

RAINWATER GARDENS

AND THE STEPS TO CREATE YOUR OWN AT HOME

A rainwater garden is a vegetated area of your lawn with a primary purpose of collecting stormwater that flows off your lawn, roof, and driveway. These gardens are found in low laying areas of your property and consist of plants that can tolerate large amounts of stormwater. These gardens vary in size and can be created within small pockets of space in your yard.



DID YOU KNOW?

A rainwater garden can absorb over 30% more water into the ground compared to a traditional turf lawn.

CREATING YOUR OWN: HOW TO GET STARTED

STEP 1:

Select the Location

- Must be least three metres away from the foundation of your home or any neighbouring property, and nine metres from a low spot.
- Plant in a low laying area on your property where stormwater naturally accumulates.
- Make sure land is relatively flat and avoid steep slopes that could cause a potential landslide.
- Avoid areas with poor drainage.
- Choose areas that can feed your rainwater garden, like a downspout or rain barrel.

Determine Where the Water Will Come From

- You can redirect water from your downspout to your rain garden.
- You can use decorative rocks, or a trench lined with plants to redirect the water towards your garden.
- You can channel water towards your garden using an overflow pipe.

STEP 2:

Sizing Your Garden and Basin

- Determine your garden's size depending on the amount of water flow and space available. Your garden should be roughly 20-30% of the area that drains into it, and about 15 to 30 cm (6 to 12 in) deep.
- **Sizing your basin:** The basin will collect water, so dig it according to the intended depth and shape.

STEP 3:

Dig Your Rain Garden

- **Prepare the site:** There are different methods to remove grass before planting the new garden. Do some research to find the way that best suits you.
- **Excavate the garden:** Angle the sides of the basin to create a slight slope toward the center. Keep some of the removed soil to fill up the garden bed later.

STEP 4:

Prepare the Soil

- Use a combination of 25% compost, 25% removed soil from excavation, and 50% sand, to ensure proper drainage.



SIDE VIEW OF THE GARDEN WITH EACH PLANT AT ITS MAXIMUM FLOWERING SIZE



- Fill the hole in 15 to 18 cm (6 to 7 in) layers, lightly patting down each layer to prevent compacting.
- Add 55 to 60 cm (22 to 24 in) of soil, leaving a maximum of 25 to 30 cm (10 to 12 in) for plants, mulch, and water.
- Add rocks for erosion control at the entry points and overflow areas.

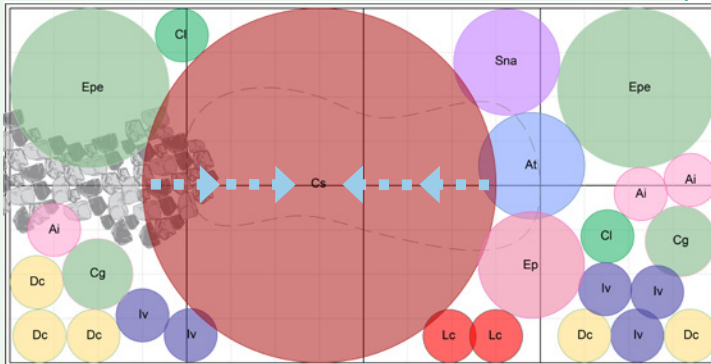
Test drainage

- Fill a test hole with water and make sure the soil drains well (should drain within 24 hours). Add sand or compost if needed.

STEP 5: Time to Plant!

- **Arrange your garden and plant:**
Create a desired layout and then plant the vegetation. The visualization and recommended plants list below can help guide you for the layout of your rainwater garden.

- **Add mulch:** Apply 6 to 10 cm (2 to 4 in) of mulch to retain moisture, suppress invasive plants, and improve filtration.



EXAMPLE OF PLANT ARRANGEMENT IN A GARDEN MEASURING 4 M X 2 M (12 FT X 6 FT)
(Each little grid square is 25 cm)

Select plants from the recommended list based on sun exposure and staggered flowering (early spring to fall).

LIST OF PLANTS USED

Epe	<i>Eupatorium perfoliatum</i> Boneset	Cs	<i>Cornus sericea</i> Red Twig Dogwood
Dc	<i>Deschampsia cespitosa</i> Tufted Hair Grass	Lc	<i>Lobelia cardinalis</i> Cardinal Flower
CL	<i>Chamanthium latifolium</i> Northern Sea Oats	Cg	<i>Chelone glabra</i> White Turtlehead
Iv	<i>Iris versicolor</i> Blue Flag Iris	Sna	<i>Symphyotrichum noae-angliae</i> New England Aster
Ai	<i>Asclepias incarnata</i> Swamp Milkweed	At	<i>Amsonia tabernaemontana</i> Blue Star
		Ep	<i>Eutrochium purpureum</i> Joe-Pye Weed

STEP 6: Maintain Your Garden

- Manually water your garden every few days for the first month, followed by periodic manual watering during dryer periods for the first full season. If you are using a mechanical or automatic sprinkler system, be sure to respect the municipal watering periods.
- Monitor erosion by checking the entry point and overflow areas. Add more rocks as needed.
- Regularly remove invasive species until the new plants establish.
- Add mulch if it is less than 6 cm (2 in) and replace any dead plants.
- Ensure your rain garden drains within 24 hours (maximum 48 hours after a heavy rainfall) to prevent standing water.

Scan to access list of suggested plants for rainwater gardens, and learn more about other types of gardens.



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