

Fact Sheet #3

2016 DRAINAGE DESIGN AND EROSION CONTROL MANUAL FOR THURSTON COUNTY

Stormwater Problems & Impacts: Why The Fuss?

WHAT IS STORMWATER?

Stormwater is rain and snow melt that runs off surfaces such as rooftops, paved streets, highways, and parking lots. As water runs off these surfaces, it can pick up pollution such as: oil, fertilizers, pesticides, soil, trash, and animal waste. From here, the water might flow directly into a local stream, bay, or lake. Or, it may go into a storm drain and continue through storm pipes until it is released untreated into a local waterway.



WHY IS STORMWATER A PROBLEM IN WASHINGTON?

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

Human Health: In general, untreated stormwater is unsafe. It can contain suspended solids (sediment, toxic metals, organic compounds, bacteria, oil, grease and viruses. Untreated stormwater is not safe for people to drink and is not recommended for swimming. Polluted stormwater can lead to beach closures for swimming and shellfish harvesting. It can also trigger toxic algal blooms. In some areas of Washington, notably south Thurston County, and parts of Pierce and Clark counties, gravelly soils allow rapid infiltration of stormwater. Untreated stormwater discharging to the ground could contaminate aquifers that are used for drinking water.

Degraded Water Quality: Virtually all of our urban creeks, streams, and rivers are harmed by stormwater pollution. Stormwater is the leading contributor to water quality pollution of urban waterways in Washington. Excess sediment can cloud the water and make it difficult for aquatic plants to grow and can clog the gravel beds that salmon need for spawning.

Increased Flooding and Erosion: Urban development increases the amount of impervious surfaces such as pavement and rooftops. This increases water flow runoff and flooding frequency and intensity. Stormwater flow also erodes stream channels. A typical city block generates 5 times more runoff than a woodland area of the same size.

Impaired Habitat: In Washington, urban stormwater harms and pollutes streams that provide habitat for fish and wildlife. Alterations to the watershed, such as building homes and other structures and clearing away trees and shrubs, are the leading causes for stormwater pollution. Federal agencies identified habitat loss from stormwater runoff as one of the primary obstacles to salmon recovery.

Debris: Litter, plastic bags, bottles, cigarette butts and other debris washed into water bodies can choke or suffocate aquatic life such as ducks, fish, turtles and birds. It is also unsightly and detracts from the natural beauty of Washington State.

Household Hazardous Wastes: Household products like insecticides, pesticides, paint, solvents, used motor oil and other auto fluids find their way in to our stormwater, streams, lakes, and Puget Sound and can poison aquatic life. Land animals and people can become sick or die from eating diseased fish or shellfish or ingesting polluted water.



For More Information:

Contact: Pat Allen, P.E., (360) 867-2078, allenp@co.thurston.wa.us

Website: www.co.thurston.wa.us/stormwater