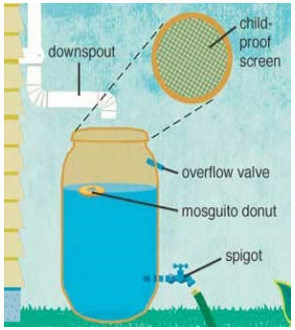
RAINWATER HARVESTING

Stormwater runoff can be reduced by collecting and storing rainwater. Rainwater harvesting has been used to provide water for lawn and farm irrigation, drinking water for livestock or support groundwater recharge. Some of the benefits include: reduced water costs, an emergency water supply, and an independent supply for watering lawns and gardens.

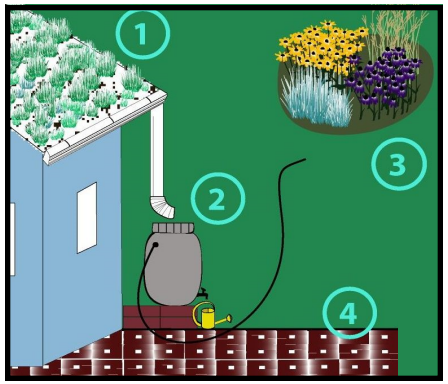
Rain barrels are an easy and inexpensive way to store rainwater. Barrels can be modified or purchased and installation is simple. The overflow valve diverts water away from the barrel and your foundation once the barrel is full and can also be used to connect to multiple rain barrels.



Easy to install rain barrel

Disconnect downspouts to drain into your yard

What *Green* management practices are being used below?



Answers:

1. Green roof
2. Rain barrel
3. Rain garden
4. Permeable pavement

Stormwater Hotline
(618) 296-7788

PLEASE HELP!

40% of US water bodies are polluted.
Stormwater runoff is the primary cause.
It's up to you to make a difference to keep gutters, storm drains and waterways clean.

FOR MORE INFORMATION

www.epa.gov

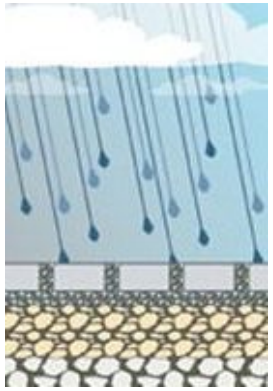
www.epa.state.il.us

Madison County Planning and Development Department
157 N Main St Suite 254
Edwardsville, IL 62025-1964
(618) 296-4468
(618) 692-8982 fax

Alan J. Dunstan
Chairman
Madison County Board

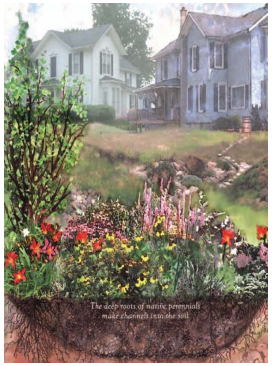
MADISON COUNTY'S GREEN INFRASTRUCTURE GUIDE

Green Roof



Permeable Pavement

Rain Barrel



Rain Garden

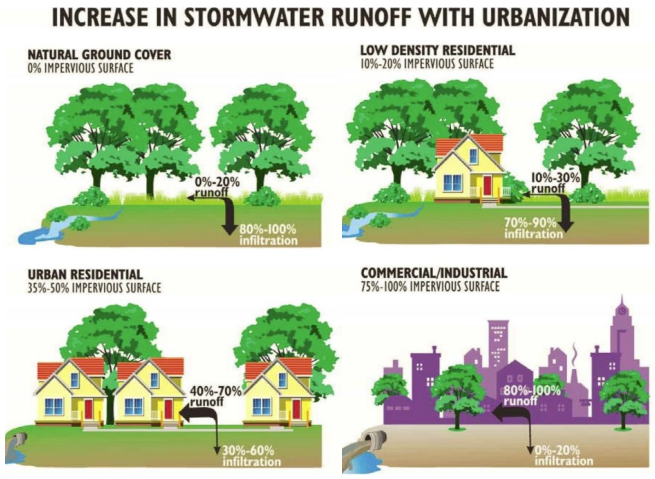
Managing Wet Weather with Green Infrastructure

During rain and snow events, water is soaked and stored by the soil and plants. Runoff occurs when excess water flows across land not able to store any more water. The runoff carries pollution such as petroleum, pesticides, and fertilizer to nearby streams resulting in lower water quality.

Green Infrastructure is an approach to wet weather management that is cost-effective, sustainable and environmentally friendly. Green infrastructure applications and approaches can reduce, capture, and treat stormwater runoff at its source before it can reach the storm sewer system.

Some green infrastructure approaches currently in use include green roofs, trees and tree boxes, rain gardens, infiltration planters, bioswales, permeable pavement, porous piping systems, dry wells, and rain barrels.

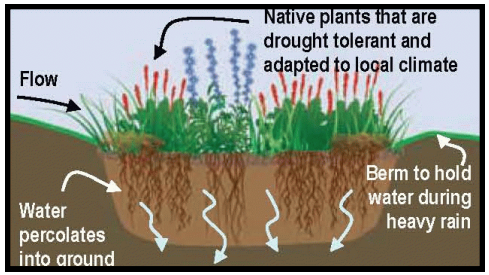
Preserving and restoring natural landscape features (such as floodplains and wetlands) are critical components of green stormwater infrastructure. By protecting these areas, communities and residents can improve water quality, conserve water, and improve the overall quality of life.



RAIN GARDEN

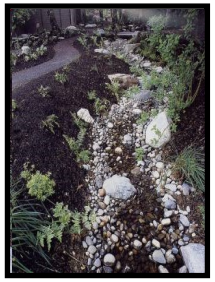
A rain garden is an attractive addition to your property that is effective in reducing the amount of runoff leaving your property. Rain gardens utilize native plants, which have deep roots that absorb runoff, filter pollutants and promote groundwater recharge.

Recessed area filled with native plants



BIOSWALES

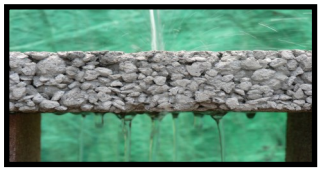
A bioswale is similar to a rain garden, but the water is eventually carried to a storm drain. They consist of gently sloped sides and filled with vegetation, compost and/or riprap. The water's flow path, along with the wide and shallow ditch, is designed to maximize the time water spends in the swale, which aids in trapping pollutants and silt.



PERMEABLE PAVEMENT

Stormwater runoff can be reduced by using permeable paving for driveways, footpaths and parking areas instead of impervious asphalt or concrete. Permeable pavement creates a more efficient land use by reducing the need for rain gardens and bioswales. Permeable pavement is available in a variety of styles and materials for many uses.

Best suited for surfaces with low traffic volume and low speed traffic



GREEN ROOFS

Green roofs are an excellent way to decrease the amount of runoff leaving your property. Green roofs are a more expensive upgrade to your property, but they could save money on heating and cooling costs. Green roofs can be constructed on flat and sloped surfaces. It's important to work with licensed professionals (engineers, contractors, and architects) to determine the feasibility, safety and costs for installing a green roof.

Green roofs reduce runoff and reduce energy consumption