## The Islands Of Hawaii Hold One Of The Dirtiest Places In The World

Kamilo Point shows just how dire the world's plastic pollution problem really is.



## **By Carla Herreria**



NASA Hawaii's Big Island, as seen from the International Space Station in 2015.

This story is part of a series on ocean plastics.

HONOLULU — Remote, undeveloped coastlines on the Hawaiian islands are renowned for their natural beauty. But Kamilo Point, a far-flung beach in the rural Ka'u district of the Big Island, is not. On the island's southeastern side, Kamilo Point looks like a wasteland, despite its tide pools and pockets of lava rock. The ocean's currents and powerful trade winds deposit thousands of pounds of man-made trash on this beach each year.

One look, and it's no wonder how this became known as one of the dirtiest beaches in the world. Some call it Plastic Beach.

People have found hair brushes, cigarette lighters, shards of plastic, water bottles, fishing net, straws, broken detergent bottles and discarded trash with labels in various languages, including Japanese and Russian.

It's a graveyard for the world's junk and a stark reminder that plastic can never really be thrown away.



In just a few months, the Hawaii Wildlife Fund (HWF) collected and hauled away 15,000 pounds of trash, nylon nets and fishing line from Kamilo Beach. The beach was visibly cleaner afterward, as it is usually after HWF's regular cleanups, but it was unclear how long it would stay like that.

So where is all this trash coming from?

The Big Island's southeastern shore is relatively close to the eastern Pacific garbage patch, which is part of the massive convergence of marine litter known as the Great Pacific Garbage Patch. The easternmost concentration of trash is midway between the California coast and the eastern shores of Hawaii.



<u>NOAA MARINE DEBRIS PROGRAM</u>The NOAA Marine Debris Program map shows several "garbage patches" where ocean currents and atmospheric pressure push large concentrations of sea life and debris.

These so-called patches of trash are a result of oceanic and atmospheric pressures that push free-floating items in the ocean — sea life, pollution, tiny pieces of plastic — into one general area. However, it does *not* converge into a floating island of trash, like some people have come to believe.

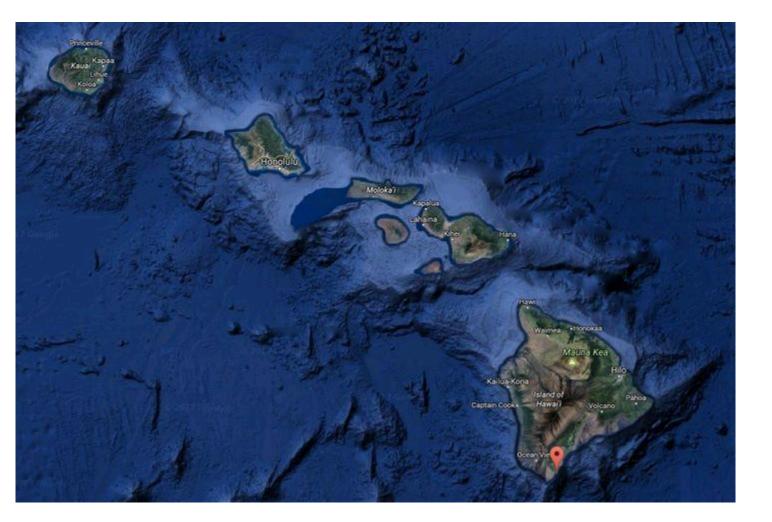
Instead, it's more like a cloud of pollution, and much of it is made up of particles called microplastics, or tiny chunks of plastic smaller than a quarter inch, according to Carey Morishige, formerly of the National Oceanic and Atmospheric Administration's Marine Debris Program. Some of these plastic pieces are microbeads from face wash products, or plastic fibers from clothing made out of synthetic materials; but others were shed from large items that the ocean battered and broke up over time.

Debris from the trash patch in the Pacific often gets deposited across the Hawaiian archipelago.

But the Big Island sees the worst of it.

As the most easterly Hawaiian island, the Big Island's Kamilo Point and the larger Ka'u coast have always acted as the perfect colander for items drifting across the ocean.

"Kamilo itself means 'whirling, swirling, twisting currents," Lamson told HuffPost, referencing the area's consistent onshore winds.



GOOGLE MAPSKamilo Point is on the southeastern stretch of the Big Island. The coast below Kamilo is considered the southernmost point of the United States.

Local organizations, including HWF, have cleaned these coastal trash magnets for decades. But, like clockwork, mounds of trash find their way to the shore.

"The Hawaiian archipelago acts like a sieve, collecting debris that was floating around the Pacific Ocean and accumulating it along our shores," Megan Lamson, a survey diver for the state's Division of Aquatic Resources, told The Huffington Post.

Lamson has participated in HWF's Kamilo Beach cleanups for years.

Native Hawaiians once used the beach to collect large driftwood, which traveled to Kamilo from the American Pacific Northwest, to make dugout canoes. Today, old toothbrushes, shards of plastic and mounds of rope and fishing line pile up on the shore instead.

Trash has accumulated on Kamilo's beaches as early as the mid 1980s, as seen in the photo below, which was taken between 1984 and 1987 by HWF volunteer and Big Island resident Noni Sanford.

Before plastics were prominent on the Ka'u coast, Sanford would collect driftwood at Kamilo Beach for her father's artwork. In 2006, she'd collect washed-up trash to create artwork of her own.



NONI SANFORDAn artist's photo of Kamilo Point in the mid-1980s.

"If you were to dig up the sand through the rocks and sift through it with your hands, you'll find more plastic than sand," Alison Teal, a local sustainability activist, told HuffPost. "It's so sad to see it covered in everything you can imagine."

In December 2016, Plastic Change International, a Denmark-based plastic pollution advocacy group, visited Kamilo to demonstrate how dire the area's pollution problem is. The video they created below sheds light on how easy it is to find microplastics in the ocean, especially on the shores of Kamilo.

It's not clear if beach cleanups are enough to keep Kamilo Beach free from the trash that winds up on its shores, but organizations are trying to be innovative with the debris.

Last week, the Hawaii Wildlife Fund sent discarded nylon fishing nets found at Kamilo to the island of Oahu to be converted into energy as part of NOAA's Net-to-Energy program. The nets will be cut into smaller pieces and burned as fuel at a power plant in Kapolei, according to the Hawaii Tribune-Herald.

Lamson, who volunteers part time as HWF's Big Island director, thinks that Kamilo's pollution problem can be handled only at a global level.

"The solution is not to encourage more people to come to Kamilo to clean up," she told HuffPost. "The solution will come with [humans] reducing our dependence to plastics, especially single-use items that we can do without."

And with an estimated 8 million metric tons of discarded plastics turning up in the ocean every year, Lamson says, humans are the only ones who can stop it from pouring into the sea.

"Ultimately, marine debris and plastic pollution are both people problems," she said. "It was created by people and can be solved by people."