



Sampling, Occurrence, and Toxicity of 6PPDQ and Related Chemicals

We will evaluate tire-derived impairments to water quality in the South Puget Sound, focused on tribally prioritized watersheds. This project will develop sampling and analytical methods to collect occurrence data on 6PPD, 6PPDQ and other PPD-quinones in stormwater, while evaluating the toxicity of individual tires and legacy tires disposed of within Puget Sound.



WHAT WE ARE DOING

- Improve stormwater sample collection
- Characterize 6PPD, 6PPD-Q and other PPD-quinone dynamics in key small watersheds of South Puget Sound
- Evaluate new and legacy tires for leaching of tire-derived chemicals that harm fish
- Compare the risks of subsurface tire reefs in the Puget Sound and above surface tire embankments in freshwater systems from toxic tire rubber-derived chemicals



WHY THIS IS IMPORTANT

Toxic chemicals widely present in tires and roadway runoff are impairing water quality and impacting salmon survival and health. We need to better understand how to sample these chemicals, where they are in the South Sound, and how toxic legacy tires remain so we can build effective treatment systems and manage runoff to protect ecosystem health.

WHAT YOU CAN DO

Roads and tires are large sources of pollutants to our watersheds. Keep your tires inflated, keep your car well maintained, stop fluid leaks. You can also limit or stop chemical use around your home and yard, prevent chemical discharge to storm drains, and use less.

ABOUT THE WASHINGTON STORMWATER CENTER

The Center for Urban Waters (CUW), an organized research unit of the University of Washington-Tacoma, is a community of environmental scientists and engineers who are working to restore and protect the Puget Sound. The Washington State University-Puyallup laboratory of Dr. Jen McIntyre at WSU studies the toxicity of chemicals, including those derived from tires, to aquatic organisms. Together, we develop data and science-based solutions to reduce those impacts.

FOR MORE INFORMATION

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