

10 things you can do  
to prevent stormwater  
runoff pollution

- ◆ Use fertilizers sparingly and sweep up driveways, sidewalks, and roads
- ◆ Never dump anything down storm drains
- ◆ Vegetate bare spots in your yard
- ◆ Compost your yard waste
- ◆ Avoid pesticides; learn about Integrated Pest Management (IPM)
- ◆ Direct downspouts away from paved surfaces
- ◆ Take your car to the car wash instead of washing it in the driveway
- ◆ Check car for leaks, and recycle used motor oil
- ◆ Pick up after your pet
- ◆ Have your septic tank pumped and have the system inspected regularly

Saline county  
**STORMWATER HOTLINE**  
(501) 303-5690



*PROTECTING WATER  
QUALITY FROM  
URBAN RUNOFF*

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Clean water is everybody's business

## Clean water is everybody's business

In urban and suburban areas, much of the land surface is covered by buildings and pavement, which do not allow rain and snowmelt to soak into the ground. Instead, most developed areas rely on storm drains to carry large amounts of runoff from roofs and paved areas to nearby waterways. The stormwater runoff carries pollutants such as oil, dirt, chemicals and lawn fertilizers directly to streams and lakes where they seriously harm water quality and groundwater resources. Development should be designed and built to minimize increases in runoff.



## How urbanized areas affect water quality

The porous and varied terrain of natural landscapes like forests, wetlands, and grasslands trap rainwater and snowmelt and allows them to filter slowly into the ground. In contrast, impervious (nonporous) surfaces like roads, parking lots, and rooftops prevent rain and snowmelt from infiltrating, or soaking, into the ground. Most of the rainfall and snowmelt remains above the surface, where it runs off rapidly in unnaturally large amounts.

Storm sewer systems concentrate runoff into smooth, straight conduits. This runoff gathers speed and erosion power as it travels underground. When this runoff leaves the storm drains and empties into a stream, its excessive volume and power blast out stream banks, damaging streamside vegetation and wiping out aquatic habitat. These increased storm flows carry sediment loads from construction sites and other denuded surfaces and eroded stream banks. They often carry higher water temperatures from streets, rooftops, and parking lots, which are harmful to the health and reproduction of aquatic life. The loss of infiltration from urbanization may also cause profound groundwater changes. Although urbanization leads to great increases in flooding during and immediately after wet weather, in many instances, it results in lower stream flows during dry weather. Many native fish and other aquatic life cannot survive when these conditions prevail.



## Controlling impacts from new development

Saline County is committed to controlling the volume of runoff from new developments by requiring structural controls, pollution prevention strategies, and educating the developers on low impact developments. Low impact development includes measures that conserve natural areas (particularly



sensitive hydrologic areas like riparian buffers); reduce development impacts; and reduce site runoff rates by maximizing surface roughness, infiltration opportunities, and flow paths.

## Controlling impacts from existing development

Controlling runoff from existing urban areas is often more costly than controlling runoff from new developments. Saline County is seeking out priority pollutant reduction opportunities, protecting natural areas that help control runoff, and initiating ecological restoration and retrofit activities to clean up degraded water bodies. The county accepts the lead role in educating the community, pollution prevention outreach campaigns, and partnerships with citizen groups and businesses. Citizens can help prioritize the clean up strategies, volunteer to become involved in restoration efforts.

### Did you know?

- ◆ Because of impervious surfaces like pavement and rooftops, a typical city block generates more than 5 times more runoff than a woodland area of the same size.
- ◆ Tests show one cigarette butt in two gallons of water will release enough chemicals to kill 80% of aquatic life. One butt with tobacco remnant will kill 100% of aquatic life.