

City of Worthington 303 9<sup>th</sup> Street, P.O. Box 279 Worthington, MN 56187 (507) 372-8640 www.ci.worthington.mn.us

# What You Can Do At Home To Reduce Flooding and Water Pollution

#### The Runoff Problem

Runoff from hard surfaces including roofs, driveways, sidewalks, parking lots and streets can cause flooding and pollute lakes and streams. In most of Worthington's neighborhoods, excess rain and snowmelt water flows into a nearby storm sewer catch basin. From there the runoff is piped underground to Lake Okabena or a ditch draining to Lake Ocheda or Heron Lake. During big rain events or rapid snowmelt, runoff can cause local street flooding and overload drainage ditches.

Runoff is seldom clean. Rain and snowmelt water picks up soil, organic matter and other pollutants as it flows across hard surfaces. This pollution is efficiently carried downstream by the storm sewer system.

In some of the City's newer neighborhoods, storm sewer water is temporarily stored and treated in a detention pond. Water slows down as it enters a pond allowing the heavier pollution particles to settle to the bottom. Lighter particles and dissolved pollution may flow through the basin to a lake or stream.

Pollution and flooding can be minimized by reducing the volume of water flowing into streets, storms sewers and ponds. Keeping dirt and other the pollution away from hard surfaces protects ditches and lakes downstream.

Worthington residents can help protect water quality and reduce flooding by temporarily storing runoff in their yards. Below are some suggestions.

# **Reduce Impervious Surfaces**

Rain soaks into the ground when it falls onto healthy lawns and well-planned landscaped areas. The water is later used by the yard's grasses, flowers, trees and shrubs. Healthy vegetation keeps soil in place and uses nutrients.

In contrast, rain falling onto hard surfaces, like roofs, driveways and parking lots, is not absorbed, and often flows directly into streets and storm sewers. Hard surfaces do not filter water, so pollution moves downstream with the runoff.

Runoff and pollution can be reduced by minimizing the size of hard surfaces in your yard and increasing the size of areas planted to grasses, gardens, shrubs and trees.

## Capture and Use Roof Water

Roof gutter downspouts often drain to impervious surfaces connected to streets, storm sewers, lakes and streams. Rain barrels can capture this roof water and store it for future use.

Rain barrels were once common in yards and gardens. Many were removed because they were considered old fashioned and it was easier use a garden hose to water plants.



Modern Rain
Barrels
Capture, Filter,
Store and
Dispense Roof
Water





Rain barrels are back in style among gardeners and conservation minded homeowners. Modern rain barrels are attractive and have covers that keep out mosquitoes.

Many new barrels have spigots for connecting garden hoses. They are both convenient and free sources of soft water for trees, vegetable gardens and flowers.

## Capture and Treat Runoff

Rain gardens capture and treat runoff from parking lots, driveways, roofs and other impervious surfaces. Water entering them soaks into the ground and is used by flowers, grasses and shrubs. Nutrients trapped by the soil are fertilizer for the growing plants.

Well-planned rain gardens contain attractive plants chosen for their ability to withstand both dry and wet conditions and remove pollutants.



Cost-share money is available for rain garden construction from the Heron Lake and Okabena-Ocheda watershed districts. The Nobles Soil and Water Conservation District and Natural Resources Conservation Service office offers free rain garden planning assistance. For more information on financial assistance and rain garden design, contact the conservation office at 507-376-9150 Extension 3.

Many websites contain information on rain garden design, recommended plants, costs and more. One of the best sites is www.bluethumb.org.

