**Stormwater FAQs**

**What is stormwater runoff?**

Stormwater runoff is water from rain or melting snow that “runs off” across the land instead of seeping into the ground. This runoff usually flows into the nearest stream, creek, river, lake or ocean. The runoff is not treated in any way.

**What is polluted runoff?**

Water from rain and melting snow either seeps into the ground or “runs off” to lower areas, making its way into streams, lakes and other water bodies. On its way, runoff water can pick up and carry many substances that pollute water.

Some-like pesticides, fertilizers, oil and soup- are harmful in any quantity. Others- like sediment from construction, bare soil, or agricultural land, or pet waste, grass clippings and leaves- can harm creeks, rivers and lakes in sufficient quantities.

In addition to rain and snowmelt, various human activities like watering, car washing, and malfunctioning septic tanks can also put water onto the land surface.

Polluted runoff generally happens anywhere people use or alter the land. For example, in developed areas, none of the water that falls on hard surfaces like roofs, driveways, parking lots or roads can seep into the ground. These impervious surfaces create large amounts of runoff that picks up pollutants. The runoff flows from gutters and storm drains to streams. Runoff not only pollutes but erodes streambanks. The mix of pollution and eroded dirt muddies the water and causes problems downstream.

**What is Nonpoint Source Pollution?**

This is another term for polluted runoff and other sources of water pollution that are hard to pinpoint. The term “nonpoint sources pollution” comes from the Federal Clean Water Act of 1987. There, it is used as a catch-all for all kinds of water pollution that are not well-defined discharges (point sources) from wastewater plants and industries.

**What cause polluted stormwater runoff?**

Polluted stormwater runoff generally happens anywhere people use or alter the land. People going about their daily lives are the number one source of stormwater pollutants. Most people are unaware of how they impact water quality. Some common example include over fertilizing lawns, excessive pesticide use, not picking up pet waste, using salt or fertilizer to de-ice driveways, letting oil drip out of their vehicles and littering. Developed areas in general, with their increased runoff, concentrated numbers of people and animals, construction and other activities, are a major contributor to NSP pollution, as are agricultural activities. Other contributors include harvesting activities, roadways, and malfunctioning septic systems.

**Why do we need to manage stormwater and polluted runoff?**

Polluted stormwater runoff is the number one cause of water pollution in the United States. In most cases today, stormwater either does not receive any treatment before it enters our waterways or is inadequately treated.

Polluted water creates numerous costs to the public and to wildlife. Communities that use surface water for their drinking supply must pay much more to clean up polluted water than clean water.

Polluted water hurts the wildlife in creeks, streams, rivers and lakes. Dirt from erosion, also called sediment, covers up fish habitats and fertilizers can cause too much algae to grow, which also hurts wildlife by using up the oxygen they need to survive. Soaps hurt fish gills and fish skin, and other chemicals damage plants and animals when they enter the water.

The quantity of stormwater is also a problem. When stormwater falls on hard surfaces like roads, roofs, driveways and parking lots, it cannot seep into the ground, so it runs off to lower areas. Due to more water running off hard surfaces, developed areas can experience local flooding. The high volume of water also causes stream banks to erode and washes the wildlife that live there downstream.

**How are stormwater and runoff “managed”?**

“Best management practices” is a term used to describe different ways to keep pollutants out of runoff and to slow down high volumes of runoff.

Preventing pollution from entering water is much more affordable than cleaning polluted water! Educating citizens about how to prevent pollution from entering waterways is one best management practice. Laws that require people and businesses involved in earth disturbing activities—like construction and agriculture—to take steps to prevent erosion are another way to prevent stormwater pollution. There are also laws about litter, cleaning up after pets and dumping oil or other substances into the drains.

Education and laws are just two best management practice examples. Some BMPs are constructed to protect a certain area. Some are designed to slow down stormwater, others help reduce the pollutants already in it- there are also BMPs that do both of these things.

Detention ponds, built to temporarily hold water so it seeps away slowly, fill up quickly after a rainstorm and allow solids like sediment and litter to settle at the pond bottom. These ponds are one constructed BMP example. (Plum Creek Park and Memorial Park). Storm drain grates, filter strips, sediment fences and permeable paving are other examples.

**Why the recent fuss about stormwater?**

The Federal Clean Water Act requires large and medium sized towns across the United States to take steps to reduce polluted stormwater runoff. The law was applied in two phases. The first phase addressed large cities. The second phase, often referred to as “Phase II,” requires medium and small cities, fast growing cities and those located near sensitive water to take steps to reduce stormwater. In Lexington, Phase II laws took effect in 2006.

These laws require chosen cities to do six things:

1. Conduct outreach and education about polluted stormwater runoff.
2. Provide opportunities for residents to participate and be involved in conversations and activities related to reducing polluted stormwater runoff.
3. Detect illicit discharges (e.g. straight piping or dumping).
4. Control construction site runoff.
5. Control post-construction runoff.
6. Perform municipal housekeeping (e.g. take steps to prevent runoff from city buildings, yards and activities.

**If it only affects streams and creeks, why should I care?**

Streams and creeks feed into river, lakes and the ocean. We all drink water, so we are all affected when our water is polluted. If you like to fish, swim or boat, you may have heard or been affected by advisories warning you not to swim, fish or boat in a certain area because of unhealthy water or too much algae. Money made from tourism and water recreation can also be impacted, as are businesses and homes flooded by stormwater runoff. When we pollute out water, everyone is affected!

**What can I do to reduce the amount of stormwater pollution I contribute?**

If you own a car, maintain it so it does not leak oil or other fluids. Be sure to wash it on the grass or at a car wash so the dirt and soap do not flow down the driveway and into the nearest storm drain. If you maintain a yard, do not over fertilize your grass. Never apply fertilizers or pesticides before a heavy rain. If fertilizer falls onto driveways or sidewalks, sweep it up instead of hosing it away. Mulch leaves and grass clippings and take to the City provided grass and tree pile located on East Walnut Street. Doing this keeps leaves out of the gutter, where they can wash into the nearest storm drain. Turn your gutter downspouts away from hard surfaces, seed bare spots in your yard to avoid erosion and consider building a rain garden in low-lying area of your lawn. (Out front of the Lexington Field House).

Pet owners should pick up after their pets and dispose of pet waste in the garbage. Keep lawn and household chemicals tightly sealed and in a place where rain cannot reach them. Dispose of old or unwanted chemicals at household hazardous waste collection sites or events. (Glenn Hawks Community Services Building holds a hazardous waste event once a year during the summer time). Never put anything in a storm drain and don’t litter.

**How else can I help reduce stormwater pollution in my area?**

Participate in the next storm drain stenciling event- where the destination of storm water is clearly marked on the drain- are a fun way to let your neighbors know the storm drain is only for rain. Report stormwater violation when you spot them to Nick Hoendervoogt at the Development Service Department located at City Hall (406 E. 7th Street), Email-nhoendervoogt@cityoflex.com or call- (308)324-2341. Keep learning about polluted stormwater runoff and how to prevent it.