

Can plants prevent water pollution?

SURPRISING BENEFITS OF NATIVE PLANTS AND RAIN GARDENS

The power of plants

Gardening with plants that are native to Michigan boosts your landscape's ability to absorb and infiltrate stormwater runoff. That's because the deep, thirsty roots of natives are much better at keeping water clean than the shallow roots of turf grass.

Having evolved locally, native plants are hardy, long-living and disease resistant, and—once established—require little or no additional watering or fertilizers. As an added benefit, they attract pollinators like butterflies and bees.

Stopping storm runoff

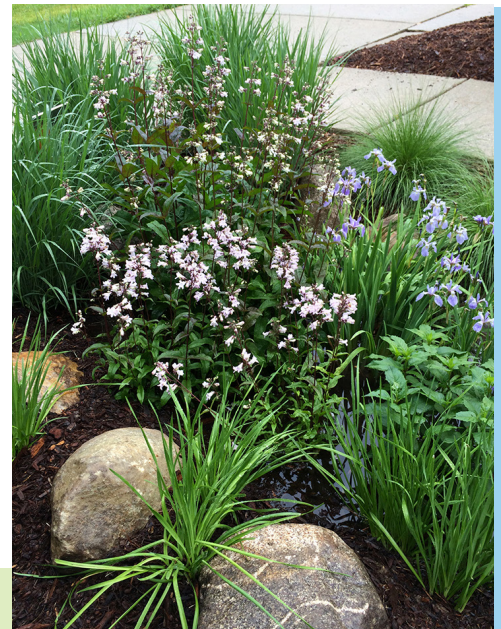
Stormwater runoff is the biggest source of water pollution today. It moves through storm drains to nearby lakes and streams, unfiltered. Along the way it picks up pollutants like dirt, motor oil and toxic auto fluids, pesticides, fertilizer, and bacteria from pet waste and failing septic systems.

Our built environment of rooftops, roads, sidewalks, driveways and parking lots does not soak up rain and melting snow the way natural areas do. And because of their large surface area and limited ability to absorb water, single-

species turf grass lawns (such as Bermuda or Rye Grass) also act like hard surfaces, contributing to runoff and flooding.

Native plants, shrubs and trees are clean water machines.

Their leaves and bark catch falling rain and hold it for evaporation for gradual release to the ground below. Underground, their deep extensive root systems create channels in the soil—allowing runoff to soak in and make its way to groundwater aquifers or be taken up for use by the plants themselves.



The many advantages of native plants:

- Drought tolerant
- Disease resistant
- Require less water and fertilizer (adapted to naturally occurring conditions)
- Attract wildlife (bees, butterflies, dragonflies, hummingbirds)
- Infiltrate runoff
- Long-living (perennial)
- Cost efficient*



** Per-acre installation costs for native landscapes can be \$4,400 to \$8,850 less than turf grass installations. Likewise, over a 10-year period, maintenance cost savings per acre of native plants range between \$3,950 and \$4,538.*

Put your native plants to work in a rain garden!

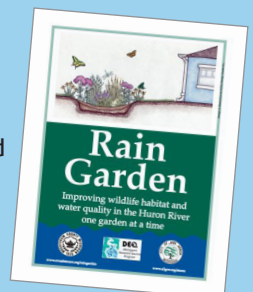
Rain gardens are native plant landscaping features designed specifically to catch and slowly soak in runoff. They are shallow saucer-shaped gardens that combine an amended soil medium with native plants that thrive in periods of wet and dry conditions. Downspouts and diverters can direct runoff from hard surfaces like rooftops and sidewalks straight into the garden, thus preventing it from reaching nearby storm drains.

Rain gardens allow up to 30% more water to soak into the ground than conventional turf grass lawns.

Start by enrolling in the Rain Garden Program:

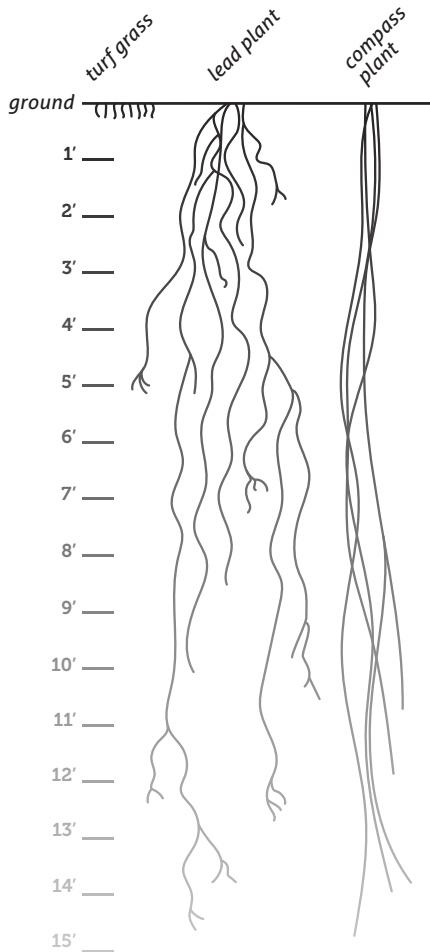
Sponsored by the Washtenaw County Water Resources Commissioner, the program includes classes; site selection, design and installation advice; a comprehensive how-to manual with a list of native plant suppliers; and maps of rain gardens to visit.

www.washtenaw.org/raingarden.



Know your roots

Turf grass roots (left) are typically 2 inches deep, while native prairie plant roots range from 2-15 feet deep. These deep roots create channels in the soil, allowing runoff to soak in.



Huron River Watershed Council

www.hrwc.org

The Huron River Watershed Council coordinates programs and volunteer efforts aimed at protecting and restoring the Huron. Our work is supported through the membership of individuals, local businesses, and more than 40 communities across Southeast Michigan.

Three easy-to-grow native plants to try



Swamp Milkweed (*Asclepias incarnata*)

Good for rain gardens. A beautiful, fragrant, late-summer-blooming native that is a host for Monarch and Queen butterflies.

Light: Full sun
Soil: Sandy clay loam
Moisture: Medium to wet soils



Prairie Dropseed (*Sporobolus heterolepis*)

Good for dry soils. A beautiful, drought-tolerant native grass that grows well as a ground cover and adds a soft green-to-golden hue to gardens.

Light: Full sun
Soil: Sandy clay
Moisture: Dry to medium



Golden Alexanders (*Zizia aurea*)

Good for woodland soils. A larval host for Black Swallowtails, the blooms add delightful touches of yellow to woodland, prairie, and wild-looking native gardens.

Light: Full to part sun
Soil: Sandy clay loam
Moisture: Medium

Where to source your rain garden plants and supplies:

For a list of local suppliers, check out the Michigan Native Plant Producers Association: www.mnppa.org.

Almost every spring, the Washtenaw County Conservation District conducts a native plant and tree sale: www.washtenawcd.org.

What is an H2O Hero?

You can be an H2O Hero! An H2O Hero protects water quality in their everyday actions. They pick up and dispose of pet waste in the trash, sweep fertilizer spills off sidewalks and driveways, choose phosphorus-free fertilizer, plant deep-rooted native plants or use rain gardens to capture and infiltrate runoff, and save water to save energy.

When you help keep pollution out of our streams, lakes, wetlands and groundwater with simple steps taken right in your own home or back yard, YOU are an H2O Hero!

The H2O Heroes campaign...

Is brought to you by communities that are committed to protecting water quality and securing our watershed as a permanent source of clean drinking water, natural beauty, and diverse recreational opportunities. Partners include Ann Arbor Charter Township, Ann Arbor Public Schools, Barton Hills Village, City of Ann Arbor, City of Belleville, City of Chelsea, City of Dexter, City of Ypsilanti, Eastern Michigan University, Pittsfield Charter Township, Scio Township, Superior Charter Township, University of Michigan-Environment, Health & Safety, Washtenaw County Road Commission, Washtenaw County Water Resources Commissioner, Ypsilanti Charter Township, and VA Ann Arbor Healthcare System (VAAHS)

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