

Puget Sound

DOWN THE DRAIN

HOW EVERYDAY PRODUCTS

ARE POLLUTING PUGET SOUND

A Study By:

**WASHINGTON
TOXICS
COALITION**
www.watoxics.org



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Protecting Health
& the Environment





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Executive Summary

It is well known that toxic chemicals pose a major threat to the health of Puget Sound. For many chemicals, however, how they are getting from the products in our homes to the waters, sediments, and wildlife of the Sound remains mysterious. This study examines whether toxic chemicals are escaping consumer products in our homes, contaminating house dust, and then hitchhiking on our clothing. The chemicals could then enter the wastewater treatment system, and eventually Puget Sound, when we wash our clothes in the washing machine.

The study explores this possible pathway using phthalates, a family of chemicals widely present in consumer products. In our homes, phthalates are in plastics, personal care products, and many home and building materials such as vinyl flooring, wallpaper, and shower curtains. In the environment, they turn up in sediments and wildlife in Puget Sound and the discharges from wastewater treatment plants.

To investigate the route from home to environment, we tested washing machine rinse water and house dust from six homes around Puget Sound. Participating homes were located in Tumwater, Renton, Bainbridge Island, Seattle, Whidbey Island, and Bellingham.



Key Findings:

1 Phthalates from everyday products are making their way to Puget Sound by way of the clothes we wash in our washing machines.

Our testing uncovered the fact that the phthalates in the products in our homes aren't staying put: instead, they are migrating into dust, attaching to our clothing, and coming off when we do the laundry. We found phthalates in every sample we took of house dust and washing machine rinse water.

2 Dust from our homes hitchhiking on our clothes may constitute a significant source of water pollution.

Our calculations indicate that in the Puget Sound region, phthalates from our clothing contribute approximately 2110 pounds or 959 kilograms yearly of the phthalate DEHP to the flows entering wastewater treatment plants. This makes up approximately 17.5% of the total phthalate load entering treatment plants.

3 Washing machine detergent also contributes phthalates to Puget Sound.

We tested two popular detergents, and found the phthalate DEP in one of them, liquid Tide. If all households used a detergent that contained phthalates at this level, it would contribute approximately 40 kilograms or 87 pounds yearly of DEP to the flows entering wastewater treatment plants from Puget Sound residences.

Recommendations:

- 1 Washington should enact legislation to ensure that only the safest chemicals are used in products.**

The Washington State Legislature should take action to eliminate the use of the most hazardous chemicals and replace them with safer alternatives. The Legislature can begin by granting the Washington State Department of Ecology authority to require that safer alternatives be used in place of harmful chemicals in consumer products.
- 2 Washington should take action to phase out the chemicals posing the greatest threat to Puget Sound's health.**

The Puget Sound Partnership and other state agencies have yet to take action to phase out the highest priority toxic chemicals. State agencies must develop plans for addressing ongoing chemical pollution and take action to eliminate it.
- 3 Washington should help industry switch to safer alternatives and away from chemicals known to be harmful to Puget Sound.**

Washington needs to help businesses adopt greener, healthier, and Puget Sound-friendly solutions by identifying safer solutions and providing technical support.
- 4 Companies should disclose what chemicals they are using to manufacture products.**

Agencies must be able to access information on chemicals used in manufacturing in order to determine the opportunities for reducing pollution.
- 5 The Puget Sound Partnership should prioritize Action Agenda items that prevent toxic chemical pollution.**

The Partnership should support the above recommendations in the legislature and other arenas and fully fund policies that keep toxic chemicals out of products and Puget Sound.

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