



CITY OF OWATONNA RAIN GARDEN CONSTRUCTION GUIDE



Every rain garden is different, but here is a general step-by-step guide for constructing a rain garden.

1. **Call Gopher State One** (1-800-252-1166) and your irrigation installer to stake the location of underground utilities and irrigation lines near your raingarden site. You may need to adjust the rain garden location if utilities are found below your rain garden location.
2. **Prepare site:**
 - a. **Spray paint** or lay a rope around the outline of the proposed rain garden.
 - b. **Remove the sod.** A mechanical sod cutter works best. Roll it up and save it for patching up bare spots.
 - c. **Loosen soil 6" - 12" deep.** A large 8hp rear tine tiller makes this much easier!
 - d. **Remove the soil 4" lower than your intended garden depth to accommodate adding and tilling in 3" of compost.** For example, if you want a 3" deep rain garden on flat land, dig the depression 7" below the surrounding grade. Use the excess soil elsewhere on your property (raised bed garden?) or haul away.
 - e. **Add 3" of compost and till** into the soil. Compost loosens up the soil, helping water infiltrate faster. Adding 3" of compost and tilling the garden bed will raise the depth 4" or more.
 - f. **Make sure there is an outlet** to the rain garden that is lower than the inlet (unless using a pop-up drain). If there is a high flow of water entering the rain garden, put the outlet close to the inlet so when the rain garden is full it can easily reroute itself out of the garden and into a proper drainage path.
3. **Add 3" of shredded hardwood mulch** to the garden. High quality shredded hardwood mulch is stringy and gets tangled easily, and should hold together if squeezed into a ball (or stick to a fleece jacket!). Unlike wood chip mulch, shredded hardwood mulch should stay put on the bottom of the rain garden during times of temporary ponding.
4. **Lay out potted plants** in desired locations. This is your chance to make final adjustments to your design.
5. **Dig in and plant the native plants!** Break up the root balls before planting and after planting be sure compress the soil surrounding the plants to allow good soil to root contact.
6. **Water the garden** immediately after planting and at least twice a week for the next month or two. Potted plants, especially small pots and plugs, dry out quickly with full sun and wind. After the first season no additional water should be needed—native plants with their deep roots can handle droughts.
7. **Connect your water sources** (down spouts and/or sump pump outlets) to the raingarden. If using a pipe, extend it underground or overland, or create a dry creek bed by digging a shallow, rock-lined trench that drains water to the raingarden.
8. **Weed the rain garden** two to three times per growing season or as needed.
9. **Remove dead vegetation** each spring with hedge clippers or a weed whacker and compost it. Driving lawn mowers on the rain garden will compact the soil and reduce water infiltration rates.
10. **Replace mulch as needed.** In 2-3 years the native perennial plants should spread to empty areas so that mulching is no longer required. The closer you plant, the faster the garden fills out.
11. **Dividing perennial plants** with a spade every 5-7 years makes the plants healthier and more vigorous. It also means free plants for you and your friends!