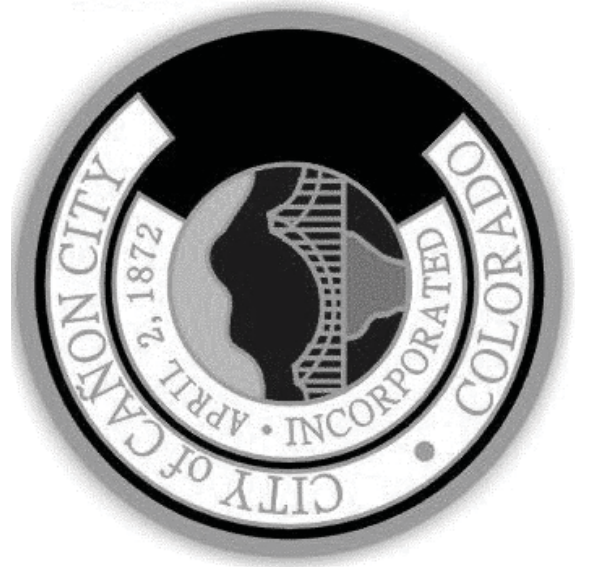


City of Cañon City
Engineering Dept.

Stormwater Management Program News

**COMMUNITY
EDITION**



STORMWATER HOTLINE

276-5265

CALL THIS NUMBER IF YOU WITNESS AN ILLICIT DISCHARGE!

REMEMBER: NOTHING BUT RAIN IN THE STORMDRAIN!

City Ordinance Prohibits

Illicit Discharges

Illicit Discharge: is defined as direct or indirect release of pollutants into the City's Storm Sewer System, including gutters!.

City Ordinance provides enforcement and civil penalties of up to

\$250 per violation per day!

Exempted Discharges

When properly managed, the following are allowable to be discharged into drain, drainageway or other conveyance:

- Water line flushing or other potable water sources, landscape irrigation or lawn watering, irrigation return flows, diverted stream flows, foundation or footing drains, crawl space pumps, air conditioning condensation, individual residential car washing (on lawns or other pervious surface), swimming pools (if dechlorinated), street wash water, and uncontaminated pumped ground water
- Discharges to protect public health and safety, such as flows from firefighting;
- Dye testing, provided the person undertaking such testing provides verbal notification to the authorized enforcement agency 24 hours prior to the time of the test;
- Runoff of roadway anti-icing and deicing agents; provided that they are applied according to Best Management Practices.

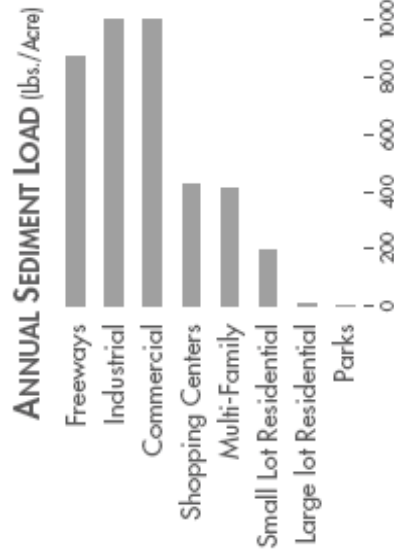
Managing Urban Stormwater Runoff

How Urbanized Areas Affect Water Quality

Urban runoff is a significant issue because urban areas have impervious surfaces. That means more water runs off instead of soaking in to the ground. Picked up as water passes over impervious surface, some of the pollutants found in urban runoff are sediment, metals, nutrients, oxygen demanding materials, and bacteria. In this issue we will focus on nutrients, Oxygen Demanding Material, sediment and bacteria.

Sediment

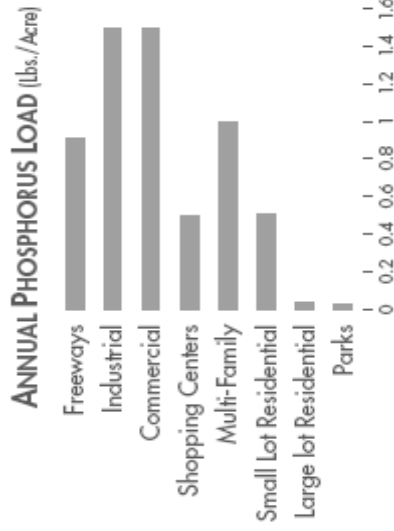
Urban runoff is loaded with sediment. Besides the dirt you see in the streets and gutters, urban areas produce their own distinctive mix of sediment. It includes flakes of metal from rusting vehicles, particles from vehicle exhaust, bits of tires and brake linings. The leading sources of sediment in existing urban areas are industrial sites, commercial development



THE CITY OF CAÑON CITY STORMWATER MANAGEMENT PROGRAM MISSION IS TO PROTECT THE WATER QUALITY OF THE ARKANSAS RIVER FROM POLLUTANTS FOUND IN URBAN STORMWATER RUNOFF

Bacteria

The levels of bacteria found in urban runoff almost always exceed public health standards for recreational



swimming and wading. Generally, fecal coliform bacteria counts for urban runoff are 20 to 40 times higher than the health standard for swimming. Research shows these high levels of bacteria are typical of runoff from small as well as large cities. Sources of bacteria in urban runoff include sanitary sewer overflows, pets, and populations of urban wildlife such as pigeons, geese and deer

and highways. But by far the highest loads of sediment come from areas under construction. Two factors account for the large amount of sediment coming from construction sites — high erosion rates and high delivery rates. Construction sites have high *erosion rates* because they are usually stripped of vegetation and topsoil for a year or more. Without erosion and sediment controls in place, typical erosion rates for construction sites are 35 tons to 45 tons per acre per year. Even more importantly, construction sites have very high *delivery rates*. During the first phase of construction, the land is graded and ditches or storm sewers are installed to provide good drainage. This also provides an efficient delivery system for pollutants

Nutrients

Runoff from both urban and rural areas is loaded with nutrients such as phosphorus and nitrogen. **Phosphorus** is the nutrient of greatest concern because it promotes weed and algae growth in streams. Because phosphorus compounds attach to soil particles, areas with high sediment loads also produce high phosphorus loads. This means that construction sites are significant sources of phosphorus as well as sediment. Other sources of phosphorus include fertilizer spills, leaves and grass left on paved areas, and orthophosphate in vehicle exhaust.