



WHAT IS A RAIN GARDEN?

A rain garden is a flower garden that captures runoff from rain that falls on roofs, driveways or yards. A rain garden is a depression or a shallow bowl made in the landscape that is level from side to side and end to end. Runoff that travels to your rain garden is temporarily ponded - but it doesn't stay ponded for long. Capturing runoff in a rain garden allows water to infiltrate into the soil rather than running into streets and storm drains. Dirty runoff that enters storm drains is sent directly into "receiving waters" - our rivers, streams, lakes, ponds, or wetlands.

HOW TO BUILD A RAIN GARDEN

Location

1. **Location is Critical** Proper location is one of the most important components of successful rain garden installation. The first step in planning a rain garden is walking a property during a rainfall event. Get out in the rain, and watch how runoff moves on the site. You have to locate a rain garden so that runoff moves to it. If you have a low spot where water ponds, it might be a good site for a rain garden - but maybe not. If you have a spot that ponds water for an extended period of time (i.e. long enough to kill grass) it does not percolate well enough for a rain garden to work properly. A rain garden should impound water for about 12 hours (maybe up to 24 hours). You **do not want** water standing in a rain garden for an extended period of time.
2. **Call "Iowa One Call" at 800-292-8989** to request assistance locating utilities. Call at least 48 hours before you want to start installing a rain garden.

Installation

1. Lay out the shape of the rain garden on the contour – that is across the slope. Long and narrow rain gardens are recommended, so make the long sides lay across the slope and have the narrow ends running up and down the slope.
2. It is important that the rain garden be level from side to side and end to end so that water infiltrates uniformly across the bottom of the rain garden. If you're building on a slope, you'll have to excavate to get a level surface in the rain garden.
3. Excavate subsoil and use it as fill material to create a berm on the lower edge of the rain garden.
4. You want the berm compacted
5. If you want to impound 6 inches of water, you'll have to build a berm 8 inches high on the lower edge of the rain garden. Leave one end or both ends of the rain garden 2 inches below the berm to serve as an overflow outlet.
6. The cut slope on the upper edge of the rain garden should be sloped back to a stable slope.

Plants

Native plant species are recommended for rain gardens. Typically the border will be a low growing grass, such as blue or hairy grama or sideoats grama if using natives. On the floor of the rain garden plant a variety of species that bloom throughout the growing season. Plant clumps of each species, with spacing of 1 to 1.5 feet apart. Select lower growing native plants that don't grow more than 3- 4 feet high.

Mulch

Use a 2 – 3 inch layer of shredded hardwood mulch.

How Much Will it Cost?

Cost of a rain garden will depend on its size and complexity. Obviously, if you're on a steep slope and are using a retaining wall system your costs will be higher than if you're installing a simple cut/fill rain garden on gentle slopes.

Tools List (for installation of rain garden by a homeowner)

- Clam shell post hole digger
- Shovel
- Rakes
- Rope
- Wooden stakes
- Flags
- String
- A carpenter's level
- Tape measure
- Materials for killing existing vegetation (Round-up, plastic, cardboard, etc.)
- Work gloves
- Wheel barrow
- Rototiller (not required unless amending soil)