



Focus on

# Stormwater Pollution Control

Water Quality Program

## What is stormwater?

Stormwater is the water that runs off surfaces such as rooftops, paved streets, highways, and parking lots. It can also come from hard, grassy surfaces including lawns, play fields, as well as graveled roads and parking lots.

## Why is stormwater a problem in Washington?

Stormwater is a problem because it is often polluted and can harm human health, drinking water, and fish habitat. Untreated stormwater contains toxic metals, organic compounds, and bacterial and viral pathogens. It is not safe for people to drink, and is not recommended for swimming. In some areas of Washington, gravelly soils allow rapid infiltration of stormwater. Untreated stormwater discharging to the ground could contaminate aquifers that are used for drinking water. Virtually all of our urban creeks, streams, and rivers are harmed by urban stormwater runoff. Stormwater is the leading contributor to water quality pollution of urban waterways. Urban development causes significant changes in patterns of stormwater runoff – leading to increased flooding during the wet season and decreased stream flows during the dry season.

## Programs to control pollution from stormwater

### *Phase I and II General Permits*

In 1987, Congress changed the federal Clean Water Act by declaring the discharge of stormwater (traditionally considered a nonpoint source) from certain industries and municipalities to be a point source of pollution requiring National Pollutant Discharge Elimination System (NPDES) permits or water quality discharge permits. Washington state is delegated authority by the U.S. Environmental Protection Agency (EPA) to implement the water quality permit program. The EPA stormwater regulations establish two phases for the stormwater permit program:

*Phase I* — Under Phase I, the Department of Ecology (Ecology) has issued stormwater NPDES General Permits to cover stormwater discharges from certain industries and construction sites involving five or more acres, and municipalities with a population of more than 100,000.

There are approximately 1,400 facilities covered under the Industrial General Permit. The number of construction sites under the current phase I Construction General Permit varies seasonally, from about 350 to nearly 700 sites. The cities of Seattle and Tacoma, and Clark, King, Pierce, and Snohomish counties are covered under the Phase I Municipal General Stormwater Permit. The Washington Department of Transportation is also covered within those jurisdictions, except for Clark County.

*Phase II* — EPA issued the final Phase II stormwater regulations in December 1999. The Phase II regulations expand the requirement for stormwater permits to all municipalities located in the 2000 census-defined urbanized areas. The rule also requires an evaluation of cities outside of urbanized areas that are more than 10,000 in population to determine if a permit is necessary for some or all of these cities. A total of 102 jurisdictions have been tentatively identified by Ecology as communities needing coverage under a Phase II municipal general stormwater permit. Ecology will develop separate general permits for Eastern and Western Washington. An application has been developed for Phase II jurisdictions to apply for coverage by the March 10, 2003 deadline. The Phase II municipal general permit must include provisions for public education and outreach, public participation and involvement, illicit discharge detection and elimination, construction site runoff controls, post-construction runoff controls, pollution prevention, and good housekeeping practices.

Phase II also expands construction stormwater permitting requirements to cover sites with between one and five acres of disturbed land. This expansion of the construction general permit is expected to increase the number of permitted sites by a factor of 2-3. A revised general permit (or permits) is currently under development that will address both phase I and phase II construction stormwater requirements.

### ***Stormwater Management Manual***

In 2001, Ecology issued its updated stormwater management manual for western Washington. Currently, Ecology has a stormwater management manual for Eastern Washington in draft. The objective of the manuals is to provide a commonly accepted set of standards and guidance for stormwater control measures. These measures are to be used by local governments, state agencies, and private businesses to control runoff from new development and redevelopment activities. It is generally expected that when these management measures are applied to new development and redevelopment activities, the stormwater runoff produced will comply with water quality standards.

At the request of Ecology, the Governor's Salmon Recovery Office requested that the Independent Science Panel (ISP) review the Stormwater Management Manual for Western Washington. The purpose of this review is to determine whether the manual is based on sound science. More information is available on the ISP review at:

[www.governor.wa.gov/gsro/science/overview.pdf](http://www.governor.wa.gov/gsro/science/overview.pdf)

For more information on stormwater, please contact Megan White at (360) 407-6405 or Bill Moore at (360) 407-6444, or visit Ecology's Stormwater Home Page at:

[www.ecy.wa.gov/programs/wq/stormwater/index.html](http://www.ecy.wa.gov/programs/wq/stormwater/index.html)

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