# RAINSCAPING IOWA

LANDSCAPES FOR CLEAN WATER



Landscapes for clean water

www.rainscapingiowa.org

#### Don't Just Landscape...Rainscape!

Traditional development and landscaping designs cause rainfall to flow off roofs, sidewalks, driveways, and compacted lawns. Water flows into the street, down the storm drain and through the storm sewer to the nearest stream, river or lake. Along the way, it picks up pollutants that degrade water quality. Learn more about the many Rainscaping practices that help reduce runoff and water pollution.

## **Rainscaping Practices**

There are many Rainscaping practices to choose from. Install the practices that suit you and your conditions best to capture rain, reduce runoff and improve water quality in lowa!



#### Rain Garden

A rain garden is a landscaped depression that captures rainwater runoff from impervious surfaces, such as roofs or driveways. Runoff collected in a rain garden is temporarily ponded before seeping down through the soil. Installing a rain garden helps restore a landscape's ability to manage water more sustainably.



#### **Bioretention Cell**

On the surface a bioretention cell looks very similar to a rain garden. While a rain garden relies on soils with good percolation rates, a bioretention cell can be used in areas where the soils are more poorly drained. Bioretention cells rely on a rock chamber, modified soil, and perforated tile subdrain to infiltrate and filter water.



#### Bioswale

A bioswale is a multi-purpose stormwater management practice that provides an alternative to storm sewers. By using a permeable soil bed and perforated subdrain tile, bioswales infiltrate water from frequent small rains. During heavy rains, bioswales convey runoff in a non-erosive manner over its vegetated surface. Bioswales can feature native grass and flowers or turf grass.



#### Stream Corridor Stabilization

Many of our urban stream corridors are vulnerable to erosion. Flashy stream flows and increased volume of runoff causes streams to get deeper and wider. Roads, bridges, and even houses can be threatened by unstable banks and channels. After thorough assessment and planning, practices can be installed to stabilize the stream corridor and enhance the habitat and health of aquatic ecosystems.



#### Soil Quality Restoration

As buildings and houses are built, valuable topsoil is removed and the remaining subsoil is compacted by heavy grading equipment and construction activity. Healthy soil is the first step in preventing polluted runoff. Soil quality restoration begins with the decompaction of soils. Compost is added to further increase the soil's organic matter content, which helps a yard absorb more rain.



#### Permeable Pavement

Roads, parking lots and driveways account for more than 60 percent of impervious surfaces in urban areas and are the largest generators of stormwater runoff. Permeable pavement allows water to infiltrate into layers of rock placed below the pavers and then into surrounding soils.



#### Native Landscaping

Hardy native flowers and grasses with deep root systems help restore soil quality over time. This helps landscapes absorb more rainfall and reduces the amount of runoff. Native landscaping attracts songbirds, dragonflies, butterflies and other desirable species.



### Rainwater Harvesting

Harvesting rainwater is gaining in popularity. You can start with a single rain barrel, or employ larger and more elaborate systems to capture large quantities of rainwater and significantly reduce runoff. A 1,500-square-foot ranch house sheds about 1,000 gallons per inch of rain.



#### **Native Turf**

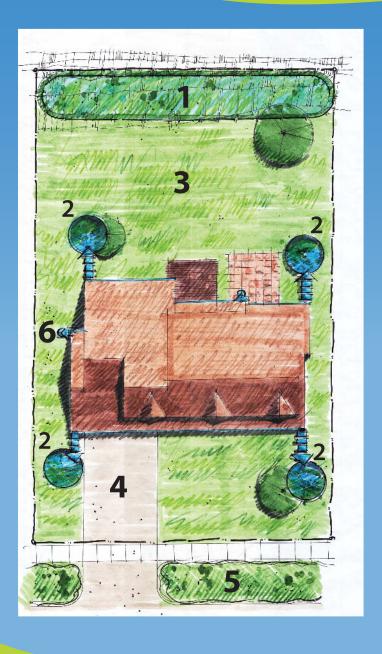
Native turf features a combination of low-growing native grasses that create a turf-like appearance. A blend of blue grama, buffalograss and sideoats grama is recommended. Its deep, fibrous root system will help build and maintain soil quality. Native turf is only adapted to well-drained, sunny sites.

# Don't just landscape . . . RAINSCAPE

Rainscaping creates beautiful landscapes that manage water sustainably. It includes the installation of stormwater management practices that result in the improvement and protection of water resources in urban areas.

You can help prevent pollutants from reaching storm drains and streams by incorporating rainscaping practices into your landscape. Do it yourself or hire a certified Rainscaper trained in the design and installation of rainscaping practices. Either way, you can create beautiful and functional rainscapes that reduce runoff and improve water quality. So don't just landscape—Rainscape.

- 1 Native landscaping to buffer and provide habitat
- 2 Rain gardens capture downspout flows
- 3 Soil quality restoration to help yard absorb rain
- 4 Permeable paver driveway to reduce runoff
- 5 Native turf as a low maintenance alternative
- 6 Rain barrels to harvest rainwater









iowaagriculture.gov

iowastormwater.org







#### Low-interest loans available

The State Revolving Fund provides lowinterest loans (3 percent) to implement sustainable stormwater management practices. Loans can be made to developers, municipalities, businesses and homeowners. Visit www.iowasrf.com and click on "Topics" -"Stormwater" for more details.