rainscape

# stormwater . gardening simple . valuable . artistic expressive . beneficial . easy

a beautiful solution to stormwater pollution

know your rainscaping

This series of factsheets provides an overview of rainscaping: the purpose, the techniques, and the benefits of adding landscape enhancements to reduce stormwater runoff.

Use the factsheets to help you incorporate rain into your landscape.

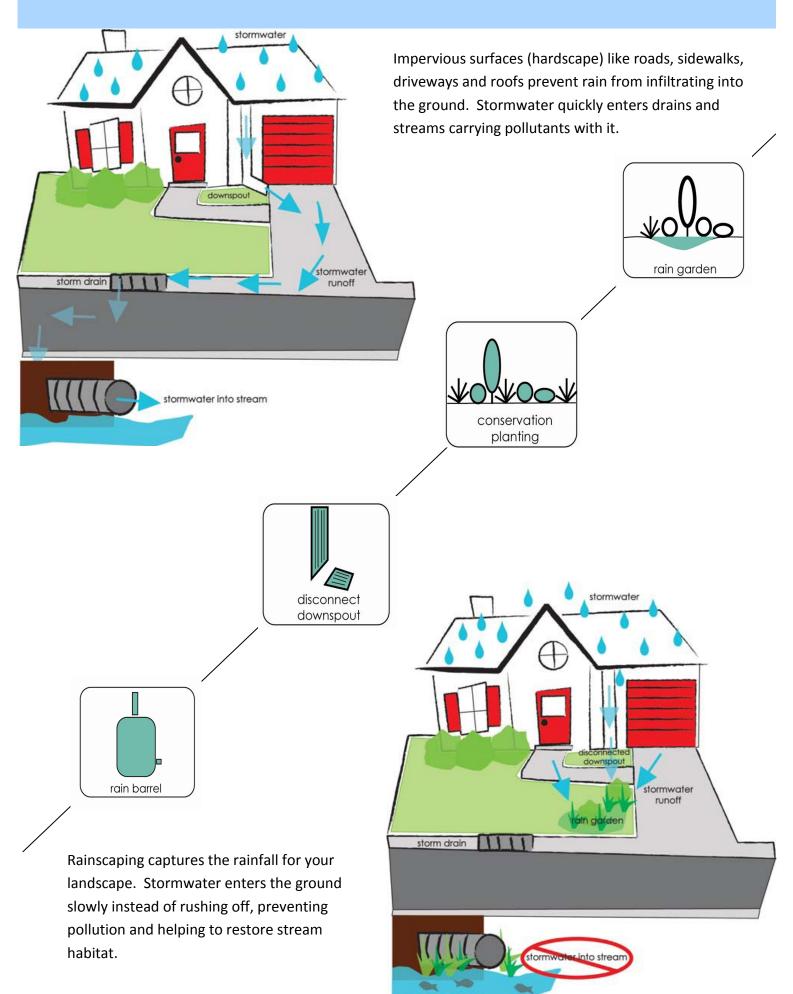




www.ncsu.edu/weco

NCSU Department of Horticultural Science

Watershed Education for Communities and Officials &



# the stormwater issue:

Impervious surfaces (hardscape) like roads, sidewalks, driveways and roofs prevent rain from infiltrating into the ground. If rainwater cannot infiltrate soft ground, it races downhill collecting pollutants, and eroding our land-scapes along the way. The additional volumes of water, sediment, and pollutants are then emptied into streams and tributaries disrupting habitats downstream. You can make a difference by rainscaping your yard!

# what is a rainscape?

Rainscapes are landscape enhancements that reduce stormwater runoff. Most rain that falls on hard surfaces flows to a creek or a stormdrain. Stormdrains flow to creeks. This stormwater runoff carries pollutants, causes flooding, erodes streambanks and disturbs habitat.

In contrast, rainfall on natural surfaces like gardens, forests and meadows soaks into the ground, replenishing groundwater and streams, and providing water for plants. Rainscapes simulate natural drainage to intercept, capture and absorb rain.

This series of factsheets will provide the detail needed to rainscape your backyard.

# rainscaping techniques defined:



**Rain Barrels Capture** rainfall coming off roofs, gutters and downspouts. They store rainfall to use in the garden at a later date and once they're full, they must be emptied. Cisterns are similar to rain barrels, just larger. They can be buried or set above-ground.



**Disconnecting your Downspout** is about detaching a downspout from the storm drain system or driveway and redirecting rainwater to soak into your yard or landscaping. You can also direct water from your downspout or rain barrel (overflow) to your rain garden.



**Conservation Plantings Naturalize** your landscape to allow rainfall to infiltrate. Turf areas are usually compacted and slightly impervious. By removing turf, amending or aerating the soil, or planting trees, shrubs or perennials, more rainwater can be absorbed into the ground and used by the plants, preventing additional runoff.



**Rain Gardens** are slightly recessed gardens designed to capture and temporarily hold rainfall flowing through your yard (runoff). Water moving through the rain garden not only irrigates the plants, but will have most of the pollutants removed from it (partly by the plants and partly by the filter bed).

# how to decide which one is best for you?

The great thing about rainscaping is that there are different techniques that can all suit the needs of you and your landscape best. For instance, if you live in townhome with little yard, a rain garden might not be appropriate due to size limitations, but a cistern or rain barrel may be perfect to help you water those patio plants. For residential and commercial landscapes that can afford the space, rain gardens provide the greatest benefits, the most "bang for your buck". They not only remove stormwater, they filter it and provide beautiful scenery within your land-scape. Some homeowners find a combination of the techniques is the best solution, such as a rain barrel and rain

#### what are the benefits?

**environmental:** Rainscaping helps restore stream health, recharge groundwater, and provide habitat for plants, animals, and birds.

**economic:** Rainscaping reduces water costs, reduces energy costs, and increases property values. Some municipalities even offer credits or rebates to homeowners with rainscaping.

**aesthetic:** Rainscaping provides opportunities to beautify your landscape with blooming flowers and provide four seasons of interest in the garden.



# how do I choose?

Whether you own 3 acres or a simple patio garden, there is a rainscape solution for your property! Drawing on

horticulture, engineering, and landscape architectural expertise, we have featured each of these techniques in a series of guides to help you decide which option is most suitable to your tastes, maintenance requirements and landscape conditions. So no matter, big or small, you can help do your part to restore our watersheds. Visit our website at **www.ncsu.edu/WECO** to begin your rainscape journey.

# DRAFT PUBLICATION FOR REVIEW