



Focus on **Municipal Stormwater Programs**

from Ecology's Water Quality Program

What is stormwater?

Stormwater is the water that runs off surfaces such as rooftops, paved streets, highways, and parking lots from storm events. It can also come from hard, grassy surfaces including lawns and play fields as well as graveled roads and parking lots. As water runs off these surfaces, stormwater picks up pollution such as oil, fertilizers, pesticides, pet waste, and trash.

Why is stormwater a problem in Washington?

Stormwater is the leading contributor to water quality pollution of urban waterways. Stormwater is a problem because it is often polluted and can harm human health, drinking water, and fish habitat. Untreated urban stormwater runoff may contain toxic metals, pesticides, oil, grease, chemicals from plastics, and tail pipe emissions from vehicles. The runoff may also carry diseases caused by bacteria and viruses. It is not safe for people to drink and is unsafe for swimming. Urban development causes major changes in patterns of stormwater runoff, leading to increased flows during the wet season and decreased stream flows during the dry season. Untreated stormwater can contaminate public drinking water supplies. All of our urban creeks, streams, and rivers are harmed by urban stormwater runoff.

What programs control municipal stormwater?

In 1987, Congress changed the Clean Water Act to include stormwater discharges in the National Pollutant Discharge Elimination System (NPDES) permit program. This program requires permits for municipal stormwater discharges to surface waters. The Environmental Protection Agency (EPA) gave the authority to implement these permits in Washington State to the Department of Ecology. EPA developed rules to implement the new stormwater requirements in two phases:

Phase I In 1990, EPA issued NPDES Phase I rules that applied to cities and counties with populations greater than 100,000. Ecology issued permits to seven Phase I jurisdictions: Snohomish, King, Pierce, and Clark counties; the cities of Seattle and Tacoma; and Washington Department of Transportation facilities within those jurisdictions. These permits expired in 2000 and need to be reissued.

Phase II In 1999, the EPA issued NPDES Phase II rules regulating municipally-owned separate storm sewer systems within census-defined urban areas. These are areas that generally have more than 1,000 people per square mile. The Department of Ecology (Ecology) has developed separate general permits for eastern and western Washington.

What do the federal rules say?

Phase I and Phase II rules require publicly-owned stormwater systems to obtain NPDES permits for their stormwater discharges. The Phase I rule includes publicly owned stormwater systems located in the unincorporated portions of King, Pierce, Snohomish and Clark counties, as well as



the cities of Tacoma and Seattle. The Phase II rule includes publicly owned storm sewer systems located within census defined urban areas. There are 13 census-defined urbanized areas in Washington. Ecology identified more than 100 cities and counties that potentially need permit coverage under a Phase II municipal stormwater permit.

See Ecology's Web site for Urban Area Maps:

http://www.ecy.wa.gov/programs/wq/stormwater/phase_2/maps.html

For Phase I, EPA required the identified cities and counties to obtain an NPDES permit for their stormwater discharges and specified permit application requirements.

For both Phase I and Phase II jurisdictions, EPA rules require operators of municipal separate storm sewer systems (**MS4s**) to develop and implement a *stormwater management program* that:

- Reduces the discharge of pollutants to the "maximum extent practicable."
- Satisfies appropriate requirements of the Clean Water Act.
- Meets state requirements to use all known, available, and reasonable methods to prevent and control pollution to waters of the state.
- Protects water quality.

Phase II minimum control measures

The EPA Phase II rules identify six minimum control measures that must be included in a Phase II stormwater permit to protect water quality.

1. Public Education and Outreach
2. Public Participation/Involvement
3. Illicit Discharge Detection and Elimination
4. Construction Site Runoff Control
5. Post-Construction Runoff Control
6. Pollution Prevention/Good Housekeeping

The federal rules also require:

- Fulfillment of requirements of an approved Water Quality Improvement Report (TMDL).
- Record keeping, evaluation, and reporting on the progress of the program.

The Department of Ecology will use four different permits to cover the areas required by these rules. The Phase I permit will cover the unincorporated portions of King, Pierce, Snohomish, and Clark counties, as well as the cities of Tacoma and Seattle. Due to climatic differences in Washington, Phase II will have separate permits for eastern and western Washington. The Washington State Department of Transportation will also receive a separate permit.

For additional information:

Please check our Web page at: <http://www.ecy.wa.gov/programs/wq/stormwater/municipal/index.html> or contact:

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