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From paradise to landfill: beloved California beach covered in trash

<u>Katharine Gammon</u> in Los Angeles, Fri 8 Feb 2019 06.00 EST Last modified on Fri 8 Feb 2019 10.33 EST



Trash is strewn along the sand south of the San Gabriel river in Seal Beach on 4 February 2019. Photograph: Jeff Gritchen/MediaNews Group/Orange County Register via Getty Images

Shopping carts, traffic cones and Styrofoam among the piles of debris that littered Seal Beach after a trio of winter storms

Beachgoers hoping to stretch their legs on southern California's famous Seal Beach were surprised to find a mountain of trash instead of sand and surf this week.

After a trio of winter storms dropped inches of rain on the area, the beach looked more like a landfill than a pristine paradise. Shopping carts, traffic cones and Styrofoam were among the piles of debris that littered the stretch of beach.

That's because Seal Beach lies at the mouth of the San Gabriel river, which drains runoff from more than 50 cities in the Los Angeles river basin, said Eben Schwartz, the outreach manager at the <u>California Coastal Commission</u>, a state agency with regulatory oversight over land use and public access in the California coastal zone. "This is one of the most highly urbanized areas in the United States, and Seal Beach is basically the recipient of the outflow of all of those communities."

Schwartz says that during coastal cleanup days, the coastal commission finds that about 80% of the trash that enters the ocean in <u>California</u> actually starts on land.

"We have an effective transportation system for trash: our creeks, rivers and storm water systems, all of which eventually empty out into the ocean through one process or another," he said.

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Southern California cities are starting to install special inserts into storm drains – basically screens that filter out anything larger than a pea – to filter out trash before it reaches beaches. Cities also use devices called full capture, massive pits with a turbine at the top that help separate out trash from water. The problem? "They are very expensive to maintain," says Schwartz. "And in a massive rain event like what we saw in California, even the best of the systems can be overwhelmed."

<u>Cleanup efforts</u> on Seal Beach have already begun in an effort to clear the area before the debris is carried out into the ocean. But keeping plastic out of the storm drains starts with reducing the amount of plastic being created and consumed. "It's always stunning to see a big event that brings plastic and trash down to the beach all at once," says Trent Hodges, who leads the plastic pollution initiative at the <u>Surfrider Foundation</u>, a not-for-profit organization that seeks to protect beaches and oceans. "But we are constantly loading plastic into the ocean just though the proliferation of single-use plastics in commerce today."

Hodges says people think of marine pollution as a giant garbage patch, but it's more like a soup. "As the plastic breaks up it absorbs different chemicals and toxins, and it is really hard to manage," he says. "The best solution is to do source reduction: to look at everyday single-use plastic and think about redesigning plastic so we don't waste a resource."



A lone sea lion sits on the sand north of the pier in Seal Beach on 4 February 2019. Photograph: Jeff Gritchen/Getty Images

Tina Treude, the director of the marine center at UCLA's Institute of the Environment and Sustainability, says that California is far ahead of most places when it comes to political actions like banning single-use plastic bags statewide. But it's far from enough.

Biodegradable plastic bags, too, make their way into the ocean, and Treude is skeptical about their ability to break down. When she and a student <u>buried</u> typical plastic polyethylene plastic bags and biodegradable plastic bags in sediment in their lab in 2016, they didn't see any change in either set of bags after 100 days. Biodegradable plastic bags may break down in landfills where the temperatures get high, but the natural conditions in the ocean don't appear to help degrade the plastic microbially, she explained.

"It's something we need to consider: whatever we put into the ocean may stay there for a long time," she said.