

Rain Gardens in Greenbelt

Stormwater runoff from parking lots and other paved surfaces can carry harmful pollutants into creeks and rivers. This rainfall flows quickly from hardened surfaces and can also cause stream erosion, which further threatens water quality.

Rain gardens, like this one, act like a living sponge: native plants take up water and excess nutrients, while soil microorganisms, remove nutrients, and digest oil and other contaminants. The plants used in the garden grow in a special mix of compost, sand, topsoil, and mulch, designed to allow water to flow through efficiently, but trap and filter pollutants. Extra nutrients and moisture collected by rain gardens support healthy plant growth. The plants in turn, provide quality habitat for birds, butterflies, and other beneficial insects.

During rainy weather common water will pond in the garden for a short while slowing down the runoff flows to the stream. A gravel layer at the bottom of this garden collects excess clean water not absorbed by the plants. By allowing rain water to collect and soak through the soil

mixture, rain gardens help “recharge” groundwater. The special drain in the middle of the garden allows for overflow in periods of very heavy rain.

This rain garden was carefully designed for this large site to mimic the natural ecosystem. You can adapt some of these principles for use around your own home to help protect our streams and waterways. You can check out details of other GHI rain gardens and get information about building your own by visiting www.ghi.coop/raingardens/



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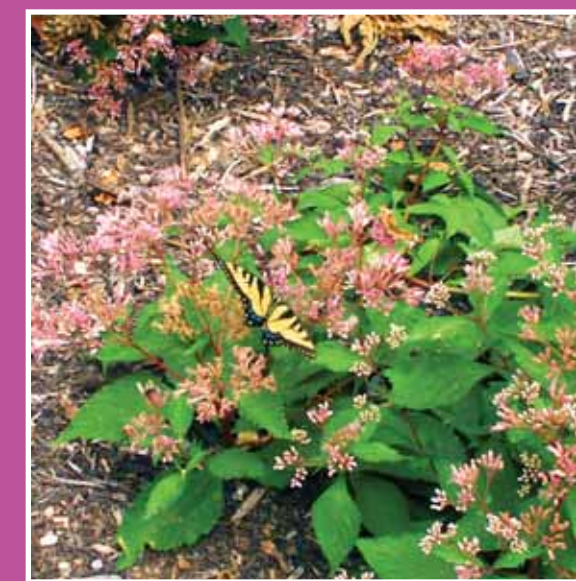
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Illustrations by Tony Fitch

A few of the plants in this garden



Blue Lobelia



Joe Pye Weed and Tiger Swallowtail Butterfly



New England Aster provides Fall colors.



Black Eyed Susan

- Acornus Americanus (Sweet Flag)
- Andropogon virginicus (Broomsedge)
- Aster novae-angliae (New England Aster)
- Aster Novi-Belgii (New York Aster)
- Caltha palustris (Marsh Marigold)
- Chelone Glabra (Turtlehead)
- Eupatorium maculatum (Joe Pye Weed)
- Iris versicolor (Blueflag Iris)
- Lobelia Cardinalis (Cardinal Flower)
- Lobelia Siphilitica (Blue Lobelia)
- Panicum amarum (Bitter Panic Grass)
- Panicum Virgatum (Switchgrass)
- Penstemon Digitalis (Foxglove Beardtongue)
- Rudbeckia hirta (Black Eyed Susan)
- Solidago nemoralis (Gray Goldenrod)
- Verbena Hastata (Blue Vervain)
- Vernonia Noveboracensis (New York Ironweed)
- Aronia arbutifolia (Red Chokeberry)
- Itea virginica (Virginia Sweetspire)
- Lindera benzoin (Spicebush)
- Magnolia virginiana (Sweetbay Magnolia)
- Myrica pensylvanica (Northern Bayberry)