

Commercial Storm Water Management

Know where your property storm water is collected, where it goes, and what can be done to protect runoff quality. This will protect water quality in streams and lakes.

Outdoor Areas and Parking Lots Dirt, oil, and debris that collect in parking lots and paved areas can be washed into the storm sewer system and eventually enter local streams and lakes.

- Sweep up litter and debris from sidewalks, driveways, and parking lots, especially around storm drains.
- Regularly clear sediment and debris from storm inlets, drains, and storm water ponds.
- Cover grease storage and dumpsters and keep them clean to avoid leaks.
- Keep property free of trash and windblown items.

Automotive Facilities Cars waiting to be repaired can leak fuel, oil, and other harmful fluids that can be picked up by storm water.

- Clean up spills immediately and properly dispose of cleanup materials.
- Cover fueling stations and design or retrofit spill containment measures.
- Properly maintain vehicles to prevent oil, gas, and other discharges from being washed into local streams and lakes.

Further Information

Water Quality Protection District

(406) 457-8927

water@lccounty.mt.gov

www.lccountymt.gov/health/water

City of Helena Public Works

(406) 457-8567

www.helenamt.gov/public-works/utility-maintenance

Lake Helena Watershed Group

(406) 457-8584

jmcbroom@lccounty.mt.gov

EPA Storm Water Information

www.epa.gov/npdes/stormwater



Runoff that enters a storm drain is not treated and eventually flows into streams, lakes, or groundwater.

What is storm water runoff?

Storm water runoff occurs when precipitation from rain or snowmelt flows over the ground. Impervious surface like driveways, sidewalks, streets, and roofs prevent storm water from naturally soaking into the ground.

Why is storm water runoff a problem?

Storm water can pick up debris, chemicals, dirt, and other pollutants. Contaminants in storm water runoff negatively impact our ability to use streams and lakes for drinking water, swimming, and fishing because storm water is typically untreated. Locally, storm water eventually flows into Tenmile or Prickly Pear Creek, Lake Helena, or the Helena valley aquifer.

How can runoff be improved?

Simple practices around your house, yard or business can reduce pollution in storm water runoff.

**Storm Water
Keep it Clean
Save Your Stream**

2014



Storm Water Runoff Pollution

How You Can Protect Streams & Lakes



Lewis & Clark County
Water Quality Protection District



City of Helena Public Works

Storm Water Pollution

Polluted storm water 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.

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.

Bacteria and other pathogens can wash into swimming areas and create health hazards.

Common household chemicals like insecticides, pesticides, paint, solvents, used motor oil, and other auto fluids can poison aquatic life. Land animals and people can become sick from eating diseased fish and shellfish or ingesting polluted water.

Polluted storm water often affects drinking water sources like the Helena Valley groundwater aquifer. This, in turn, can affect human health and increase drinking water treatment costs.

Together, we can prevent storm water pollution.



Residential Storm Water Management

Household Chemicals Household products that contain chemicals like insecticides, pesticides, paint, solvents, and used motor oil and other auto fluids contaminate storm water if they enter runoff.



- Don't pour chemicals onto the ground or into storm drains.
- Recycle or properly dispose of household products that contain chemicals.

Auto Care Washing your car and dumping automotive fluids into storm drains is just like dumping them directly into a stream or lake.

- Use a commercial car wash that treats or recycles its wastewater, or wash your car on your lawn so the water filters into the ground.
- Repair leaks and dispose of used auto fluids and batteries at designated drop-off or recycling locations. You can drop off used motor oil and antifreeze at the City of Helena Transfer Station. It is free with a residential permit.

Pet Waste Pet waste on the ground can be picked up by storm water runoff, washed into storm drains, and into rivers, and streams. There, it can contribute to elevated pathogen and nutrient levels.

- Regularly clean up pet waste from your yard.
- Bring a bag and pick up any waste when out with your pet.
- Dispose of pet waste by burying it or putting it in the garbage.

Debris Trash and other debris washed into streams and lakes can choke, suffocate, or disable aquatic life like ducks, fish, turtles, and birds.

- Ensure that plastic bags, six-pack rings, bottles, and cigarette butts are put in the garbage to keep out of waterways.



Residential Lawn and Landscaping Management

Lawn Care Excess fertilizers and pesticides applied to lawn and gardens wash off and pollute streams. Yard clippings and leaves can wash into storm drains and contribute nutrients and organic matter to streams.

- Don't overwater your lawn. Consider using a soaker hose instead of a sprinkler.
- Use pesticides and fertilizers sparingly and at the recommended amounts. Use organic mulch or safer pest control methods whenever possible.
- Compost mulch, or recycle grass trimmings, leaves, and branches. Keep yard waste away from streets, storm drains, and drainage infrastructure.

Landscaping Landscape design and plantings can reduce storm water runoff and allow water to seep into the ground.

- Permeable pavement systems allow rain and snowmelt to soak through into the ground. This decreases storm water runoff, unlike conventional, impervious concrete or asphalt.
- Consider routing roof runoff to lawns, other vegetation, or rain barrels. Rain gardens and grassy swales are specially designed areas planted with native plants that can provide natural places for rainwater to collect and soak into the ground. Rain from rooftop areas or paved areas can be diverted into these areas rather than into storm drains.
- Vegetated filter strips are native plants along roads, sidewalks, or streams that trap pollutants from storm water.

