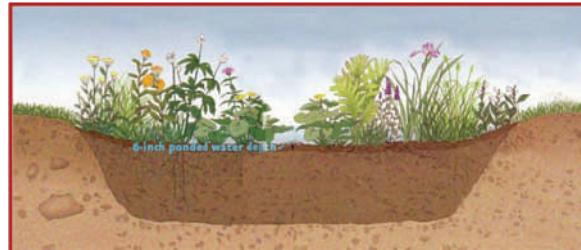


## Planning Your Rain Garden

- Map your property. Note topography, buildings, existing vegetation, location of downspouts, and other features. Determine where existing runoff flows through your yard.
- Calculate the area of impervious surface that drains to each downspout or runoff point. The rain garden should be about 10-20% of the size of the area it receives runoff from and 6-9" deep.
- Create a shallow swale or run drain tile from downspouts to your rain garden to ensure runoff is captured. The garden should be at least 10-15' from your foundation.
- Plan for a controlled overflow for large storm events.
- Choose a variety of native perennials, depending on soil and light conditions. Include at least 40% grasses and sedges to provide support for flower stems and interesting textures.



## Creating Your Rain Garden



- Locate utilities by calling Gopher One at 651-454-0002 or 1-800-252-1166.
- Lay out the shape of your garden using rope or a hose.
- Remove existing vegetation and sod by using a sod cutter, by hand or by spraying an herbicide. Dig a shallow depression with gently sloping sides.
- Add leaf compost and other soil amendments if needed.
- Construct a berm on the downhill side of the garden and cover with erosion control blanket to hold loose soil in place.
- Spread mulch at least 3" deep. Use double-shredded mulch. Avoid wood chips-they float away when water enters the garden.
- Install plants in groups for easy identification and greater visual impact. Water plants after installation.

## Maintaining Your Rain Garden

Your rain garden will need some maintenance for at least the first two years. Make sure your rain garden gets at least 1" of water per week for the first two months. If you need to water, give the garden one good soaking per week.

Lightly weed the garden once a month. Placing plant identification tags next to the plants may help you determine what is a weed and what is good.

In the spring, remove dead plant material.

### Technical Assistance

Expert assistance is available to homeowners wishing to determine the best methods for managing runoff on their property, including the best locations for rain gardens. Contact the Chisago Soil and Water Conservation District for assistance.

### Permits

Contact the MN Department of Natural Resources for information on required permits at <http://www.dnr.state.mn.us/permits/water> or call 763-689-7100. Permits may also be needed from cities/townships or watershed districts. Locate utilities before you dig (Gopher One-Call at 651-454-0002 or 1-800-252-1166).

### Additional Information

For more information on rain gardens, visit these resources:

- <http://clean-water.uwex.edu/pubs/>
- <http://www.bluethumb.org/>
- <http://www.dnr.state.mn.us/volunteer/mayjun04/raingardens.html>
- <http://www.ci.maplewood.mn.us/index.aspx?NID=456>
- <http://www.epa.gov/weatherchannel/stormwater.html>
- [http://www.raingardens.org/Rain\\_Garden\\_History.php](http://www.raingardens.org/Rain_Garden_History.php)
- <http://www.minnesotawildflowers.info/>
- <http://plants.usda.gov/>

Chisago SWCD Brochure Series



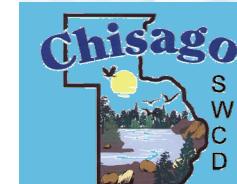
# RAIN GARDENS

Treating runoff at the source



Chisago Soil and Water Conservation District  
38814 Third Avenue  
North Branch, MN 55056  
(651) 674-2333  
[www.chisagoswcd.org](http://www.chisagoswcd.org)

Bringing Conservation to Chisago County



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# What is a rain garden?

● A rain garden is a basin designed to catch the first flush of runoff after a rain and infiltrate that water into the ground. Ninety percent of Minnesota's rain fall events are 1" or less and the first 1/2" of rainfall carries most of the sediment, excess nutrients and other pollutants to the nearest water body, reducing water quality. Rain gardens are designed to capture and infiltrate the average rainfall event.



● A rain garden is NOT a pond, water feature or a mosquito breeding hotspot. Rain gardens are designed to hold water for up to 36 hours, allowing the plants to take up the water and nutrients that have run into the garden. Mosquitoes require 5-7 days to complete their breeding cycle.



● A rain garden is a beautiful alternative to a perennial garden using Minnesota native plants. Native plants hold soil, slow or stop erosion, attract birds and butterflies, are hardy to our area and have deep roots that help infiltrate water.



Bottle gentian



Boneset



Black-eyed Susan

## Plants For Shady Sites

- \*\*Canada anemone *Anemone canadensis*
- \*\*Pennsylvania sedge *Carex pensylvanica*
- \*\*Lady fern *Athyrium angustum*
- \*\*Sensitive fern *Onoclea sensibilis*
- \*\*Cardinal flower *Lobelia cardinalis*
- \*\*Fox sedge *Carex vulpinoidea*
- \*\*Dwarf bush honeysuckle *Diervilla lonicera*
- \*\*Bottlebrush grass *Elymus hystrix*
- \*\*Wild geranium *Geranium maculatum*
- \*\*Sneezeweed *Helenium autumnale*
- \*\*Alumroot *Heuchera richardsonii*
- \*\*Highbush cranberry *Viburnum trilobum*
- \*\*Glossy black chokeberry *Aronia melanocarpa*
- \*\*Wild columbine *Aquilegia canadensis*
- \*\*Turtlehead *Chelone glabra*
- Bleeding heart *Dicentra spectabilis*
- Hosta cultivars *Hosta spp.*
- Astilbe cultivars *Astilbe spp.*

## Plants For Sunny Sites

- \*\*Butterfly weed *Asclepias tuberosa*
- \*\*Joe-pye weed *Eupatorium maculatum*
- \*\*Purple prairie clover *Dalea purpurea*
  - \*\*Flat-top aster *Aster umbellatus*
- \*\*Black-eyed Susan *Rudbeckia hirta*
- \*\*Wild bergamot *Monarda fistulosa*
  - \*\*Soft rush *Juncus effusus*
  - \*\*Rough blazing star *Liatris aspera*
    - \*\*Stiff goldenrod *Solidago rigida*
- \*\*Big bluestem *Andropogon gerardii*
  - \*\*Yarrow *Achillea millefolium*
  - \*\*Bottle gentian *Gentiana andrewsii*
    - \*\*Smooth blue aster *Aster laevis*
- \*\*Sideoats gramma *Bouteloua curtipendula*
  - \*\*Golden Alexanders *Zizia aurea*
- \*\*Little bluestem *Schizachyrium scoparium*
  - \*\*Canada wild rye *Elymus canadensis*
  - \*\*Boneset *Eupatorium perfoliatum*
- \*\*Pennsylvania sedge *Carex pensylvanica*
- \*\*Dwarf bush honeysuckle *Diervilla lonicera*
- \*\*Glossy black chokeberry *Aronia melanocarpa*
- Daylily cultivars *Hemerocallis spp.*

## \*\*Native to Minnesota



## Plants For Sandy Soils

- \*\*Butterfly weed *Asclepias tuberosa*
- \*\*Purple prairie clover *Dalea purpurea*
- \*\*Black-eyed Susan *Rudbeckia hirta*
- \*\*Wild bergamot *Monarda fistulosa*
- \*\*Rough blazing star *Liatris aspera*
- \*\*Stiff goldenrod *Solidago rigida*
- \*\*Yarrow *Achillea millefolium*
- \*\*Smooth blue aster *Aster laevis*
- \*\*Sideoats gramma *Bouteloua curtipendula*
- \*\*Little bluestem *Schizachyrium scoparium*
- \*\*Canada wild rye *Elymus canadensis*
- \*\*Pennsylvania sedge *Carex pensylvanica*
- \*\*Dwarf bush honeysuckle *Diervilla lonicera*
- \*\*Glossy black chokeberry *Aronia melanocarpa*



Blue flag iris



Swamp milkweed



Joe-pye weed



Wild bergamot



Butterfly weed

## \*\*Native to Minnesota

## Plants For Loamy Soils

- \*\*Smooth blue aster *Aster laevis*
- \*\*Giant hyssop *Agastache foeniculum*
- \*\*Obedient plant *Physostegia virginiana*
- \*\*Canada anemone *Anemone canadensis*
- \*\*Golden Alexanders *Zizia aurea*
- \*\*Swamp milkweed *Asclepias incarnata*
- \*\*Common ox-eye *Heliopsis helianthoides*
- \*\*Boneset *Eupatorium perfoliatum*
- \*\*Joe-pye weed *Eupatorium maculatum*
  - \*\*Blue flag iris *Iris versicolor*
  - \*\*Spikenard *Aralia racemosa*
- \*\*Pennsylvania sedge *Carex pensylvanica*
  - \*\*Lady fern *Athyrium angustum*
  - \*\*Sensitive fern *Onoclea sensibilis*
  - \*\*Kalm's brome *Bromus kalmii*
- \*\*Big bluestem *Andropogon gerardii*
  - \*\*Switchgrass *Panicum virgatum*
- \*\*Indian grass *Sorghastrum nutans*
- \*\*Red-osier dogwood *Cornus stolonifera*
- \*\*Highbush cranberry *Viburnum trilobum*
- Daylily cultivars *Hemerocallis spp.*
- Hosta cultivars *Hosta spp.*
- Mum cultivars *Chrysanthemum spp.*

For more information on native plants, see the Chisago SWCD's "Native Plants" brochure.