



## A RESOURCE GUIDE: PROTECT THE ENVIRONMENT BY REDIRECTING DOWNSPOUTS



#KnowTheFlowNWA

### REDIRECT DOWNSPOUTS!

Impervious surfaces such as roofs, sidewalks, and driveways prevent rain from soaking into the ground. When it rains, stormwater runs over these hard surfaces picking up pollutants such as yard debris, trash, fertilizers, vehicle fluids, and pet waste, which are washed into storm drains that connect to local creeks.

One inch of rainfall creates approximately 623 gallons of water falling on a 1,000-square foot roof. Downspouts transport stormwater away from buildings, often to a driveway or street into a storm drain that flows untreated to a creek. Interrupting the flow of stormwater runoff by keeping it on site and letting it soak into the ground, lessens the impact of stormwater downstream.

For more information, contact the Northwest Arkansas Stormwater Education Program at UofA Cooperative Extension Service at 479-444-1755 or [www.uaex.edu/nwastormwater](http://www.uaex.edu/nwastormwater).

# PROTECT THE ENVIRONMENT BY REDIRECTING DOWNSPOUTS

**NO**



Downspouts are designed to keep water away from buildings for flood protection. When channeled over hard surfaces such as sidewalks and streets, the paved path created from roofs to creeks never gives stormwater the opportunity to soak into the ground. This increases the volume and velocity of stormwater runoff and gives the water extra muscle to pick up pollutants and carry them to creeks and streams through the storm drain system. Easy, low-cost actions to keep stormwater on site and slow it down are described below.

**YES!**



## **SLOW IT DOWN AND SOAK IT IN**

To slow stormwater runoff and reduce pollution, redirect gutter downspouts to surfaces that can soak up water such as a yard or garden. Washed out spots at the base of a gutter can cause soil to wash away in stormwater. Add a splash guard or extender to your gutter's downspout to direct it to a lawn or garden.

Sometimes gutters are piped underground all the way to the street or sidewalk. This does not give the water an opportunity to slow down or soak in creating, potential runoff issues.

**YES!**



## **RAIN BARRELS**

Rain barrels can be a creative option for redirecting downspouts with added perks. Harvesting stormwater with rain barrels can offer many benefits including:

- Saving money on municipal water bills
- Reducing use of treated water for home irrigation
- Lowering peak demands on public water systems
- Reducing stormwater runoff volume and velocity which reduces potential for further erosion downstream

**YES!**



## **RAIN GARDENS**

Rain gardens are landscaped depressions that collect rainfall. These bowl-shaped gardens are designed to capture stormwater runoff and allow it to slowly percolate into the soil, recharging groundwater and removing stormwater pollutants.

The garden's flat bottom helps distribute rain water evenly across the planted area. Topsoil amended with compost and sand allows the water to slowly soak into the ground within a few days so there is no standing water to breed mosquitoes.

**NO**



## **ARE YOU IRRIGATING OR IRRITATING?**

If you have an automatic system, don't set it and forget it. Check your irrigation for excessive watering or misdirection of spray onto streets and sidewalks. Look for over-saturated areas that might indicate leaks. Any time water moves across the sidewalk or street, it can carry pollutants into a storm drain. Knowing your system can reduce runoff and save you money!