



Low-Maintenance Tips

For Installing & Planting Raingardens

Plants

- Have copies of the original plant list and planting plan for each raingarden so you can reference it when doing maintenance.
- Pictures of desired plants and common weeds can be passed out to volunteers. To make it easier for volunteers to help with weeding and maintenance, it would be good to plant species that very clearly do not resemble common weeds.
- Raingardens should be planted with climate adapted species that are drought tolerant after the first two to three summers following planting. Invasive species should be avoided.
- Rain gardens have three planting zones.
 - Zone 1 is the bottom of the rain garden—the wettest area.
 - Zone 2 covers the side slopes, which occasionally may become wet. This zone requires plants to help stabilize the slopes.
 - Zone 3 covers the area around the perimeter of the rain garden and/or on the berm, where plants will grow in drier soil. This is also a zone where the raingarden can most resemble the landscaping around the rest of the site so picking plants already in the landscape will help tie the rain garden into the rest of the site design.
- Always keep in mind the mature size of the plant when selecting plants for the rain garden. Putting plants in that will not outgrow the area into walkways, parking stalls and driveways creates less maintenance. Keep in mind that all plants are relatively small when they are bought from the nursery. Be conservative. Raingarden soil mixtures can allow plants to grow larger than normal.
 - For example, Arctic Blue Dwarf Willows grow to a mature height and width of 8-10 feet. When these are planted in raingardens next to curbs, parking spaces and walkways, they will require constant pruning. A more appropriate plant, shrub or tree for these areas would have a mature size of roughly 4 feet by 4 feet.
- Selecting which plants to use in your raingarden will vary based on the site and users of that raingarden. Some plants will be preferred to others based on aesthetics or local growing conditions. For a full list of plants that are known to do well in raingardens, refer to the [Raingarden Handbook for Western Washington](#). This resource also notes zones, size, preferred growing conditions, etc. and should be consulted when selecting plants.
- Plant selection should be done in conjunction with the administrative and maintenance staff in charge of the raingarden. This will allow maintenance staff to advise designers and landscape architects on which plants should be used and which should be avoided.
- Many schools discourage and/or disallow the use of berry- and fruit-producing plants on school property. Raingarden designers should receive explicit, written permission from both the administrative and maintenance staff before using berry- and/or fruit-producing plants.
- See the table (at end of document) for a list of plants that were identified by maintenance staff as preferable and not preferable for raingardens from a maintenance perspective.

Mulch

- A good mulch layer reduces maintenance needs in 3 ways:
 1. It helps retain soil moisture which means less watering is needed
 2. It creates a protective layer so that when weed seeds land on it, they can't put down roots very well
 3. Mulch makes weed pulling a bit easier when weeds do find their way into your garden
- Should be 2-3 inches deep and spread between and around plants. No bare soil should show.
- A thick layer of coarse mulch can help keep cats and other animals out of raingardens.
- Shredded or chipped wood is recommended. A good resource to find wood chips is www.chipdrop.in. Do not use grass clippings (high in nutrients) or bark (it floats and is often colored with dyes and sometimes treated with other chemicals).
- Replenish mulch as needed.

Weeding

- The first one or two years after installing a raingarden are the most important to control weeds and reduce maintenance. Early and frequent intervention during the first two years will reduce the maintenance needs for the raingarden in the future. This may require more initial weeding, so it is important to have a good weeding plan in the first several years.
- Spring is the best time to weed when the soil is moist and when weeds are small. It is very important to remove weeds by the root before they seed. Once the weed is removed, "fluff up" the mulch from the area and cover the bare soil.
- Monitor your raingarden regularly for weeds. Common weeds in Western Washington raingardens include dandelions, Himalayan blackberry, morning glory (also known as bindweed), lawn grass, and buttercup. Having a visual guide for these plants will help students and volunteers more easily participate in weeding.
- Maintain ground cover, such as a thick layer of mulch. This will help prevent weed growth.

Watering

- For the first summer, plants should be watered deeply to encourage plant roots to grow deep (top 6-12 inches of soil is moist): once per week from May through September.
- For the second summer, plants should be watered deeply (top 6-12 inches of soil is moist) and less frequently: once every two weeks (a little more in the hottest weeks and less in the cooler weeks).
- By the third summer, plants should be fairly well established, but may need water every 4 to 6 weeks and during the driest times. Assess the plants for heat stress and water only when they show stress.

Armoring

- Where water enters the rain garden from a swale or pipe (inflow), and where water exits at the overflow, place a pad of flat rocks to slow the water and guard against erosion.
- For both the inflow and overflow, use rock (cobble or river rock) that is a minimum 2 inches in diameter. The rock should be free of sediment, so order washed rock. Round rocks can more easily roll and be washed away from water flow, so look for irregular-shaped and/or flat rocks if possible.
- If the overflow is through a berm, be particularly careful to stabilize (or armor) the overflow with extra rock. If erosion appears to be a recurring problem, extend the rock all the way down the slope and a minimum of 4 feet beyond the berm to prevent additional erosion.

Edging

- Edging will help separate the rain garden from other surrounding landscapes and reduce encroachment of lawn into the rain garden. To reduce maintenance needs, avoid placing a raingarden where it will be surrounded by a lawn when possible. If it is not possible, hard edges can help reduce encroachment.
- You may be able to avoid the need for edging by locating the rain garden away from a lawn area or converting the landscaping around the rain garden into other sustainable landscape options such as additional shrubs, groundcovers, or garden spaces. Ideally, the landscape around raingardens will be designed in a way that ties the raingarden to already landscaped areas. "Island raingardens" (those placed with hard edges in a lawn) are discouraged because of high maintenance needs.
- For raingardens that are placed in a lawn, cutting a sharp line between the rain garden edge and the lawn with a spade during the growing season can help prevent grass from spreading into the rain garden. These raingardens should also have hard edges to reduce grass invasion. Hard edges include curvilinear concrete curbing, unit pavers, flagstone, metal, and other materials.

Table 1 - Raingarden plants known to have low and high maintenance needs.

	Scientific Name	Common Name	Zone	Mature Size (height & width)	Notes
Plants known to have low maintenance needs	<i>Acorus calamus</i>	Sweet flag	2, 3	H: 24" W: 18 – 24"	
	<i>Acorus gramineus</i>	Golden variegated sweet flag	1, 2	H: 10" W: 4" – 6"	
	<i>Festuca glauca</i>	Blue fescue	3	H: up to 12" W: Up to 12"	Like most grasses, it can get ragged looking in the wintertime. Rake out the dead parts.
	<i>Juncus acuminatus,</i>	Taper-tipped rush	1	H: 6" – 18" W: 12" – 24" spreading	
	<i>Juncus ensifolius,</i>	Dagger-leaf rush	1	H: 6 – 15" W: 6" – 9" spreading	
	<i>Juncus patens</i>	Spreading rush	1, 2	H: 12" – 24" W: 18" – 24" spreading	
	<i>Juncus tenuis</i>	Slender rush	1, 2	H: 6" – 20" W: 6" – 30"	
	<i>Nepeta x faassenii</i>	Catmint	3	H: 12" W: 18" – 24"	If used, do so in a small amount (can spread quickly)
	<i>Gaultheria shallon</i>	Salal	2, 3	H: 2' – 5' W: 5' spreading	Berry-producing plant
	<i>Ribes sanguineum</i>	Red flowing currant	2, 3	H: 6' – 12' W: 4' – 10'	Berry-producing plant
	<i>Rubus spectabilis</i>	Salmonberry	1, 2, 3	H: 5' – 10' W: 10' spreading	Berry-producing plant
	<i>Symphoricarpos albus</i>	Snowberry	2, 3	H: 2' – 6' W: 6' spreading	Berry-producing plant Can spread. Cut to ground in winter to maintain size.
	<i>Symphoricarpos x doorenbosii</i>	Coralberry	2, 3	H: 4' – 6' W: 4' – 6'	Berry-producing plant Can spread. Cut to ground in winter to maintain size.
	<i>Arctostaphylos uva-ursi</i>	Kinnikinnick	2, 3	H: 6" – 12" W: 24" – 36" spreading	Berry-producing plant
	<i>Aster modestus</i>	Great northern aster	2, 3	H: 12" – 42" W: 36"	Asters in raingardens tend to grow large, so plan accordingly
	<i>Symphyotrichum chilense</i>	Pacific aster	2	H: 18" – 36" W: 36"	Asters in raingardens tend to grow large, so plan accordingly
	<i>Symphyotrichum subspicatum</i>	Douglas aster	1, 2, 3	H: 18" – 36" W: 36" spreading	Asters in raingardens tend to grow large, so plan accordingly
	<i>Gaultheria procumbens</i>	Wintergreen	1, 2	H: 6" – 12" W: 12" – 36" spreading	This is not in the Raingarden Handbook for Western Washington but it was recommended for use.

	<i>Thymus praecox</i>	Creeping red thyme	2, 3	H: 3" – 6" W: 12" – 30" spreading	This is not in the Raingarden Handbook for Western Washington but it was recommended for use.
	<i>Cornus Sanguinea</i>	Bloodtwig dogwood	1, 2, 3	H: 5' – 6' W: 4' – 6'	Cutting back of old growth encourages colorful new growth
	<i>Cornus sericea</i>	Dwarf red-twig dogwood	1, 2, 3	H: 1.5' – 3' W: 3' spreading	Cutting back of old growth encourages colorful new growth. Make sure you select the "dwarf" cultivar (the Latin name does not reflect this). Typical dogwoods will grow by large.
	<i>Salix purpurea</i>	Dwarf blue arctic willow	1	H: 5' – 8' W: 5' – 8'	
Plants known to have high maintenance needs	<i>Fragaria chiloensis</i>	Coastal strawberry	2, 3	H: 6" – 10" W: 36" spreading	Spreads aggressively and can spread outside of raingarden. May be appropriate for use in well-contained raingardens (i.e. surrounded by pavement or in a planter)
	<i>Carex obnupta</i>	Slough sedge	1, 2	H: 12" – 36" W: Up to 48" spreading	Spreads aggressively and can spread outside of raingarden. May be appropriate for use in well-contained raingardens (i.e. surrounded by pavement or in a planter)
	<i>Aquilegia formosa</i>	Western columbine	2, 3	H: 12" – 36" W: 12" – 36"	Can jump out of raingarden. Dies back in winter. Resembles weed when it first emerges
	<i>Camassia sps.</i>	Camas grasses	2, 3	H: 18 – 48" W: 12 – 24" (depending on species)	Die back in winter.
	<i>Deschampsia cespitosa</i>	Tufted hair grass	2, 3	H: 6" – 12" W: 6" – 12"	Not attractive
	<i>Dicentra formosa</i>	Western bleeding heart	2, 3	H: 8" – 12" W: 24"	May be too delicate for school raingardens if not protected from foot traffic.
	<i>Hesperantha coccinea</i>	Crimson flag	1, 2, 3	H: 18" – 24" W: 18" – 24"	Invasive
	<i>Rudbeckia hirta</i>	Black eyed Susan	3	H: 12" – 36" W: 12" – 36"	Spread via rhizomes. Can be aggressive.
	<i>Trillium ovatum</i>	Western trillium	2, 3	H: Up to 18" W: 12"	Die back in winter.