

# Fish-Friendly Car Wash

## What's the problem with car washing?

When a car is washed on a paved surface, like a driveway or parking lot, the soap and other pollutants go straight into nearby storm drains. Water in storm drains flow directly to lakes, streams, and Puget Sound, with little or no treatment. There are two types of pollutants generated by car washing on paved areas: 1) pollution associated with the use of soap, and 2) automobile related pollutants that bind with the soap.

### The Soap

\* The **surfactants** in soap enables water and oil to mix and allows water to hold onto grit and dirt. Surfactants affect fish mucus membranes, washing away natural oils and affecting oxygen uptake by the gills. They may also make fish more susceptible to the affects of petroleum, pesticides, and other chemicals.

\* **Phosphorus** is used to boost the effectiveness of surfactants. Phosphorus leads to excessive plant growth and decay. This leads to low dissolved oxygen levels and overall degradation of water quality. This process is known as eutrophication.

### The Automobile Related Pollutants

Car wash water runoff can contain gasoline, diesel, motor oil, lead, copper, suspended solids (grit and dirt suspended in the water), and other pollutants. Some of the issues associated with these pollutants are:

\* **Gasoline, diesel, and motor oil** cause harm to aquatic organisms through direct contact, ingestion, and destruction of food sources and habitats. Bottom-feeding organisms may ingest the petroleum contaminants and transmit them up through the food chain until they accumulate in dangerous concentrations in fish.

\* **Copper** in brake pads is especially harmful to salmon as it impacts their sense of smell for critical behaviors such as homing, foraging, and predator avoidance.

\* **Suspended Solids** can smother fish eggs, destroy habitat for insects (food source for fish), and cover spawning areas.