

WHAT IS STORMWATER RUNOFF AND HOW DOES IT BECOME A PROBLEM

Stormwater pollution occurs when rainfall or snowmelt runoff travels across loose soils or impervious surfaces and transports sediment, vehicle fluids, chemicals, fertilizers, salts, and other contaminants into natural water supplies and sensitive environments. It can also run directly into storm drainage systems and catchment areas. From there, it's carried without treatment into our streams, ponds, reservoirs and rivers.

Stormwater pollution can be problematic due to the pollutants it can pick up and transport to sensitive areas like potable water sources or polluted/threatened environments.



COMMON POLLUTANTS

- Salts
- Fertilizers (Phosphorus and Nitrogen)
- Car Fluids (Oils and Gas)
- Soaps
- Sediment
- Sewage
- Trash



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POLLUTION SOURCES AND SOLUTIONS

EDUCATION

Polluted stormwater runoff can have many adverse effects on plants, fish, animals and people. Homeowners have the most impact at reducing Stormwater Pollution and Phosphorus Loading from:

Fertilizers, pesticides, yard clippings and leaves can wash into the drainage networks and pollute waterbodies via nutrient loading. Compost yard waste and use that as fertilizer in place of commercial fertilizers.

Don't over water your lawn. Have a rain barrel to catch roof runoff and utilize that for lawn care. Avoid or minimize the use of fertilizers and pesticides for lawn care.

ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)

Homeowners, businesses and contractors can accidentally/intentionally dump pollutants into the drainage network or directly into water bodies.

The general public should report any suspicious discharges (dirty/cloudy/tinted water, unusual smells, floating debris and random dumping) to Municipal offices. Municipal offices will investigate and attempt to identify the source.

PHOSPHORUS POLLUTION

Phosphorus is the most common form of stormwater pollution due multiple sources of pollution (sediment erosion, sewer overflow and fertilizer application).

This can cause algae blooms in aquatic habits that depletes dissolved oxygen through overproduction and mass die off.

EDUCATIONAL AWARENESS

1

Sediment can cloud the water and make it difficult or impossible for aquatic plants to grow. Sediment also can destroy aquatic habits and fill in streams, ponds and lakes.

2

Polluted stormwater can often affect drinking water sources. This, in turn, can create human health issues and increase drinking water treatment costs.

3

Bacteria and other pathogens can wash into swimming areas and create health hazards, often making beach closures necessary.

4

Debris, plastic bags, drink containers, cigarette butts and litter washing into waterbodies can choke, suffocate or disable aquatic life like ducks, fish, turtles and birds.

5

Excess nutrients can cause algae blooms. When algae dies, it sinks to the bottom and decomposes in a process that removes oxygen from water called eutrophication. Fish and other aquatic organisms can't exist in water with low dissolved oxygen levels.

6

Household hazardous waste like insecticides, paint solvents, used motor oil, and other auto fluids can poison aquatic life.

SEPTIC SYSTEMS

Leaking and poorly maintained septic systems release nutrients and pathogens (bacteria and viruses) that can be picked up by stormwater and discharged into nearby waterbodies. Pathogens can cause public health problems and environmental concerns.

Inspect your system every 3 years and pump your tank as necessary (every 3 to 5 years).

PET WASTE

Pet waste can be a major source of bacteria and excess nutrients in local waters.

When walking your pet, remember to pick up the waste and dispose of it properly. Flushing pet waste is the best disposal method.

AUTO CARE

Washing your car and degreasing your auto parts at home can send detergents and other contaminants through the storm sewer system. Dumping automotive fluids into storm drains has the same result as dumping the materials directly into a waterbody.

Use a commercial car wash that treats or recycles its wastewater, or wash your car in your yard so the water infiltrates into the ground.

Don't dispose of any hazardous materials (cleaning chemicals, auto fluids, greases) into storm drains. Properly dispose of them in sealed containers and take to a certified disposal facility. All facilities that change oil must accept used waste oil.