

Rain Gardens of Northwestern Indiana

A Presentation of NIRPC and
the MS4 Community Partnership



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What is a Rain Garden?



- Native Garden
 - Rain Gardens typically use native plants
 - Natives require less maintenance
- Water Retention and Infiltration
 - Stormwater from impervious surfaces are directed to the garden
 - Garden is in a basin to hold water and let it soak in naturally



Why Do We Need Rain Gardens?



- Response to Increasing Amount of Impervious Surfaces
- Addresses a variety of Problems
 - Volume of Stormwater Runoff
 - Quality of Stormwater Runoff
 - Local Habitat for Plants and Animals
 - Beautiful, Low-Maintenance Landscape



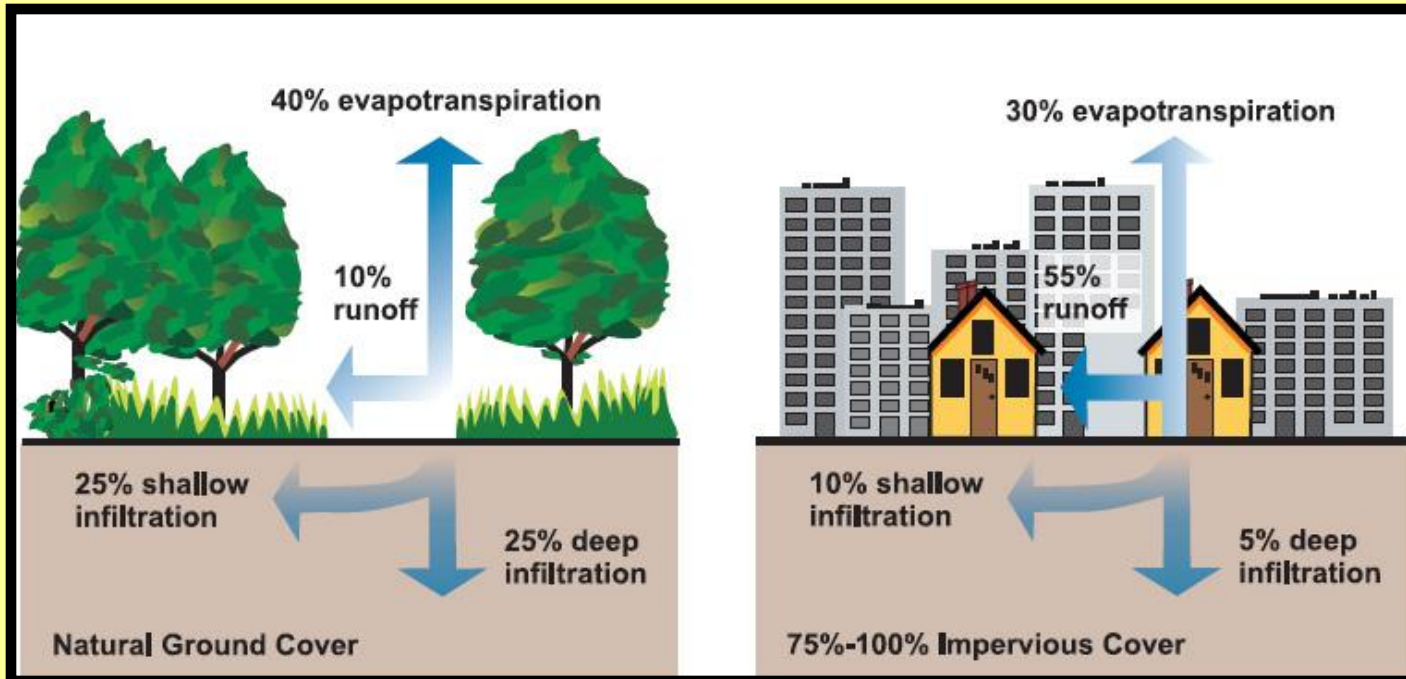
Impervious Surfaces



- Development of land leads to the construction of a variety of surfaces which prevent water from soaking into the ground.
- Storm sewer system to quickly remove stormwater from an area and deposit it in local streams
- Entire system has striven to remove water as quickly as possible



Impervious Cover Increases Runoff



Decreasing Volume



- By holding water, rain gardens decrease the amount of runoff during a storm
- If the storm is too large for the garden, the garden will at least slow down the flow of the water, decreasing volume during the storm event and releasing it after.



Increasing Quality



- Rain gardens force the water to soak through the soil, so any pollution picked up by storm water is trapped in your garden's soil instead of accumulating in local rivers and streams.
- The quality of water improves as it soaks through soil and pollutants are trapped in the soil or collected by plants



Local Habitat



- Native plants provide habitat for native fauna such as birds and butterflies.



Beautiful Landscaping



How to Create Your Rain Garden



1. Investigate Regional How-To Manuals
2. Utilize Online Tools
3. Visit Local Example Rain Gardens



1. Investigate Manuals



- [Indiana Lake Michigan Coastal Program](#)
- [UW Extension and Wisconsin DNR's Manual](#)
- [Catching Rain Fort Wayne](#)



2. Utilize Online Tools



- NIRPC has developed several items to complement How-To Manuals
 - All are available online at <http://www.nirpc.org/environment/Rain%20Gardens.htm>



3. Visit Local Examples



- Lake County Government Building
- Forest Park Golf Course
- Valparaiso Water Department
- Porter County Visitor's Center
- Michigan Boulevard, Michigan City



Lake County Government Building



- Installed May 2009
- Specific Design Considerations
 - Low Profile (Nothing taller than three feet)
 - Collects runoff from sidewalk only, no diversion from gutters on building
 - Low maintenance budget



Lake County Government Building



Forest Park Golf Course



- Installed 2008?
- Specific Design Considerations
 - Long, Narrow Profile
 - Handle large volume of runoff from parking lot
 - Overflow drain for large storm events



Forest Park Golf Course



Valparaiso Water Department



- Installed 2005
- Specific Design Considerations
 - Few Examples, One of First In the Area
 - Accessible to Public
 - Run off from parking lot and building



Valparaiso Water Department



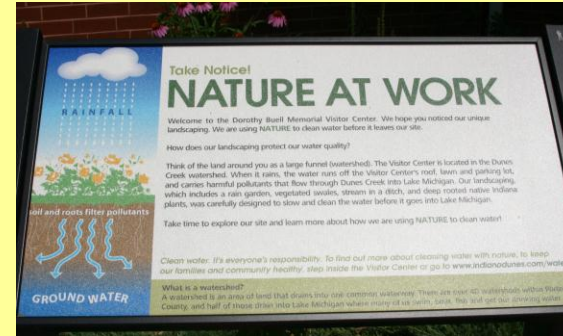
Porter County Visitor's Center



- Installed 2008
- Specific Design Considerations
 - High Visual Appeal
 - Integration with other natural plantings
 - Great example for area



Porter County Visitor's Center



Porter County Visitor's Center



Michigan Boulevard, Michigan City



- Installed 2008
- Specific Design Considerations
 - Capture runoff from a major street
 - Volunteer opportunity for local youth
 - Enhance local area



Michigan Boulevard, Michigan City



Michigan Boulevard, Michigan City



Ask Questions!



- Rain Gardens have become a popular landscaping option, and as more are installed, more knowledge is acquired.
- Take the time to ask local experts about designing, constructing, and maintaining a rain garden to avoid common mistakes!



Credits



- This presentation was developed by NIRPC through the Northwest Indiana MS4 Community Partnership.
- All uncited photographs were taken by NIRPC, Summer 2009.

