

Homeowner **Guide:** Installing a **Raingarden** for Cleaner **Lakes and Rivers**



This document is intended to help property owners determine where to put a raingarden as well as plan for installation and planting. Additional assistance can be found through the Landscaping for Clean Water workshops offered each year through the Dakota County Soil and Water Conservation District.

A Raingarden is a shallow depression that captures and filters dirty stormwater from hard surfaces and soaks the water into the ground, thereby stopping pollutants from entering our streams, lakes, ponds, and wetlands while also recharging groundwater.



Step 1: Draw a Base Map of Your Property

Using graph paper, draw your house and property lines. Pick a scale for the graph paper that fits your lot, such as 1 box = 2 feet or 1 box = 5 feet.

Aerial photos and property data is available through Dakota County. For information, go to: <http://gis.co.dakota.mn.us/dcgis/>

Step 2: Add Details to the Base Map

- Existing buildings and structures (showing roof ridges & downspout locations).
- Hard surfaces (driveways, sidewalks, patios, etc.) and which way water flows off them
- Existing substantial vegetation (trees and shrubs).
- Landscape areas (retaining walls, shrub & perennial beds, etc.).
- Nearby storm-drains / drainage-ways (street stormwater catch basins).
- Existing topography / slopes (how much does the grade drop in 10 feet/20 feet).

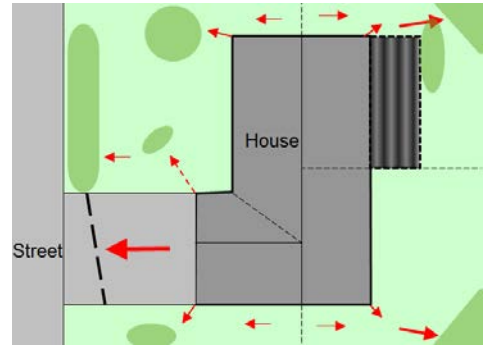
Step 3: Locate Utilities and Easements

Call Gopher State One-Call at 800-252-1166 and request locations for all buried utilities (electrical, gas, phone, cable, etc.) and add them to your map. Locate any irrigation lines, sprinkler heads, invisible fencing and drainage easements.



Step 4: Identify Potential Locations for Raingardens

On your base map, draw where water flows: Does it “sheet-flow” evenly across the property or is it concentrated in certain areas? Can a large amount be captured from a downspout? Plan around areas used for recreation or pathways. Identify views to screen or accent with plantings. *Raingardens should be kept 10-15’ away from basements.



Step 5: Identify Sun Exposure

Choosing plants is often based on the amount of sun they can tolerate. Observe your yard on a sunny day and label your potential raingarden areas based on sun exposure by the following:

- Full sun: At least 6 full hours of direct sunlight
- Partial sun: 3–6 hours of sun each day, preferably in the morning and early afternoon
- Full shade: Less than 3 hours of direct sunlight each day

Step 6: Test the Soils Ability to Soak in Water

After locating all underground utilities and finding an area for a raingarden, test the soil. A simple test of a soils ability to soak in water is to dig a 1’x1’ wide hole 10 inches deep and fill it with water; wait one hour and fill it again, if the water disappears within 48 hours, the site is likely suitable for a rain garden.

Step 7: Plant Selection

Pick attractive plants that you like. Keep in mind the sun exposure and choose plants accordingly. Consider choosing native plants which are suited for the climate of Minnesota.

A raingarden is not a wetland and is not intended to hold water permanently. Plants that can handle both wet and dry conditions best.

Some options for plant suppliers are provided on the Minnesota Department of Natural Resources website at the following webpage: <http://www.dnr.state.mn.us/gardens/nativeplants/suppliers.html>



Step 8: Install Your Raingarden!

The most crucial step is the installation of your project. Contact the Dakota County Soil and Water Conservation District (651) 480-7777 with questions regarding your raingarden plan or installation.

