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Hawaii Is Losing Its Beaches

Article

HALEIWA, Hawaii (Achieve3000, April 24, 2014). Alice Lunt didn't worry too much when she saw waves splashing close to her home on December 24, 2013. Lunt lives on the North Shore of the Hawaiian island of Oahu. She had seen the water come close in the past. But before dawn, a neighbor called her.

"Everything is washing away," Lunt's neighbor said.

The water claimed Lunt's deck that day. The next night, it washed away a concrete slab. It was part of a fast-moving collapse of the shore. It also ripped out a neighbor's backyard and forced another neighbor to cut away rooms to save the rest of the house. The December swell occurred not because of a freak storm but due to large amounts of water that regularly hit the North Shore. The event rekindled a debate about how best the state of Hawaii and homeowners there should respond to beach erosion and the rising waters of the Pacific Ocean.



Photo credit: AP/Audrey McAvoy

Sandbags are piled up in front of properties damaged by severe beach erosion off of Oahu's North Shore.

Erosion and rising waters are ongoing problems in Hawaii. They're causing destruction on the coastlines. Sea levels have been rising for years. And erosion is a problem at 70 percent of the beaches on Hawaii's Oahu, Maui, and Kauai islands.

What's causing these problems? Scientists say that the burning of fossil fuels is leading to climate change, including an overall warming of the atmosphere. The oceans absorb much of this heat. When the water gets warmer, it expands. In addition, the glaciers and ice caps at and near the Poles are melting. For these reasons, sea levels are rising. Scientists believe that rising sea levels are one factor leading to increased erosion.

The existence of houses on the coast is also contributing to the problem. At Rocky Point, the neighborhood where Lunt lives, homes were built on sand dunes. Those dunes would now be feeding the beach with sand if they didn't have structures on them.

Facing the likelihood of future sea swells, many homeowners want to be able to install a seawall between the ocean and their properties. But scientists say that doing so could lead the sand on the nearby coastline to disappear. Chip Fletcher is a geologist from the University of Hawaii. He said that building seawalls always comes to mind wherever severe erosion occurs. He said it's understandable that homeowners would want to protect their homes. But he pointed to studies showing that seawalls built on chronically eroding shorelines only lead to more erosion down the coast. This means a choice must be made.