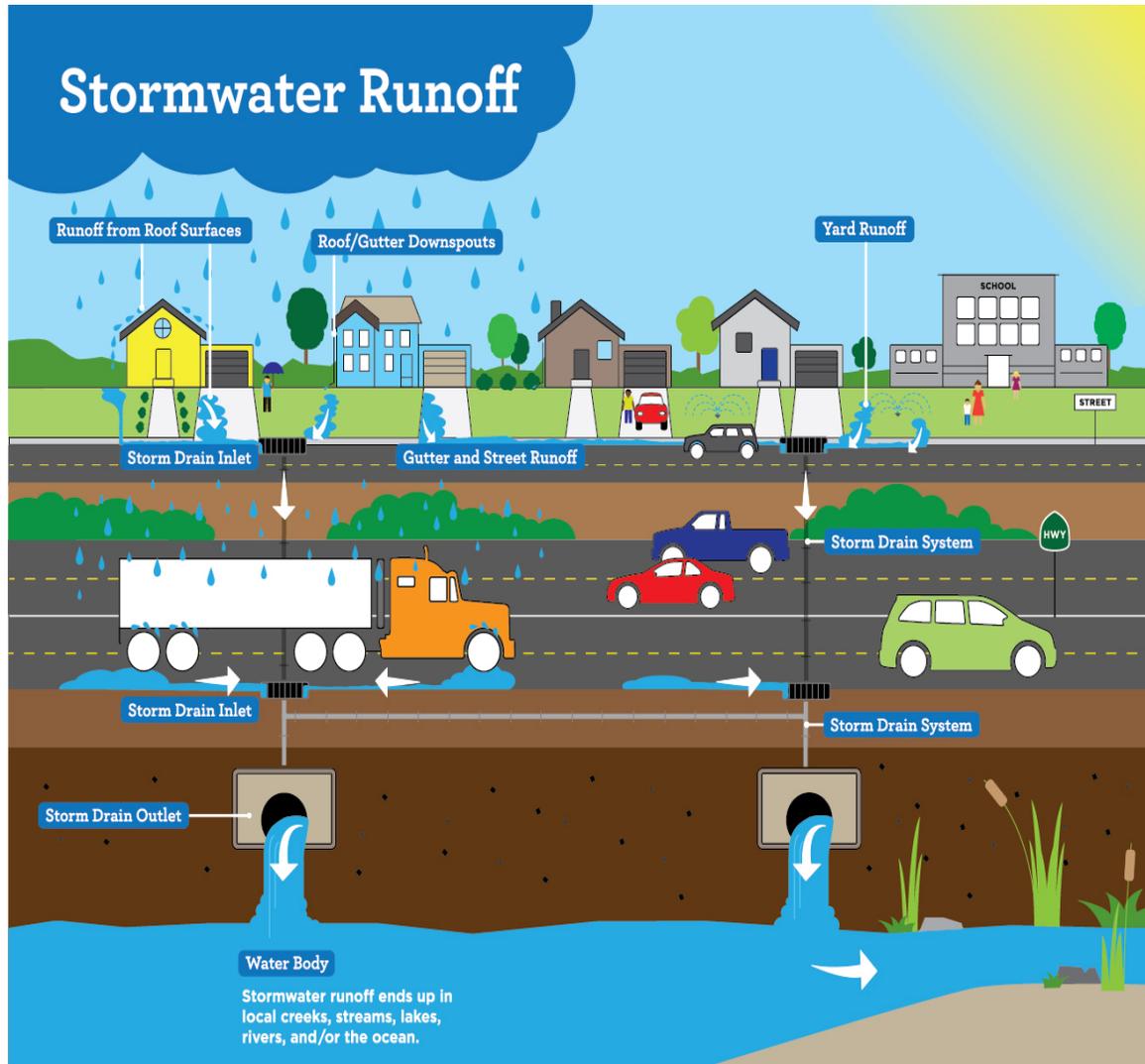


CEDAR PARK STORMWATER: THE INS AND OUTS AND WHY WE SHOULD CARE

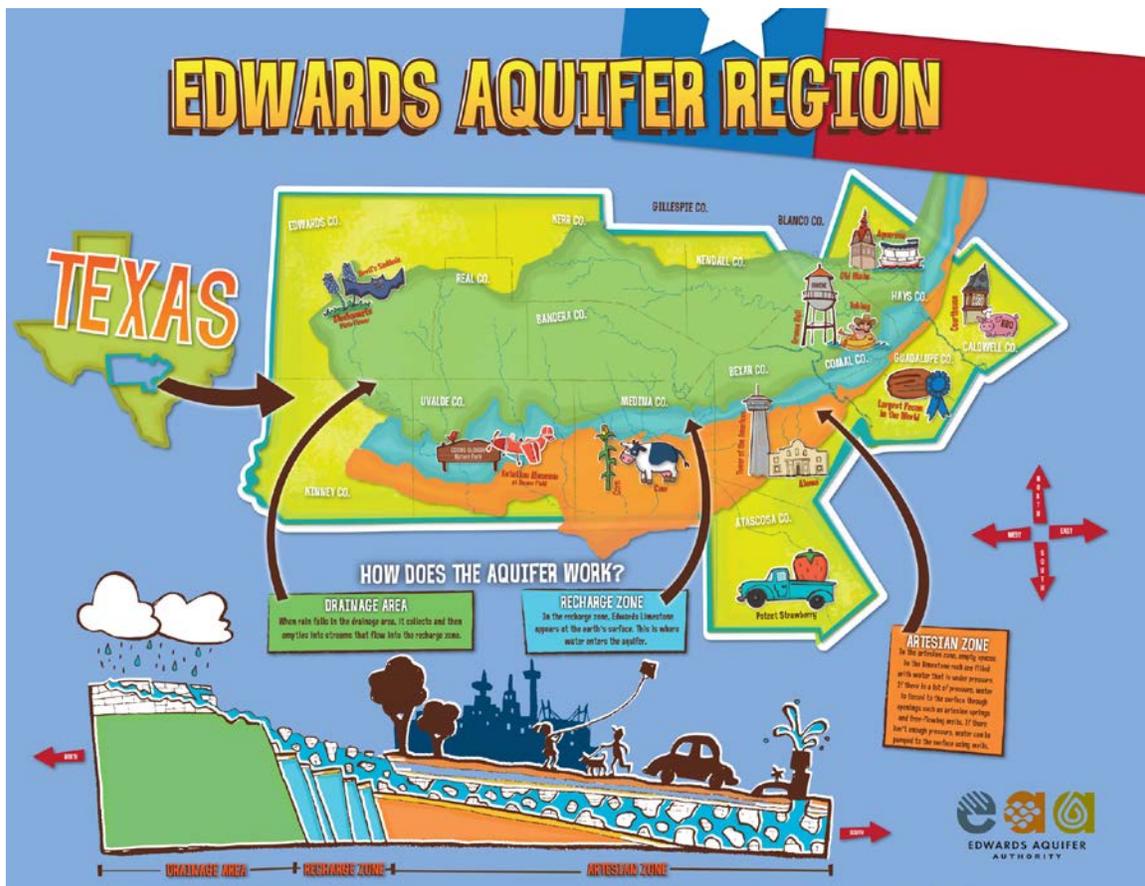
What is Stormwater Runoff?

Stormwater runoff occurs when precipitation from rain or snowmelt flows over the ground. Impervious surfaces like driveways, sidewalks, and streets prevent stormwater from naturally soaking into the ground.



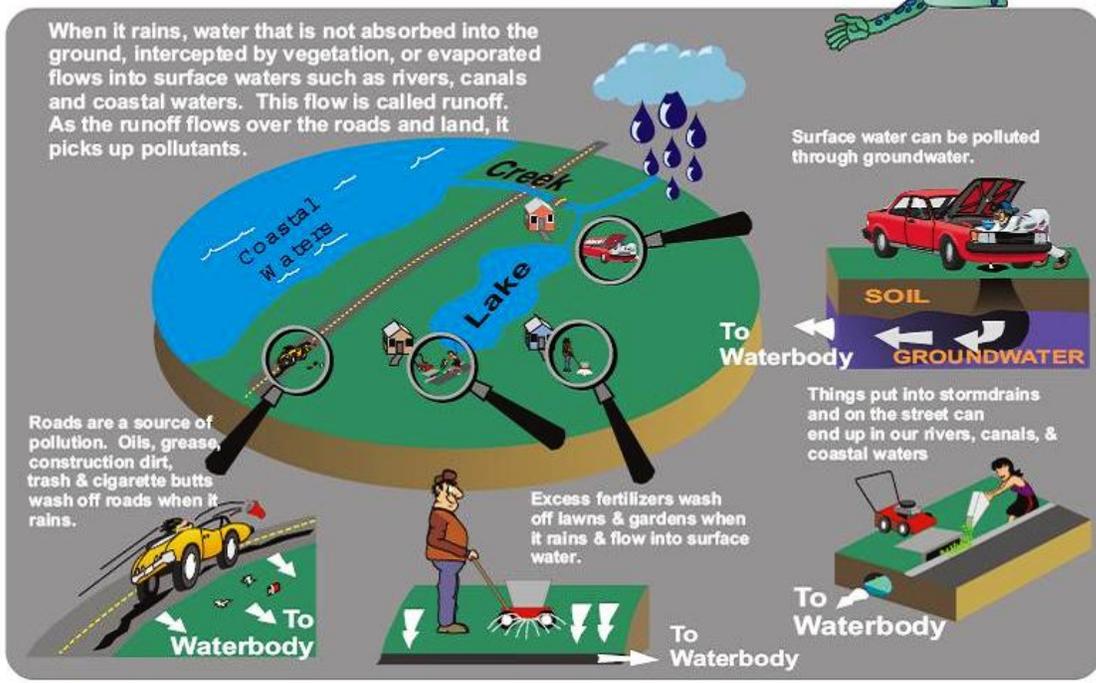
Why is Stormwater Runoff a problem?

A majority of the City of Cedar Park is located within either the Recharge or Contributing Zone of the Edwards Aquifer. The Edwards Aquifer is one of the most valuable natural resources in the Central Texas area. This aquifer provides water for municipal, industrial, and agricultural uses as well as sustaining a number of rare and endangered species. To preserve these beneficial uses, Texans must protect water quality in this aquifer and other waterways from degradation resulting from human activity.



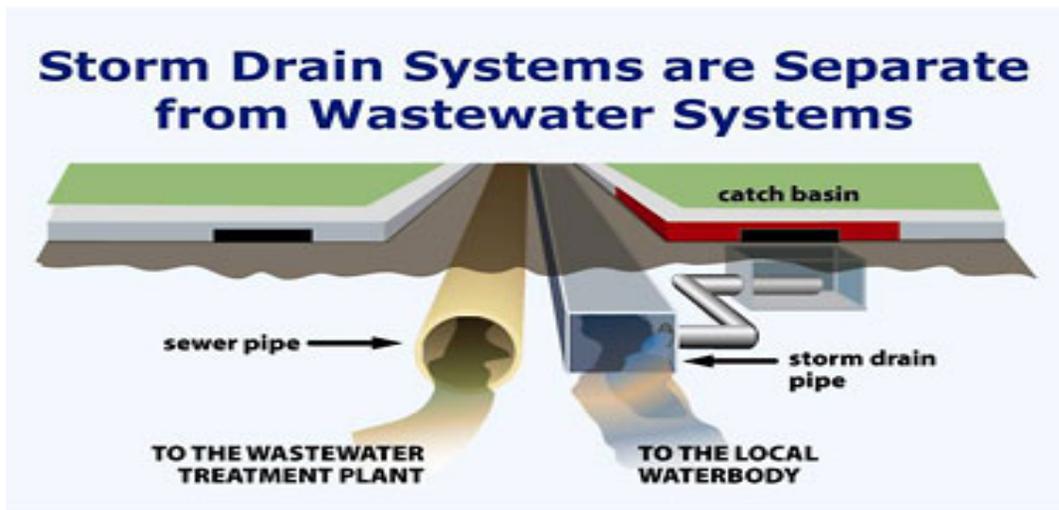
Stormwater can pick up debris, chemicals, dirt, and other pollutants and flow into a storm sewer system or directly to a lake, stream, or river. Polluted stormwater runoff can have many adverse effects on plants, fish, animals, and people. Sediment can cloud the water and make it difficult or impossible for aquatic plants to grow. Sediment can also destroy aquatic habitats. Excess nutrients can cause algae blooms. When algae die, they sink to the bottom and decompose in a process that removes oxygen from the water. Fish and other aquatic organisms can't exist in water with low dissolved oxygen levels. Debris (plastic bags, six-pack rings, bottles, etc.) washed into waterbodies can choke, suffocate, and displace aquatic life like ducks, fish, turtles, and birds. Household hazardous wastes like insecticides, pesticides, paint, solvents, used motor oil, and other auto fluids can poison aquatic life. Polluted stormwater often affects drinking water sources. This, in turn, can affect human health.

The CULPRITS



How is stormwater different from wastewater?

The wastewater collection and stormwater systems within the City of Cedar Park are separate. Wastewater is the used water that drains from toilets, sinks, household drains, and some industrial drains. The wastewater travels through wastewater collection pipes to a wastewater treatment plant where it is treated to strict quality standards before it is released into a water body. Water that goes into the stormwater system does not go to a treatment facility.



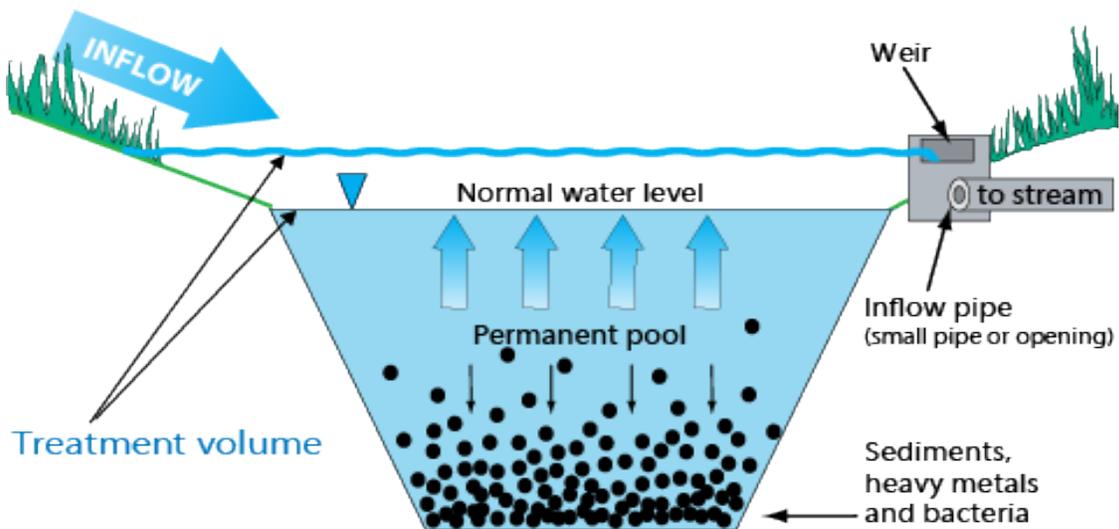
Environmental Protection Agency Regulations

To decrease the amount of pollution reaching surface waters, the U.S. Environmental Protection Agency (EPA) issued stormwater regulations as part of the Federal Clean Water Act. The Texas Commission on Environmental Quality (TCEQ) is responsible for administering the state of Texas' stormwater permitting program. The Texas stormwater program is closely modeled after the federal National Pollution Discharge Elimination System (NPDES) program, which requires stormwater be treated to the maximum extent practicable (MEP). These regulations are intended to guide developing areas such as Cedar Park in their efforts to keep our waterways clean. As a regulated city, Cedar Park has developed a Stormwater Management Program (SWMP) around the following five (5) minimum control measures (MCMs):

1. Public Education, Outreach, and Involvement
2. Illicit Discharge Detection and Elimination (IDDE)
3. Construction Site Stormwater Runoff Control
4. Post Construction Stormwater Management in New Development and Redevelopment
5. Pollution Prevention and Good Housekeeping for Municipal Operations

Water Quality and Detention Controls

Stormwater can have significant impact on the water quality of creeks and rivers, as well as the Edwards Aquifer. "Best management practices (BMPs)" is a term often used to describe different ways to keep pollutants out of runoff and to slow down high volumes of runoff. Two commonly used BMPs in the central Texas area are water quality and detention ponds. Water quality ponds are designed to minimize the effect of pollutants in stormwater associated with development. These water quality controls must meet the TCEQ regulations and are designed to improve water quality by removing suspended particulate matter and associated constituents such as bacteria, nutrients and metals. Detention ponds are designed and built to temporarily detain water to prevent an increase in stormwater peak runoff rates from a developed site, when compared to flows from the pre-developed site condition.



Illicit Discharge Detection and Elimination

The City of Cedar Park Code of Ordinances states that “No person shall sweep into or deposit in any street or sidewalk the accumulation of yard refuse, clippings, or litter from any building or property”. In addition to the City’s Ordinances, the City of Cedar Park will be retrofitting existing public storm inlets and requiring new inlets be marked with a “No Dumping, Drains to Waterway” marker. The markers will be similar to the following image:



The City has also completed the process of mapping the entire public storm sewer system, identifying all major inlets and outfalls. This will allow the City to track where stormwater enters and exits the system and help isolate sources of pollution.

Construction Site Runoff Controls

Construction sites are often times the biggest contributors of a major stormwater contaminant; dirt. To reduce the impacts of silted runoff on local waterways, developers must implement and maintain erosion and sediment controls. Routine inspections ensure that pollution controls are established and preserved throughout development. The City of Cedar Park Engineering Department has created a database to track complaints and potential violations related to construction site runoff. If you would like to report a possible violation, please send an email to the City of Cedar Park Engineering Department at engineering@cedarparktx.gov. Be sure to include the site address or location and your concerns.



What are some simple steps residents can take to help control stormwater pollution?

Keeping pollutants out of stormwater run-off is less expensive than installing stormwater treatment facilities. There are several ways you can prevent pollution from entering stormwater:

- Leave grass clippings on your lawn (mulch).
- Sweep driveways, sidewalks and gutters to keep debris out of storm sewers.
- Use fertilizers and pesticides in recommended amounts. Consider using organic alternatives.
- Direct downspouts to lawns or gardens.
- Wash vehicles on your lawn or at a car wash.
- Clean up pet waste.
- Dispose of hazardous materials properly.
- Practice dry clean-up methods – For instance, instead of hosing down your driveway or sidewalk, a broom to sweep up waste.
- Recycle used engine oil.

Additional Information for Citizens

An electronic version of EPA's "After the Storm: A Citizen's Guide to Understanding Stormwater" brochure is available on the EPA web page at the following web address:

http://www.epa.gov/npdes/pubs/after_the_storm.pdf. Additional information on water quality and the Edwards Aquifer Protection Program may be found on the TCEQ's web page at <https://www.tceq.texas.gov/permitting/eapp/program.html>. Citizens may also contact the City of Cedar Park Engineering Department with any questions or concerns in regards to stormwater via email at: engineering@cedarparktexas.gov.

