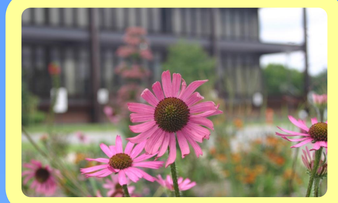
Rain Gardens- Naturally

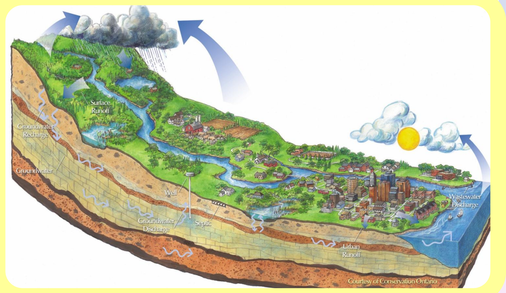


Nature at Work

In a natural forest or prairie setting very little surface runoff is generated when it rains. Deep-rooted native plants and undisturbed soils help rainwater soak into the ground. The rain recharges groundwater supplies which in turn help maintain and stabilize stream flows and lake levels. The system is sustainable.

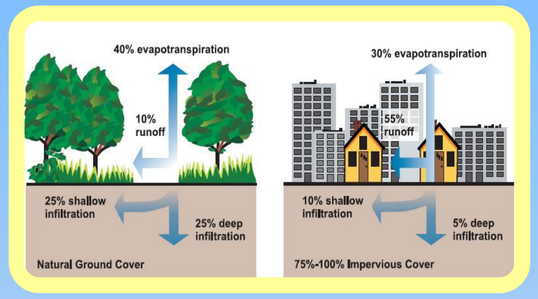
Watersheds, Land Use & Stormwater

A watershed is the entire land area that drains to a particular waterbody such a lake, stream or wetland. As rain or snow melt moves across the landscape it can pick up harmful pollutants and deliver them to our waterways. This is known as stormwater runoff and the types of pollutants it carries depends on land use. For example some of the common pollutants you would find in urban runoff include metals, automotive fluids, sediment, nutrients and pathogens.



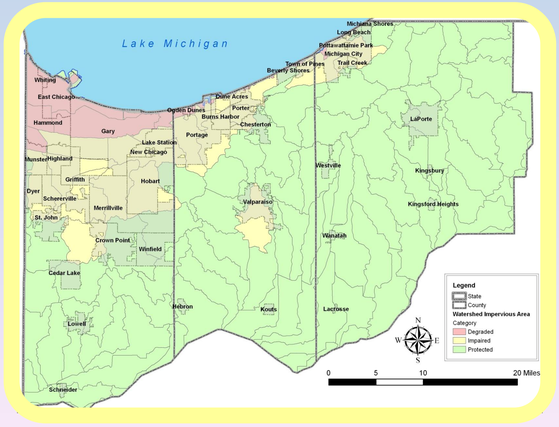
The Urban Environment

Much less rainfall is able to soak into the ground in our urban areas primarily because of impervious surfaces, such as pavement and rooftops. Lawns with their shallow root structure and compacted soils are another factor. Instead rainwater tends to runoff picking up harmful pollutants. In some cases this runoff is directed to a storm drain that empties into a local stream or lake without any treatment.



The Impact

Studies have shown that streams in watersheds with 10% impervious cover begin to show signs of ecological impairment. As the impervious cover in a watershed approaches 25%, streams become degraded and the water quality, habitat quality, and biological diversity are all greatly reduced.



Why Rain Gardens?

Rain gardens are a simple way for the watershed community to participate in water quality and aquatic resource protection. The plants and soils in a rain garden help rainwater soak into the ground and filter out harmful pollutants before they can reach our lakes and streams. The NIRPC demonstration rain garden will help nearly 30 inches of runoff from a 7,250 ft² parking lot area soak into the ground annually. That's more than enough runoff to fill an Olympic size swimming pool!

Rain gardens also provide an oasis for wildlife in the urban sea of turf grass and pavement. Wildlife in urban areas are faced with the challenge of habitat loss and fragmentation. Many of the plants and flowers that thrive in a rain garden can be used by pollinators and birds.

Creating a Rain Garden

Rain gardens are created by digging a shallow depression down slope of an area that will produce runoff . The size and depth of the rain garden depend on soil type and size of the contributing area.

Soils in a rain garden can be easily amended to improve drainage and eliminate the worry of mosquitoes because of ponding water. Rain gardens can be incorporated into new construction or built-out areas as a stormwater retrofit. There are a variety of showy plants that can be used in the rain garden to add color throughout the year.

Be Part of the Solution

Please visit www.nirpc.org or take one of the brochures below for more information on creating your own rain garden.

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