

# Rain Gardens and Rain Barrels Contribute to a Cleaner Environment



## What is Storm Water?

Storm water is water from rain and melting snow that does not sink in to the ground. This is water that runs off roofs, driveways, and parking lots. It carries pollutants to lakes and rivers. By reducing stormwater runoff, rain gardens and rain barrels can be a valuable part of changing these trends.



## Why a Rain Garden?

Rain gardens reduce runoff of pollutants and nutrients into our lakes and streams. Reduced runoff into sewers can help with flooding problems as well.

## Why use Native Plant Species?

Using native plants in your garden helps stabilize the soil because their deep roots prevent erosion during large storm events. Diverse plantings with many species are more resistant to drought, flood, insects and disease. The natives, once established, require little time and attention

## How much Water is Saved ?

A rain garden allows 30% more water to infiltrate the ground than a traditional lawn. This helps replenish the groundwater supply.

## Are there other Savings?

In addition to helping the environment by collecting water to water our plants, we save resources and money by using less water. This translates to less fertilizer inputs and ultimately less energy used to make petroleum products.

Reference sites:  
<http://www.raingardens.org>  
[www.rainbarrelguide.com](http://www.rainbarrelguide.com)

## Rainwater from Rain Barrels Makes your Garden Smile.

## Why a Rain Barrel?

Since the water is usually collected from the roofs of houses, it picks up very little contamination as it falls. A rain barrel collects and stores rainwater from your rooftop to use later for things like lawn and garden watering.

## How much Rain Water?

A typical ½ inch rain will fill a 50 to 55 gallon rain barrel. A 2,000 square foot roof can collect about 1,000 gallons of water (accounting for about a 20% loss from evaporation and splash)





## Rain Garden Construction Tips

The purpose of a rain garden is to encourage water to infiltrate the soil instead of running straight to the nearest storm drain. Place your rain garden in a slightly depressed area of your lawn, where it will naturally collect the rainwater/runoff. You can dig a depression 4-8 inches deep if necessary. Choose an area with less than a 12% slope for ease in construction.

Local clay soils don't provide good drainage, and during large storm events, water will accumulate faster than the clay can absorb it. For this reason, in areas with heavy clay, we recommend that other topsoil replace or be mixed in with the clay before the garden is planted. Make sure to include some sand (for drainage) and compost (for the plants) in your mixture. Rain Gardens of West Michigan says that a mix of 50-60% sand, 20-30% topsoil and 20-30% compost is ideal.

Make the bottom level and place a berm of soil at the lower end to trap the water. Be sure to plant grass or use mulch to stabilize your berm until plants are established. Place the garden at least 10 feet from the house to avoid damage from seepage. Choose plants that can



### Sault Ste. Marie Area Watershed Project

Accelerated stormwater runoff poses a serious threat to the small streams in the Sault Ste. Marie area watershed. Increasing impervious surfaces as a result of urbanization are replacing natural vegetation and natural landscapes which both filter and slow runoff. The resulting accelerated runoff creates "flashy" stream flows during spring thaw and after significant rain events. Pollutants in the stormwater are also easily transported to area streams without natural filtration.

The Sault Ste. Marie Area Watershed Project recognizes rain gardens and rain barrels as remedies for stormwater problems in the Sault Ste. Marie area watershed. Both help to slow runoff across ever-increasing impervious surfaces. Additional benefits include improving city-wide aesthetics.

Rain gardens and barrels don't have to be limited to residential sites. Businesses can install them in parking lots, and under large buildings, respectively.

Please contact the District if you would like more information regarding rain gardens and rain barrels or to learn more about what you can do at home to help protect the Sault area's water quality.



Partnering with:  
Chippewa East Mackinac  
Conservation District

906-635-1278  
[www.chipmackconservation.org](http://www.chipmackconservation.org)

# Rain Gardens and Rain Barrels



Rain is natural-  
Stormwater Runoff isn't!