Determine Organics and Bacterial Reductions by Treatment BMP

Currently, stormwater permitting regulations per the Washington Department of Ecology’s Stormwater Manuals do not include performance measures for key pollutants like certain organics (PAHs) and bacteria (fecal coliforms, enterococci, total coliform).

What we’re doing

We will identify relevant completed studies, perform field monitoring, and develop recommendations for future treatment Best Management Practices (BMPs).

How we’re doing it

To attain performance goals for bacteria and PAH, the project team will complete the following tasks:

■ Complete a literature review to characterize the current state of science related to PAH and bacteria removal by stormwater BMPs.
■ Develop a field monitoring protocol.
■ Monitor a select few stormwater BMPs for PAH and bacterial removal.
■ Analyze, report, and provide recommendations for treatment BMPs.

WHY IS THIS ISSUE IMPORTANT

Bacteria impacts the shellfish economy while PAHs are a class of carcinogen – both are transported by stormwater into Puget Sound waterways and habitats.

WHAT YOU CAN DO

To reduce the amount of bacteria transported into Puget Sound waters

- Pick up after your pet
- Maintain septic systems

The sources of PAHs in stormwater vary widely, with parking lots and surfaces used by vehicles main contributors. Common ways to reduce PAH loads in stormwater include:

- Regular vehicle maintenance
- Fixing engine leaks
- Properly disposing of used motor oil can prevent PAH release onto road surfaces.
- Using a licensed car wash to clean your vehicle.
- Avoid idling, as this releases PAHs which sorb to particles in the air, and deposit on road surfaces.
- Dispose of cigarette butts in authorized containers.

The Washington Stormwater Center

The Washington Stormwater Center was established in 2010 at the WSU Puyallup Research and Extension Center in partnership with the University of Washington Tacoma to protect Washington’s waters by addressing critical stormwater pollution issues. The center’s four programs focus on municipal resources, business resources, low impact development & emerging technologies.

FOR MORE INFORMATION
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