



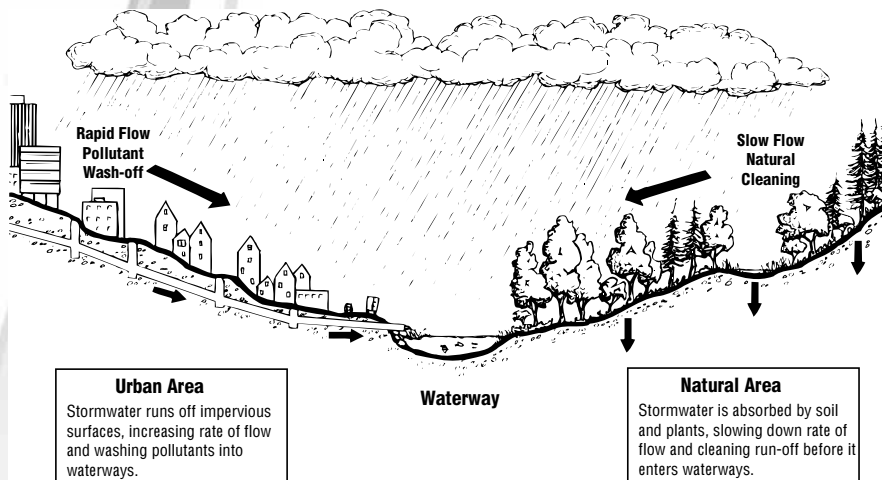
Make Clean Water Part of Your Life

Water pollution is everywhere. Whenever oil and grease, sediment, wood preservatives, fertilizers, paint or other pollutants are allowed to wash into a storm drain, even if there's no stream or river directly in sight, water pollution is the result.

Eugene has two separate collection systems. One system handles stormwater and the other handles wastewater. Wastewater is all piped to a treatment facility for cleaning before it is discharged to local waterways. Stormwater is rain and surface water that runs off streets and land and flows into nearby waterways. Along the way, this "run-off" collects pollutants such as litter, oil, anti-freeze, excess fertilizer, etc.

Storm drains carry run-off directly to nearby streams and other water bodies without any treatment. The pollutants can affect aquatic plants, wildlife, drinking water sources and generally harm our environment. Eugene's Amazon Creek, Mill Race, and other smaller waterways and drainage ditches all empty into the Willamette River or flow northwest to the Fern Ridge Reservoir.

You may know that it is illegal to directly dispose of chemicals, paint, or other pollutants into a storm drain. But you may not realize that you also break the law if you or your family allow pollutants to be washed into a storm drain.



Every Little Bit Helps

Since all surface run-off (stormwater) in Eugene flows to local water bodies, pollution prevention depends on steps taken by each and every Eugene resident.

Step 1: Locate the storm drains near your home and note what's happening around them that could harm water quality. Are they clogged with leaves or trash? Do car washing detergents, loose soils or anything else other than clean water flow into them?

Step 2: Consider your gardening and yard care methods and any alternatives you might use.

Step 3: See the reverse side of this fact sheet for more on how you can improve water quality. Remember, we all live downstream!

Stormwater Pollution Contacts

City of Eugene, Public Works Maintenance:
541-682-4800

Hazardous Waste Storage Considerations:
Fire Marshal's Office, 541-682-8360

Emergency Spills of Toxics:
Eugene-Springfield Fire and EMS: 911



Something as simple as a rolled towel can keep debris or sediment from entering a drain and flowing to the river. See the back of this sheet for more simple ways to help keep water clean.

Pollutants

How They Harm Water

What You Can Do

POLLUTANTS Toxins are poisonous, carcinogenic (cancer-causing) or otherwise harmful to organisms during brief or prolonged exposure. They come from certain metals such as arsenic, chromium, copper, lead and mercury used in automotive fluids (anti-freeze, battery acid, gasoline and brake fluid), pesticides and certain cleaning products.

High concentrations of toxic materials kill fish, harm wildlife, plants, and people. Some toxins accumulate in the environment and can cause long-term side-effects. Others concentrate in the food chain as one organism eats others that have been contaminated.

- Wash vehicles and other equipment in a properly drained area, using little or no soap or detergents.
- Store all materials properly.
- Keep vehicles in good repair so that they don't leak any fluids.
- Recycle or properly dispose of all materials.

SURFACE POLLUTANTS like oil and grease float on top of the run-off, attach to floating litter and are easily carried into waterways. When food grease or cooking oil leak from outdoor trash containers, rain carries them into nearby storm drains. Run-off from washing vehicles and other equipment outside, motor oil from roads and parking lots, accidental spills or intentional disposal of oil in storm drains are other sources of pollutants.

Surface pollutants are toxic to aquatic life even at low concentrations. These substances coat fish gills and block oxygen from entering the water, which suffocates aquatic life. With enough buildup, these pollutants clog stormwater drainage lines, which can lead to local flooding and increased maintenance costs. These increased costs must be passed on to the user — you and me.

- Wash vehicles and other equipment in a properly drained area, using little or no soap or detergents.
- Store waste so oil and grease can't leak and be washed into the drainage system.
- Properly dispose of or recycle all waste.
- Sweep driveways rather than hosing them.

SEDIMENTS begin as topsoil, sand and clay. When they are dislodged by construction, wind or rain and enter waterways, they are the most common pollutant in stormwater run-off. They may also come from exposed soil as well as dirt that accumulates on roads and paved parking lots. Many other pollutants, such as bacteria, metals and some nutrients and toxic materials, attach to soil particles.

Sediments settle on the bottom of creeks and rivers, smothering trout and salmon eggs. They destroy prime spawning areas and habitat for bottom-dwelling insects, which are a main food source for fish. They cloud streams and make them less suitable for human recreation, as well as fish and plant growth. By clogging storm drains, sediments increase maintenance costs and cause flooding. They usually carry other pollutants like oils and toxic materials along with them.

- Cover any exposed soil, especially while working on landscape projects.
- Prevent erosion by planting trees and ground covers.
- Preserve stream corridors and vegetation.

OXYGEN-DEMANDING SUBSTANCES are often the result of leaky food waste from trash cans, debris from landscaping and yard work dumped near a stream, leaves swept into a storm drain. When they enter waterways and decay, they absorb dissolved oxygen needed by fish and aquatic life.

When dissolved oxygen levels become too low, aquatic animals suffocate and die. Salmon and trout are particularly at risk because they need highly dissolved oxygen levels to live.

- Repair or replace leaky trash cans.
- Promptly clean up outdoor spills with absorbent. Sweep up and dispose.
- Recycle and dispose of waste properly.

NUTRIENTS come from phosphorus and nitrogen in lawn and garden fertilizers, pet waste, phosphate detergents and eroded soils from unpaved parking lots. Fertilizers are used to enhance plant growth and when they enter waterways, they stimulate plant growth there as well. This means the plants use up much of the oxygen needed by aquatic life.

Excess nutrients overstimulate algae and other aquatic plants, which results in unpleasant odors, unsightly surface scum and decaying plants that steal dissolved oxygen from the water. Nutrients are especially harmful in slow-moving waters like those found at the Delta Ponds.

- Wash garden tools only in a designated area that drains to the wastewater collection system.
- Consider using water alone to wash vehicles.
- Plant vegetation on exposed soils to slow run-off and filter pollutants.
- Use native plants in low-maintenance landscaping to reduce the need for fertilizers.

For more information:

City of Eugene Public Works, Stormwater Management Program

In person: 101 E. Broadway, Suite 400, Eugene, OR 97401

541-682-2739 happydrivers.org