

## PUGET SOUND'S POLLUTION PROBLEM

The beauty of Puget Sound extends for 2,500 miles of shoreline. It is home to countless species, including orcas, sea lions, salmon and shellfish, as well as four million people living in the region. The Sound creates economic strength for the area, including tourism, shipping and seafood, and our exceptional quality of life is a key reason many local companies stay and expand here.

But Puget Sound is in trouble. The way we live, work and use the land causes vast quantities of toxic pollution to enter its waters. The problem will get worse as our region expands by 1.5 million more people in the coming years.

Toxic stormwater runoff – caused by a rapidly growing population and increased development – flows directly into Puget Sound from thousands of pipes and streams throughout the region. Polluted stormwater runoff also enters nearly every river, stream and creek in the Puget Sound watershed, all of which eventually feed into the Sound. Stormwater runoff is not treated – it flows directly into the Sound and local waterways.

If we don't take action now, Puget Sound may become irreparably damaged.

## THE BAD FACTS

**FACT:** On an average day, it's estimated that 140,000 pounds of toxic chemicals – including petroleum, copper, lead, zinc and polychlorinated biphenyls (PCBs) – enter Puget Sound. Source: "Control of Toxic Chemicals in Puget Sound," Washington State Department of Ecology, Phase 2: Development of Simple Numerical Models, 2008; <a href="https://www.ecy.wa.gov/Programs/wq/pstoxics/index.html">www.ecy.wa.gov/Programs/wq/pstoxics/index.html</a>

**FACT:** About 75 percent of the toxic chemicals entering the Sound are carried by stormwater runoff that flows off of paved roads and driveways, rooftops, yards and other developed land. Source: "Control of Toxic Chemicals in Puget Sound," Washington State Department of Ecology, Phase 2: Development of Simple Numerical Models, 2008; <a href="https://www.ecy.wa.gov/Programs/wq/pstoxics/index.html">www.ecy.wa.gov/Programs/wq/pstoxics/index.html</a>

**FACT:** Harbor seals in Puget Sound are seven times more containinated with the persistent toxic chemicals known as PCBs than those living in Canad's Strait of Georgia, which adjoins the Sound.

Source: <u>Cullon, D. L.</u>, S. J. Jefferies, P. Ross, 2005, "Persistent organic pollutants in the diet of harbor seals (Phoca vitulina) inhabiting Puget Sound, Washington (USA), and the Strait of Georgia, British Columbia (Canada): a food basket approach," Environmental Toxicology and Chemistry 24 (10); pp. 2562–2572

**FACT:** Transient and southern resident orcas are considered to be among the most PCB-contaminated mammals on the planet.

Source: P. Ross person communications, 2009; Ross P.S., G. M. Ellis, M. G. Ikonomou, L. G. Barrett-Lennard and R.F. Addison, 2000, "High PCB Concentrations in Free-Ranging Pacific Killer Whales, Orcinus orca: Effects of Age, Sex and Dietary Preference," Marine Pollution Bulletin, Vol 40, 6: 504-515

**FACT:** 549 streams, rivers and lakes across the Puget Sound region are impaired by poor water quality.

Source: "Washington State's Water Quality Assessment [303(d)]," Washington State Department of Ecology,2008; www.ecy.wa.gov/programs/wg/303d/