

Overview of WSDOT's Activities to Protect Water Quality

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Stormwater - Why is WSDOT Concerned About Stormwater?

- We have an environmental obligation
 - Protect ecosystem functions & beneficial uses of receiving waters.
 - Preserve citizen's health and safety.
 - Protect ESA species and Puget Sound.
- We have a regulatory obligation



What Does Stormwater Treatment Entail?

Controlling Flow
(Water Quantity)



Removing Pollutants
(Water Quality)

How Does WSDOT Manage Stormwater?

WSDOT uses a number of approaches to manage stormwater. These include:



Wet pond

- Structural features
- Maintenance operations
- Vegetation management practices
- Staff training to control stormwater and prevent pollution

Maintenance with vector truck



Facilities

How many stormwater facilities have been constructed and what are the most common?

- Over 2,000 stormwater treatment systems constructed.
- On average, 200 new systems are added each year.

Stormwater ponds and bioswales make-up a majority of existing stormwater facilities.



Over 600 stormwater ponds



Over 500 bioswales



Nearly 200 dry wells have been installed, mostly in Eastern Washington.

Over 100 vegetated filter strips.



Nearly 75 media filter drains have been constructed.

Nearly 70 vaults have been constructed.



Nearly 50 natural dispersion areas designated.

Nearly 50 infiltration trenches have been used.



How Do We Know if Stormwater Systems Really Work?

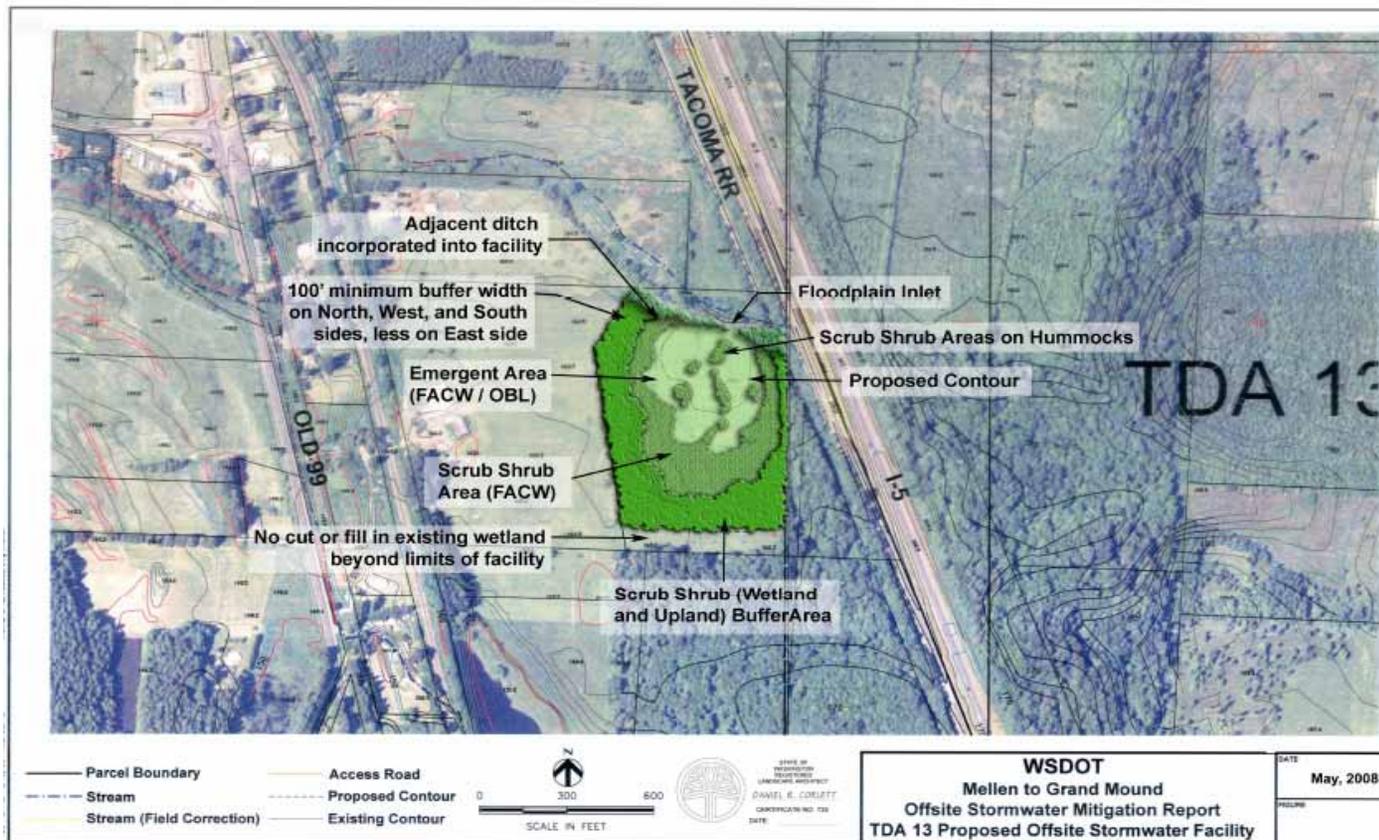
- The 1995 NPDES permit required WSDOT to monitor treatment effectiveness.
- The new permit will likely require WSDOT to monitor the following:

- Runoff from highways, rest areas, maintenance facilities, and ferry terminals.
- Sediment from highways.
- Toxicity.
- System effectiveness/performance.



Innovations in Stormwater Management

- Alternative flow control guidance developed
- A team formed with Ecology
- I-5 near Centralia – 3 wetland enhancement/creation sites
- SR 167 near Auburn – floodplain/wetland enhancement



How Does WSDOT Protect Wetlands?



WSDOT has constructed three wetland mitigation banks.

Examples of Wetland Protection Projects



Approximately 30 acres of wetland restoration and fish habitat enhancement on Bell Creek along SR 101 near Sequim.



1.2 acres of wetland mitigation along the Columbia River; SR 14 Maryhill .

Questions?

For more information on WSDOT's activities to protect water quality, please contact:

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