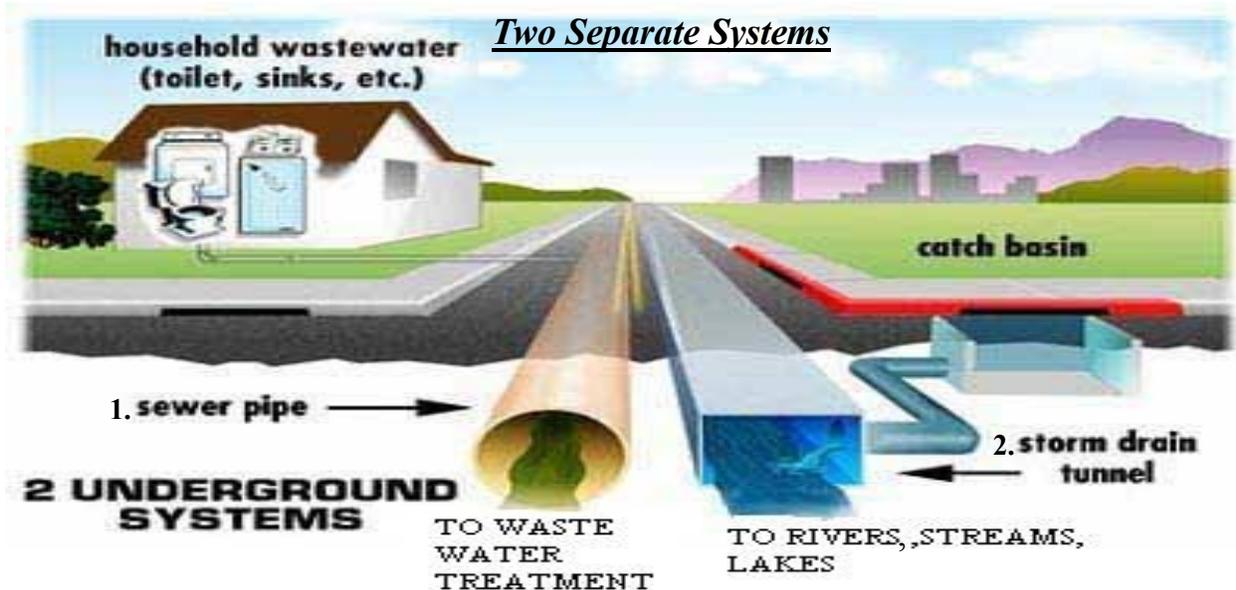


# Stormwater News

In the City of Kalispell there are two systems of drainage: the Sanitary Sewer or Wastewater System, and the Storm Drain System.



**1. The Wastewater Sewage System** takes household wastewater (such as water waste from sinks, toilets, washer, etc.) and carries it through a home's plumbing and into an underground sanitary sewer pipe. The wastewater is then piped to the City Wastewater Treatment Plant.

**2. The Storm Drain System** carries excess rain water from streets, driveways, and grassy areas and routes it into curb side storm drains. From there, it enters another underground, but **completely separate**, pipe system. The untreated stormwater flows through the storm drain pipe system and outlets to streams, rivers, and lakes.

## STORMWATER POLLUTANTS

**Vehicle Leaking Oil:** Vehicles leaking oil or other fluids onto the garage floor can end up in the storm drain.

**Leaks from Household Chemicals:** Household chemical like paint, cleaning supplies, bugs spray, and plant fertilizers leaking onto the garage floor can end up in the storm drain. These things can harm fish and wildlife, make the water unsafe to drink and swim in. Household chemical should be sealed for storage or disposed of properly.

**Pet Waste on the Yard:** It's important to clean up after dogs and other pets and dispose of their waste in the trash. This is true whether your pets are in the yard, or if you are taking them on a walk down the street, in a park, or in the woods. Pet waste contains bacteria and viruses that can make wildlife and people sick.

**Changing Oil on the Driveway:** Spilled motor oil can be washed away by the rain into the storm drains and into rivers and streams. It is important to dispose of oil and other vehicle fluids properly and safely, and never pour them on the ground or into storm drains.

**Washing off the Driveway:** Trash, leaves, sticks, and grass clippings can float into storm drains and flow into stream and rivers just like other pollutants.

**Spraying Chemicals on Plants and the Lawn:** The bug sprays, weed killers, and fertilizers we put on our plants can also run off into storm drains. This can hurt wildlife and pollute streams and lakes, so it is important to follow directions and use chemicals properly. Unused chemicals and empty containers should also be disposed of correctly.

**Garbage Overflowing from Trashcans:** Animals can eat the trash or get caught in it, and rotting yard waste can harm the water and clog streams. Also, putting trash and yard waste into storm drains can clog them up and can cause streets and roads to flood during heavy rains.

## WHAT IS STORMWATER RUNOFF?



Stormwater is runoff from rain storms and snow melts. A system of gutters, ditches, and storm drains collects this runoff and discharges it directly into natural waterways.

When water flows over parking lots, streets, and yards, it picks up pollutants like oil, fertilizers, pesticides, and litter. The water and pollutants are carried into the storm drain system where they flow untreated into the rivers, lakes, and streams.



## THE EFFECTS OF STORMWATER POLLUTION

Polluted stormwater runoff can have many adverse effects on plants, animals, and people.



- ◆ Sediment can cloud the water and make it difficult or impossible for aquatic plants to grow. Sediment also can 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 such as plastic bags, six-pack rings, bottles, and cigarette butts washed into waterbodies can choke, suffocate, or disable aquatic life including ducks, fish, turtles, and birds.

- ◆ Household hazardous chemicals like insecticides, pesticides, paint, solvents, used motor oil, and other automobile fluids are toxic to aquatic life.

## SOLUTION TO STORMWATER POLLUTION

### Auto Care

- ◆ Use a commercial car wash or wash your car on a lawn or other unpaved surface to **minimize** the amount of dirty, soapy water flowing into the storm drain and eventually into your local waterbody.



- ◆ **Recycle** used oil and other automotive fluids at participating service stations. Don't dump these chemicals down the storm drain; dispose of them properly.



### Lawn Care

- ◆ Use pesticides and fertilizers **sparingly**, and in the recommended amounts. Avoid application if the forecast calls for rain; otherwise, chemicals will be washed into your local stream.



- ◆ **Sweep up** yard debris, rather than hosing down areas. Dispose of yard waste in a solid waste container. Compost or recycle yard waste when possible.

### Home Care



- ◆ Use paints, solvents, and cleaners in the **smallest amounts possible**, and follow the directions on the label.
- ◆ Dispose of the waste through the County Landfill household hazardous waste collection program.
- ◆ Store substances properly to avoid leaks and spills.



Recycling in the Flathead Valley