergreen huckleberry	Partial shade/ shade	3 to 15 feet	March	Moist to slightly dry soils; small pinkish-white flowers; berries in August.
<b>Groundcover – Evergreen</b>				
<i>Arctostaphylos uva-ursi</i> *   Kinnikinnik	Sun/ partial shade		April – June	Prefers sandy/rocky, well-drained soils; flowers pinkish-white; bright red berries; slow to establish; plant closely for good results.
<i>Gaultheria shallon</i> *   Salal	Partial shade/ shade	3 to 7 feet	March – June	Dry and moist soils; white or pinkish flowers; reddish-blue to dark-purple fruit.
<i>Fragaria chiloensis</i> *   Wild/coastal strawberry	Sun/ partial shade	10 inches	Spring	Sandy well drained soils; flowers white; small hairy strawberries; evergreen; aggressive spreader.
<i>Helianthemum nummularium</i>   Sunrose	Sun	To 2 feet 2-foot spread	May – July	Prefers well-drained soils, but will tolerate various soils; low-growing, woody sub shrub; many varieties are available with flowers in salmon, pink, red, yellow and golden colors.
<i>Lavandula angustifolia</i>   Lavender	Sun/ partial shade	To 1.5 feet	June – August	Adaptable to various soils; blue, lavender, pink to white flowers, semi-evergreen aromatic perennial.
<i>Mahonia nervosa</i> *   Cascade Oregon grape/ Dull Oregon grape	Partial shade/ shade	To 2 feet	April – June	Dry to moist soils; drought resistant; evergreen; yellow flowers; blue berries.

**Table F.5 (continued). Plant Species Appropriate for Rarely Inundated Areas of Bioretention Facility.**

Species   Common Name	Exposure	Mature Size	Time of Bloom	Comments
<b>Groundcover – Evergreen (continued)</b>				
<i>Mahonia repens</i>   Creeping mahonia	Sun/ partial shade	3 feet	April – June	Dry to moist soils; drought resistant; yellow flowers; blue berries; native of eastern Washington.
<i>Penstemon davidsonii</i> *   Davidson's penstemon	Sun	To 3 inches	June – August	Low-growing, evergreen perennial; prefers well-drained soils; drought tolerant; blue to purple flowers.
<b>Perennials and Ornamental Grasses</b>				
<i>Achillea millefolium</i> *   Western yarrow	Sun	4 inches to 2.5 feet	June – September	Dry to moist, well-drained soils; white to pink/reddish flowers; many other yarrows are also available.
<i>Anaphalis margaritaceae</i>   Pearly everlasting	Sun/ partial shade	To 18 inches		Drought tolerant perennial; spreads quickly; attracts butterflies.
<i>Bromus carinatus</i> *   Native California brome	Sun/ partial shade	3 to 5 feet		Dry to moist soils; tolerates seasonal saturation.
<i>Carex buchannii</i>   Leather leaf sedge	Sun/ partial shade	1 to 3 feet		Prefers well-drained soils; copper- colored foliage; perennial clumping grass; tolerant of a wide range of soils; inconspicuous flowers.
<i>Carex comans</i>   "Frosty curls" New Zealand hair sedge	Sun/ partial shade	1 to 2 feet	June – August	Prefers moist soils; finely textured and light green; compact, clumping perennial grass; drought tolerant when established; inconspicuous flowers.
<i>Coreopsis</i> spp.   Tickseed	Sun	1 to 3 feet		Dry to moist soils; drought tolerant; seeds attract birds; annual and perennial varieties; excellent cut flowers.
<i>Echinacea purpurea</i>   Purple coneflower	Sun	4 to 5 feet		Prefers well drained soils; hardy perennial; may need occasional watering in dry months.
<i>Elymus glaucus</i> *   Blue wildrye	Sun/ partial shade	1.5 to 5 feet		Dry to moist soils; shade tolerant; rapid developing, but short lived (1 to 3 years); not good lawn grass.
<i>Dicentra formosa</i> *   Pacific bleeding- heart	Sun/shade	6 to 20 inches	Early spring – early summer	Moist, rich soils; heart-shaped flowers.
<i>Erigeron speciosus</i> *   Showy fleabane	Sun/ partial shade	To 2 feet	Summer	Moist to dry soils; dark violet or lavender blooms; fibrous roots.
<i>Festuca ovina</i> "Glaucous"   Blue fescue	Sun/ partial shade	To 10 inches	May – June	Prefers moist, well-drained soils; blue- green evergreen grass; drought tolerant; shearing will stimulate new growth.

**Table F.5 (continued). Plant Species Appropriate for Rarely Inundated Areas of Bioretention Facility.**

Species   Common Name	Exposure	Mature Size	Time of Bloom	Comments
<b>Perennials and Ornamental Grasses (continued)</b>				
<i>Festuca idahoensis</i> *   Idaho fescue	Sun/ partial shade	To 1 foot		Bluish-green bunching perennial grass; drought tolerant.
<i>Fragaria vesca</i> *   Wood strawberry	Partial shade	To 10 inches	Late spring – early summer	Dry to moist soils; white flowers.
<i>Gaura lindheimeri</i>   Gaura	Sun	2.5 to 4 feet		Perennial; fairly drought tolerant and adaptable to varying soil types; long blooming period.
<i>Geum macrophyllum</i> *   Large-leaved avens	Sun/ partial shade	To 3 feet	Spring	Moist, well-drained soil; bright yellow flowers; other <i>Geum</i> cultivars available, some of which may require supplemental watering.
<i>Geranium maculatum</i>   Spotted geranium	Sun/shade	To 1.5 feet	July	Moist, well-drained soils; low perennial; pale pink, blue to purple flowers.
<i>Geranium sanguineum</i>   Cranesbill	Sun/ partial shade	To 1.5 feet	May – August	Moist soils; deep purple almost crimson flowers.
<i>Helichrysum italicum</i>   Curry plant	Sun	To 2 feet	Summer	Moist or dry soils; hardy evergreen perennial; a good companion to lavender; bright yellow flowers; fragrant.
<i>Helictotrichon sempervirens</i>   Blue oat grass	Sun/ partial shade	1 to 1.5 feet	June – August	Tolerant of a variety of soil types but prefers well-drained soil; clumping bright blue evergreen grass; bluish white flowers.
<i>Hemerocallis fulva</i>   Daylilies	Sun/ partial shade	1 to 4 feet	Summer	Tolerant of a variety of soil types; easy to grow and tolerant of neglect; hardy perennial; entire plant is edible.
<i>Heuchera americana</i>   Coral bells (alumroot)	Sun/ partial shade	1 to 2 feet	June – August	Moist to dry, well-drained soils; never wet; easily transplantable perennial; red, greenish-white flowers; may need supplemental watering in dry season.
<i>Heuchera micrantha</i>   “Palace purple” (alumroot)	Sun/ partial shade	1 to 2 feet	June – August	Moist, well-drained soils; bronze to purple foliage in shade; small, yellowish- white flowers; perennial, evergreen; a number of other species and varieties are available. Try <i>H. sanguinea</i> for bright red flowers.
<i>Lupinus</i> * spp.   Lupines	Sun	3 to 5 feet	March – September	Moist to dry soils; various native varieties; blue to purple, violet to white flowers; both native and nonnative varieties.

**Table F.5 (continued). Plant Species Appropriate for Rarely Inundated Areas of Bioretention Facility.**

Species   Common Name	Exposure	Mature Size	Time of Bloom	Comments
<b>Perennials and Ornamental Grasses (continued)</b>				
<i>Lupinus bicolor</i> *   Two-color lupine	Sun	4 inches to 1.5 feet	Spring	Dry gravelly soils; small-flowered; annual.
<i>Lupinus latifolius</i> *   Broadleaf lupine	Sun	To 1 foot	June – August	Dry to moist soils; perennial; bushy herb; bluish flowers.
<i>Lupinus polyphyllus</i> *   Large-leafed lupine	Sun	To 3 feet	Spring – summer	Dry to moist, sandy to gravelly soils; perennial.
<i>Maianthemum dilatatum</i> *   False lily-of-the- valley	Partial shade/ shade	3 to 12 inches	Spring	Prefers moist soils; small, white flowers; light-green to red berries.
<i>Pennisetum alopecuroides</i>   Fountain grass	Sun/ partial shade	1 to 2 feet	August – September	Moist, well-drained soils; tolerant of many soil types; clump-forming grasses. A number of varieties are available in different heights and bloom times. Try <i>P. caudatum</i> (White-flowering fountain grass) and <i>P. alopecuroides</i> cultivars “Hameln” and “Little Bunny” (Dwarf fountain grass).
<i>Pennisetum orientale</i>   Oriental fountain grass	Sun/ partial shade	1 to 3 feet	June – October	Prefers moist, well-drained soils; somewhat drought tolerant; small clumping, blooming grass, showy pink flowers; fountain grasses will benefit from annual shearing in late winter/early spring, but not required.
<i>Penstemon fruticosus</i>   Shrubby penstemon	Sun	8 to 10 inches	May	Prefers well-drained soils; evergreen perennial; drought tolerant; violet-blue flowers 1-inch long attract hummingbirds.
<i>Polystichum munitum</i> *   Swordfern	Partial shade/ deep shade	2 to 4 feet		Prefers moist, rich soil conditions, but drought tolerant; large evergreen fern.
<i>Potentilla gracilis</i> *   Graceful cinquefoil	Sun	1 to 2 feet	July	Moist to dry soils; yellow flowers.
<i>Rudbeckia hirta</i>   Black-eyed Susan	Sun/ partial shade	3 to 4 feet	Summer	Moist to dry soils; showy flowers, hardy and easy to grow; several other varieties are available.
<i>Smilacina racemosa</i> *   False Solomon’s seal	Partial sun/ shade	1 to 3 feet	April – May	Moist soils; creamy white flowers; red berries.

\*Denotes native plant species.