

Washington State Department of Transportation Municipal Stormwater General Permit

Stormwater Monitoring Program

The Washington Department of Ecology (Ecology) intends to issue the Washington State Department of Transportation's (WSDOT) Municipal Stormwater General Permit in early 2009.

The permit outlines a monitoring program with an objective of helping WSDOT evaluate its stormwater management program and the stormwater runoff from its facilities.

The permit requires WSDOT to collect data on discharges from the storm sewer conveyance systems it owns or operates. It must also evaluate the effectiveness of the stormwater best management practices (BMPs) it uses to control stormwater flow and pollutants to prevent harm to state waters.

The overall intended purpose of WSDOT's stormwater management program is to produce scientifically credible data, provide information that can be used for designing effective management strategies, and determine the long-term effectiveness of stormwater pollution prevention plans.

Baseline monitoring

WSDOT's program will provide water quality and quantity data on discharges during specific storm events.

They will collect data from:

- Highways (at edge of pavement) including water chemistry, sediment, and biological toxicity data.
- Maintenance facilities.
- Rest areas.
- Ferry terminals.

WSDOT will collect samples from the same designated locations, several times throughout the year. They will analyze data for pollutants as well as identify and

WSDOT Permit Focus Sheet Series

- [Permit Overview](#)
- [Stormwater Management Program](#)
- Stormwater Monitoring
- [Highway Runoff Manual FAQ](#)

Stormwater monitoring helps us:

- Evaluate stormwater runoff conditions.
- Helps inform us where we need to improve.



Stormwater treatment wetlands are shallow manmade wetlands that are designed to treat stormwater runoff through settling, filtering, and the biological processes of aquatic plants.



Constructed wetland near the South Renton Park & Ride

evaluate areas of concern. Ecology expects the data to inform and help improve strategies for effective stormwater pollution and flow control.

Best management practices (BMP) monitoring

The permit also requires monitoring of water quality treatment BMPs. Practices such as designing vegetated filter strips along highways, creating detention and retention ponds, street sweeping, preservation of natural vegetation, and seeding and mulching represent only a few of the techniques WSDOT uses to manage stormwater. WSDOT will select BMPs to monitor from the following categories:

- Basic treatment (i.e., suspend solids removal).
- Dissolved Metals/phosphorus treatment.
- Oil control.

The study designs of each of these monitoring studies will depend on the type of BMP selected. Additionally, the permit will require monitoring for the effectiveness of one flow reduction technique or practice.

WSDOT will also gather data from the first stormwater event of the season, which is thought to have higher concentrations of certain types of pollutants. This “first flush” data will help WSDOT identify control strategies to reduce toxic substances from entering Washington’s surface waters.

You can find specific information on WSDOT’s monitoring requirements in the permit, Special Condition S7.

More information

To view or download the permit or additional Focus Sheets on other aspects of the permit, please visit

www.ecy.wa.gov/programs/wq/stormwater/municipal/wsdot.html.

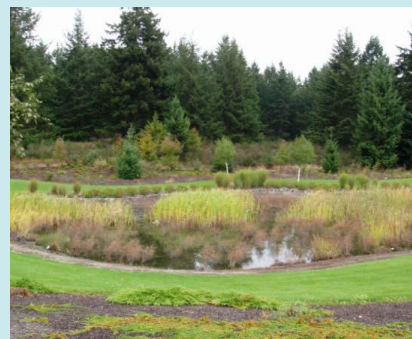
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This may look like any other grassy area...



...but in fact, this embankment is designed to treat stormwater runoff along highways, medians, and other areas where runoff may be a problem.



Infiltration Pond along SR 510
in Thurston County

Special Accommodations:

If you need this publication in an alternate format, call the Water Quality Program at 360-407-6401. Persons with hearing loss, call 711 for Washington Relay Service. Persons with a speech disability, call 877-833-6341.