



Stormwater Pollution from Construction Sites

Every time it rains, stormwater runs off streets, construction sites and open spaces and flows to the nearest storm drain or vegetated facility—picking up pollutants along the way. Common pollutants include sediment, petroleum products, pesticides, fertilizers, garbage and other toxins. Storm drains carry these pollutants directly into the nearest waterway. This system is not connected to the wastewater treatment plant. Anything that enters a storm drain flows directly to a channel, stream, wetland or river.

Common pollutants

Construction sites are often a major source of stormwater pollution. The following table describes typical stormwater pollutants and their sources at a construction site:

Pollutant	Source	Result
Sediments and Soil	Runoff from unprotected hillsides and stockpiled materials (gravel, sand, concrete), vehicles and feet tracking onto right-of-way.	In rivers, sediments cover valuable habitat; toxins adhere to sediment and poison aquatic life
Nutrients	Decaying leaves and vegetation, fertilizers, food waste and detergents	Nutrients cause increased growth of algae which lowers oxygen for fish
Oil and Grease	Leaking automobiles and construction machinery	Harms wildlife and vegetation, leaves a toxic sheen
Metals	Batteries, brake pads, corrosion, paint and machinery	Toxic to aquatic wildlife
Garbage and Debris	Construction debris, leaking dumpsters, careless dumping, food waste, etc.	May contain oxygen-depleting or toxic substances

Construction site erosion concerns

Sediments such as sands, clays and silts are the most common pollutants in stormwater runoff by volume and weight. Construction site erosion can be the most significant source of sediments. When vegetation is removed, soils are exposed, allowing erosion to begin.

How much erosion occurs depends on the amount of exposed soil, soil type, slope and rainfall. Clearing an entire site and leaving soils exposed until construction and landscaping is completed greatly increases the potential for erosion.

Erosion also increases on long, steep slopes and on sites with exposed clay and silt (the most erodible soils). Both the rainfall amount and its intensity influence erosion. Most of the rain in our area occurs between October and March but significant storms can also occur during the summer.

Eroded sediments can affect adjacent properties and clog catch basins and storm drains. When sediments enter waterways, they block sunlight, limit plant growth, harm aquatic life and interfere with recreational use and enjoyment. Sediments can remove oxygen from the water making it hard for fish to breathe and feed, and may smother salmon and

trout eggs. Other pollutants, including nutrients, bacteria, metals, and some toxic substances, attach to sediments and are carried into the waterway.

Do you need an erosion prevention permit?

An erosion prevention permit is required for construction sites that disturb 5,000 cubic feet or more in volume of soil, one or more acres of surface area, or are located within a sensitive area unless the land disturbance is less than 500 square feet or 20 cubic yards. Sensitive areas are those with highly erodible soils, steep slopes (greater than 10%), and those near water features or their designated buffers that receive direct discharge from upstream construction sites. A map and list of all affected lots, sorted by map and tax lot, is available for review at the Permit and Information Center (PIC).

The Erosion Prevention Program

99 West 10th Avenue in the Atrium Building,
Permit and Information Center

Call between 8 a.m. and 5 p.m.
Monday–Friday: 541-682-8498

www.eugene-or.gov/erosion