

Rain Gardens Fact Sheet

Rain gardens are an inexpensive, simple approach to absorb urban stormwater runoff.

A Rain Garden will:

- Reduce mosquito breeding by removing standing water
- Filter runoff pollution
- Recharge local groundwater
- Create habitat for birds & butterflies
- Enhance sidewalk appeal
- Increase beneficial insects that eliminate pest insects
- Reduce potential of home flooding
- Improve water quality
- Reduce garden maintenance
- Increase garden enjoyment
- Tolerate Drought
- Conserve water

By keeping stormwater close to where it falls, rain gardens do help reduce flooding and settle out sediments. They also prevent stormwater from becoming contaminated with oils and other chemicals in the first place, and they remove pollutants from the water as it percolates through the soil on its way to becoming groundwater.

Rain gardens consist of two layers: a top, soil layer for growing plants, and a lower, permeable layer of sand and gravel. Constructed to lie a few inches below ground, these shallow depressions are planted with flowers and other deep-rooted vegetation that can soak up rainwater and at the same time filter out pollutants the water may pick up.

When it rains, water first pools in the garden's plant zone, percolating quickly from there into the permeable layer underneath. The permeable zone then stores the water until it seeps into the subsoil. Rain gardens can soak up nearly all of the water that would otherwise run off into the gutters and sewers of city streets and then, carrying pesticides, fertilizer, pet waste, oil and other contaminants with it, wind up polluting lakes and rivers. Mosquitoes are not a problem since the water is absorbed underneath the surface of the rain garden.

For larger scale rain gardens (i.e. common greenspace areas, parking lots and park areas), drainage tiles or other drainage systems can be designed to can carry excess water from these areas in heavy storm events and direct water to conventional stormwater outlets. Many different designs are available to suit any site needs.

Rain Gardens are not completely maintenance-free. It is important to clean up and re-mulch the garden in the spring and fall.

First Season Care

The most important work during the first year of the garden is watering and weeding. The young garden will need about an inch of water per week until it is established.

Weeding & Mulching

All gardens of all ages need constant weeding and replenishing of mulch. When the garden grows old and fuller weeds will be pushed out and covered by the growing plants. The mulch will need to be raked periodically and replenished or freshened every spring.

Seasonal Clean-Up

In spring you will need to clean-up the garden by removing any dead material and replenishing the mulch and in the fall it is important to remove dead vegetation. You might wish to leave some of the material and seed bearing plants for bird habitat in the winter however.

RAIN GARDEN EXAMPLES

The picture below demonstrates an example of a single-lot rain garden. These gardens use native plants to absorb stormwater and naturally treat nonpoint source pollutants.

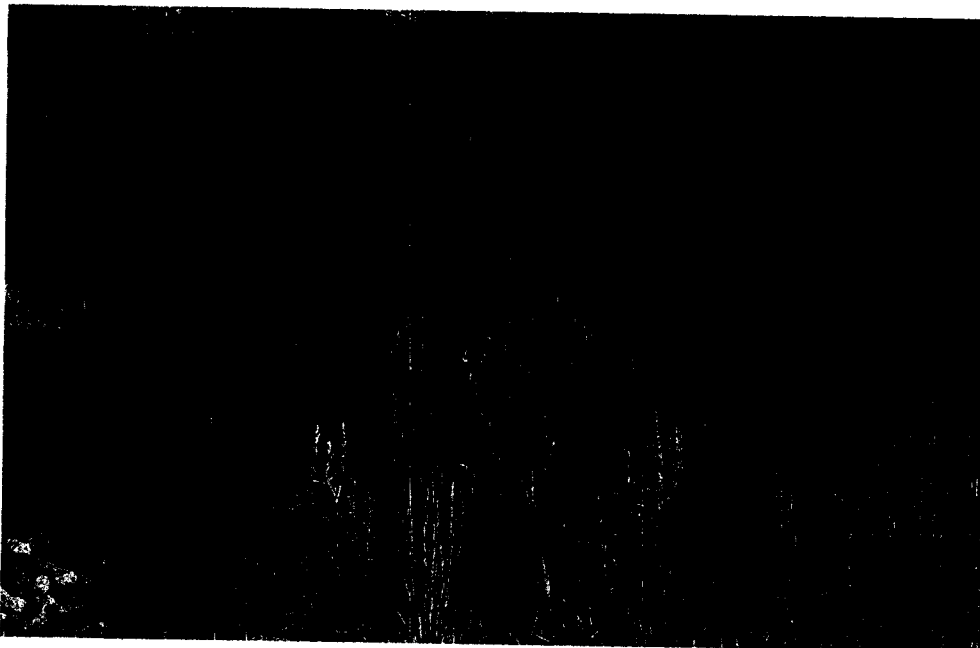


Photo courtesy of Strom Lake, Iowa

The picture below demonstrates a larger rain garden system that collects rainwater from multiple residential lots.



Photo Courtesy of Dane County, Wisconsin

Fact Sheet Sources: <http://www.raingardennetwork.com/benefits.htm>
<http://www.consciouschoice.com/environs/raingardens1405.html>
<http://www.urbanwaterquality.org/RainGardens/rgindex1.htm>
<http://www.ecoisp.com/resources16.asp>
<http://www.co.dane.wi.us/commissions/lakes/raingarden.shtml>