



# Stormwater-friendly car wash tips

Problem pollutants: oil, grease, zinc, cadmium, copper, PAHs (Polycyclic aromatic hydrocarbons) nutrients, heavy metals, soap suds



**D**id you know that vehicle washing can contribute pollutants to our rivers and streams – depending on where your vehicle is cleaned? Dirty water from commercial car washes goes into the city’s sanitary system and is treated at the regional wastewater treatment plant. However, soap suds and water run-off from vehicle washing on drive-ways, parking lots and streets typically flows along the gutter and into a storm drain before it empties into a creek or river.

## Problem pollutants

Soap is only one part of the discharge problem. Even if only water is used, there’s a mix of pollutants including oils, grease, heavy metals, particulates from vehicle exhaust emissions and brake linings and rust being washed down the drain. Adding soap to the mix may introduce phenols, dyes, acids and ammonia. And even more potentially harmful ingredients are found in spray-off tire cleaner.

## The soap factor

The detergents in car wash cleaners affect fish in several ways. All detergents contain a surfactant so that the cleaner rinses off easily with water. Surfactants destroy the external mucus layers that protect fish from bacteria and parasites, causing severe damage to their gills. Even in low concentrations, surfactants will kill fish eggs. Detergents can

lower the surface tension of water, allowing organic chemicals—such as pesticides and phenols—to be more easily absorbed by fish.

Soaps that contain phosphates promote plant growth and can cause excess algae growth in waterways. As these plants decay, large amounts of oxygen are consumed, leaving very little oxygen available for fish.

## Commercial car washes

Are there some environmental advantages to washing our car at a drive-through or self-serve commercial car wash? Absolutely! Commercial car washes drain used water into the sanitary system instead of storm drains. This water is treated to remove pollution before it is discharged into the Willamette River. Plus, conveyor car washes can use substantially less water, depending on the equipment used. Advanced, computerized pumps and nozzles control water output, reducing the amount of water used by up to 60 percent compared to a home wash. Special pressure nozzles mix 50 percent air in with the water to create pressure without volume. Some even recycle and reuse water on site.



*Commercial car washes use less water and often collect, filter and reuse water on site.*

## Fish-friendly car wash kits

If you prefer to support school clubs or non-profit groups that use car washes to raise money, consider this. Most clubs wash many cars, with lots of soap, directly adjacent to storm drains. Look for a “Fish-Friendly” car wash as an alternative. Eugene’s public works department makes these car wash kits available to use free of charge. The kits contain sump pumps that can be used to divert wash water to wastewater sewers or grassy areas, Fish-Friendly car wash signs, a hose, instructions and more. If you are planning a car wash fundraiser, call ahead to make sure kits are available and will work at the site where you want to wash. To reserve a kit, call 541-682-4929. To see how our kit works, visit [www.happyrivers.org](http://www.happyrivers.org) and look for car wash information under our featured videos section.



## Smart choices at home

If you plan to wash your vehicle at home, here are some earth-friendly tips. If you wash with more than water, choose soaps, cleaners or detergents labeled phosphate-free and biodegradable. Vegetable or citrus-based soaps are the safest products.

Before you get started, sweep driveways to prevent leaves and trash from being carried to the storm drain. Control water volume by using a spray nozzle and if possible wash your car in an area where runoff doesn’t flow to the street (gravel or grassy areas). If your wash area is paved and slopes toward the street, try rolling up a few towels to divert run-off to a lawn.

When you are done, discard dirty wash water onto your grass, flower bed or into the sink.



*Car wash kits include all the tools your club needs to keep soap out of the stormwater system. The kits are available to borrow in both Eugene and Springfield.*



### For more information:

City of Eugene Public Works, Stormwater Management Program  
541-682-2739 [www.happyrivers.org](http://www.happyrivers.org)