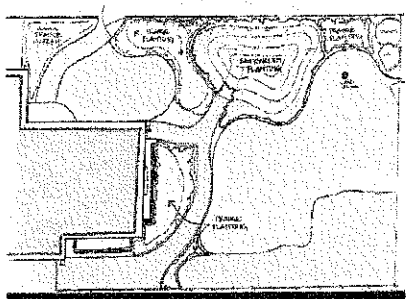


Concept plan for a rain garden

Rain gardens are an attractive, healthy alternative to traditional gardens. They help reduce nutrient and sediment run-off into our lakes and streams while providing wildlife habitat and a beautiful, low maintenance landscape. For more information about rain gardens, contact:

Gregg Thompson / Sol Bijnagte:
Anoka Conservation District
763-434-2030 ext.15 / 16
Email: metroswcd@isd.net

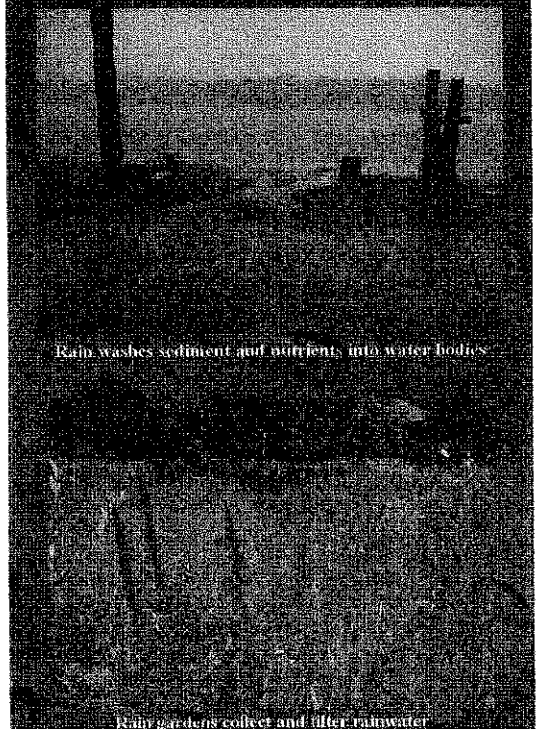
Additional Information:

'Lakescaping for Wildlife and Water Quality' DNR Publication

'Restore Your Shore' Interactive CD-ROM MN DNR

City of Maplewood
www.ci.maplewood.mn.us

Rain Gardens



Rain washes sediment and nutrients into water bodies

Rain gardens collect and filter rainwater

Anoka Conservation District

USDA NRCS Natural Resources Conservation Service

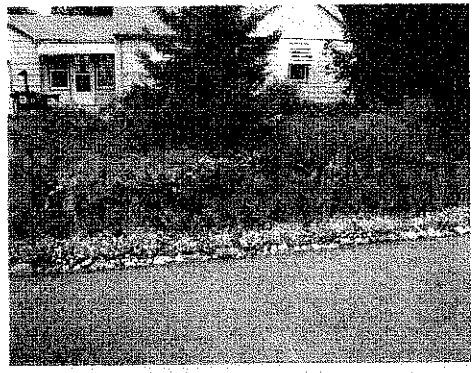
Rain Gardens

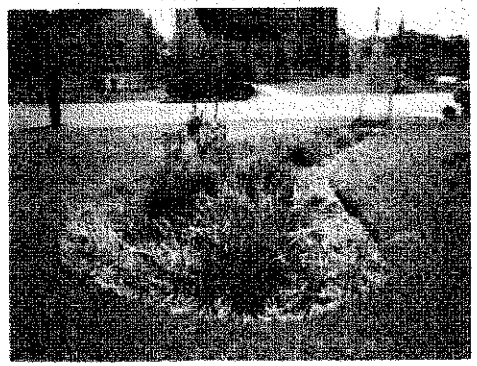
Traditionally, rainwater has been directed from our rooftops and sidewalks into storm sewers. On it's way to the road, this water picks up pollutants such as oil from our cars and lawnmowers, fertilizer, and grass clippings. Storm sewers are often allowed to empty directly into our lakes and rivers, where the extra nutrients can cause algae blooms and other pollutants can harm wildlife. These are the very same lakes and streams we use for drinking water and recreation.

Rain gardens are depressional areas planted with a diverse mix of native wildflowers and grasses. This garden collects rain water from your roof, driveway, or other impervious surfaces in a shallow pool. The water and slowly filters into the ground within a couple of days instead of into storm sewers.

There are many benefits to rain gardens:

- Stormwater retention reduces runoff of pollutants and nutrients into our lakes and streams. Reduced run-off into sewers can help with flooding problems as well.
- Deep rooted native plants stabilize soil to prevent erosion during large storm events.
- Diverse plantings with many species are more resistant to drought, flood, insects and disease than a single type or low diversity planting.
- Long term maintenance of a rain garden is much less than for lawns or formalized gardens.
- The deep rooting nature of native species encourages infiltration of stormwater runoff.
- Native plantings are adapted to local conditions and are more tolerant of flooding, drought and disease than non-native plantings
- A diverse native mix with wildflowers attracts a variety of wildlife including butterflies and birds.
- In the winter, vegetation collects snow and provides interesting texture as well as habitat.





GETTING STARTED

Site Design: Map your property, including property lines, buildings, utility lines and existing vegetation. Determine areas which will catch water from downspouts, driveways, or other impervious surfaces. The Raingarden should be about 7-10% of the size it recieves run-off from and at least 10 feet from your home. Choose local, native species based on your site conditions and personal preference.

Site Preparation: If a depressional area is not already present, dig a shallow bowl to a depth of 3-4" with sides gently sloping up towards the lawn. If soil is heavy and does not drain well it may be necessary to dig down further and back-fill with a lighter soil. Remove unwanted vegetation through smothering, through the use of herbicides, or a combination of these. Line the site with 2-3" of shredded mulch , which is useful in retaining moisture for the young seedlings and discouraging weed seeds from germinating.

Planting: Seedlings can be planted from late May to mid September, however, summer planting may need frequent watering. Seedlings should be planted 12-18" apart with flood tolerant species towards the bottom and drought tolerant species towards the edge.

Maintenance: Make sure your plantings receive at least one inch of water a week for the first two months. Your garden will also require light weeding the first few years.

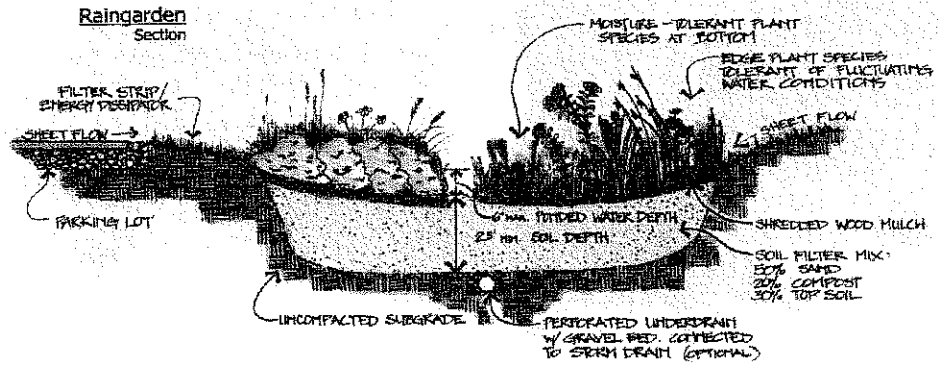
A Few of the Native Plants for Rain Gardens

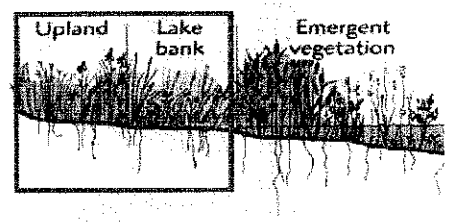
Upland—Mesic Zone (soil is moist, but not wet)

Anise Hyssop	*Agastache foeniculum*	Alum Root	*Heuchera richardsonii*
Prairie Onion	*Allium stellatum*	Blazing Star	*Liatris species*
Big Bluestem	*Andropogon gerardii*	Wild Lupine	*Lupinus perennis*
Thimbleweed	*Anemone cylindrica*	Bergamot	*Monarda fistulosa*
Columbine	*Aquilegia canadensis*	Prairie Coneflower	*Ratibida pinneta*
Lead Plant	*Amorpha canescens*	Black-eye Susan	*Rudbeckia hirta*
Butterfly Milkweed	*Asclepias tuberosa*	Little Bluestem	*Schizachyrium scopariurm*
Aster	*Aster species*	Goldenrod	*Solidago species*
White Prairie Clover	*Dalea candida*	Indian grass	*Sorgastrum nutans*
Purple Prairie Clover	*Dalea purpurea*	Prairie Dropseed	*Sporobolus heterolepis*
Purple Coneflower	*Echinacea angustifolia*	Hoary Vervain	*Verbena stricta*
Prairie Smoke	*Geum triflorum*	Culver's Root	*Veronicastrum virg.*
Common Ox-eye	*Heliopsis helianthoides*	Golden Alexanders	*Zizia aurea*

Wet Meadow Zone (soil is wet, rarely standing water)

Sweetflag	*Acorus calamus*	Blue Flag Iris	*Iris versicolor*
Swamp Milkweed	*Asclepias incarnata*	Soft Rush	*Juncus effusus*
New England Aster	*Aster novae-angliae*	Blazing Star	*Liatris species*
Bebb's sedge	*Carex bebbii*	Cardinal Flower	*Lobelia cardinalis*
Bottlebrush sedge	*Carex comosa*	Great Blue Lobelia	*Lobelia siphilitica*
Tussock sedge	*Carex stricta*	Monkey Flower	*Mimulus ringens*
Turtlehead	*Chelone glabra*	Virginia Mountain Mint	*Pycnanthemum virginianum*
Spike rush	*Eleocharis species*	Green Bulrush	*Scirpus atrovirens*
Joe-pye weed	*Eupatorium maculatum*	Wool Grass	*Scirpus cyperinus*
Boneset	*Eupatorium perfoliatum*	Prairie Cord Grass	*Spartina pectinata*
Bottle Gentian	*Gentiana andrewsii*	Blue Vervain	*Verbena hastata*
Sneezeweed	*Helenium autumnale*	Ironweed	*Vernonia fasciculata*





MN DNR

Your rain garden is similar to a lakeshore, able to tolerate both flooding and drought conditions, and will contain similar plant species.