

# Discovering Our Blue-Green Infrastructure

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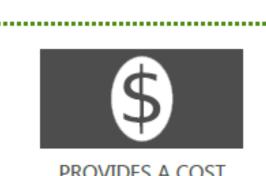


Green infrastructure uses vegetation, soils, and other elements and practices to restore the natural processes required to manage water and create healthy environments.

## Benefits of Green Infrastructure







OVERFLOWS (CSOs) WHICH SEND RAW SEWAGE INTO



TO PEAK STORM EVENTS



FOR CONSTRUCTION AND









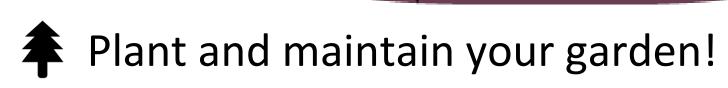
## **Build and Maintain a Rain Garden**

- Pick a good spot!
  - Don't place it too close to your house, especially if you have a basement.
  - Avoid steep slopes and bedrock.
  - Check the soil to make sure water drains correctly.
  - Estimate the size of your rain garden with online tools (such as nemo.uconn.edu/raingardens/sizemap.htm).

### The Dig it up!

- Contact www.missdig.org to make sure you aren't going to damage any utility lines.
- Mark out the area where you want to install your rain garden.
- Dig about 8 inches deep with a slope on either end.





- Select hardy native species that look good to you.
- Don't overcrowd! Your plants will grow and fill out your garden with
- Plot your plants down and fill the space between them with a couple inches of mulch.
- Water your plants immediately and weekly until they are sturdy!
- Remove weeds and replace mulch as needed.

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## Examples



#### Rain Gardens and Rainwater Collection

A rain garden can be beautiful as well as functional. Rain gardens are versatile features that can be installed in almost any unpaved space. Also known as bioretention, or bioinfiltration, cells, they are shallow, vegetated basins that collect and absorb runoff.



#### **Planter Boxes**

Planter boxes filter stormwater and reduce runoff from sidewalks, parking lots, and streets.





Bioswales are essentially rain gardens placed in long narrow spaces such as the space between the sidewalk and the curb. Bioswales are vegetated, mulched, or xeriscaped channels that provide treatment and retention as they move stormwater from one place to another.



#### **Green Streets, Parking and Permeable Pavement**

Green streets and parking lots combine more than one feature (permeable pavement, bioswales, planter boxes, and trees) to capture and treat stormwater. Benefits include mitigating the urban heat island and a more walkable built environment.



#### **Green Roofs**

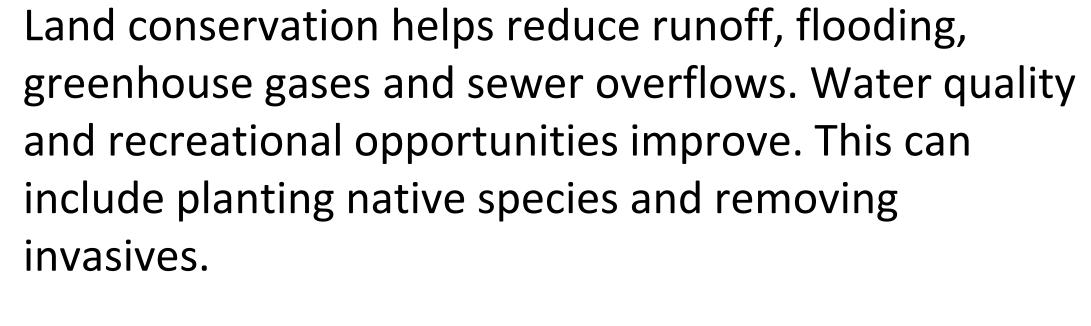
A green roof system atop a building helps manage stormwater and reduce energy costs for cooling.

#### **Urban Tree Canopy**



City trees, or tree canopy, soak up stormwater, provide cooling shade and help to slow traffic.

#### **Land Conservation**





#### **Buffer Strips**

A buffer strip is an area of permanent vegetation, often adjacent to a pond, lake, or stream, that helps control air, soil, and water quality.

### What Can I do?

## Install a Rain Barrel or Compost Bin





Rain barrels and compost bins will be sold during a special sale in March 2019. Find out more at www.midmichrecycles.org

### Plant native species!



Purple Coneflower



### Remove invasives...

Learn more about invasive species in your community. In Meridian Township, visit http://bit.ly/invasivity





## Smart Lawn Care, Gardening, and More...

Learn more about ecological landscaping practices at http://migarden.msu.edu



## References

Dietz, M. (n.d.). UConn Rain Gardens "How To" Guide. Retrieved from http://nemo.uconn.edu/raingardens

www.epa.gov/green-infrastructure/what-green-infrastructure www.greenroof.hrt.msu.edu

http://www.meridian.mi.us/residents/living-withwildlife/invasive-plants-in-meridian-township