

CASE STUDY

O'AHU, HAWAI'I

Testing the waters and engaging community volunteers in clean water solutions to protect public health and safe ocean recreation.



Hawai'i is an outdoor playground for those who love the ocean and coasts. Surfing, swimming, diving, paddling and beachgoing are just some of the recreational pursuits that attract people from around the world to the Hawaiian Islands. Unfortunately, the clear blue, tropical waters that surround the islands are not immune to the pollution that comes along with increasing growth and development.

Hawai'i's beaches and recreational waters are affected by urban and agricultural runoff. In addition, many neighborhoods are still serviced by cesspools. These outdated and inadequate wastewater systems leach nutrients, bacteria and other pathogens into ground and surface waterways. Cesspools and failing sewage infrastructure are a major concern during rain and flooding events. The [Hawai'i Department of Health \(HDOH\) issues Brown Water Advisories](#) to warn the public of potential dangers.

The Hawai'i Department of Health also runs a beach water quality monitoring program, funded in part by their federal

BEACH Act grant, to protect public health at the beach. However, with more than 400 public beaches, 300 miles of coastline and a year-round beach season, it is a challenge for the state's program to adequately cover all beaches throughout the islands.

As a result, the [Surfrider Foundation O'ahu Chapter](#) has stepped up to help protect clean water and healthy beaches. For years, the O'ahu Chapter has helped to host and share state-generated water quality results and beach advisories. With a team of dedicated and highly knowledgeable volunteers, the chapter's Blue Water Task Force (BWTF) has also grown into a well-established citizen science program. By sampling beaches that are not covered by the state's program, the O'ahu BWTF is generating valuable water quality information to inform safe beachgoing.

Surfrider volunteers are currently monitoring fifteen beaches on a biweekly basis and processing their water samples at a Hawai'i Pacific University lab. Many of the



chapter's sampling sites are located in areas with high concentrations of cesspools, or at beaches that are impacted by runoff. Watch this short video to hear Surfrider O'ahu volunteer, Christina Comfort, describe the benefits of the BWTF program:



While bacteria levels at most beaches that are tested by the chapter are generally safe during good weather, two sites have shown concerning results. The stream outflows at [Kahalu'u Park](#) and [Chocolates surf break](#) located at the Anahulu River outfall in Haleiwa, have consistently failed to meet health standards. Both sites are located in watersheds with high cesspool densities. The chapter plans to work

together with the Department of Health to warn the public of polluted conditions at these beaches. Visit [Surfrider.org](#) to view all of the O'ahu Chapter's water quality data and check for beach advisories issued by the state [here](#).

In addition to testing the waters, Surfrider is also leading the charge to address the major sources of pollution in Hawai'i. Through their Civics is Sexy program, the O'ahu Chapter has trained community members to be informed and effective advocates for clean water. This program has resulted in three state bills aimed at reducing pollution from Hawai'i's existing 88,000 cesspools, in addition to a new pioneering ban on sunscreens that harm coral reefs.

The O'ahu Chapter is also using Surfrider's Ocean Friendly Gardens program to help solve water quality problems created by flooding and stormwater runoff. Together with Permablitz Hawai'i, the chapter organizes a workday, or 'Surfblitz,' where dozens of volunteers work together to renovate a residential yard. Their efforts result in sustainable gardens that absorb rain, provide beautiful native habitat and produce fruits and vegetables for homeowners. Each work day is a great opportunity for new volunteers to learn about holistic and sustainable gardening techniques as they work alongside experts and experienced volunteers. Surfblitz



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Above: Surfrider and Permablitz Hawai'i volunteers install a terraced vegetable garden.

events are publicized through social and local media to further increase the outreach potential of this program. Best of all, these events are a lot of fun! Check out this short video that explains the benefits of this program:



This upcoming year, the O'ahu Chapter will be tackling their biggest project yet to install the Kaka'ako Ocean Friendly Garden in loving memory of volunteer, Heather Riley. This project will convert a long stretch of commercial land,

donated by Kamehameha Schools, into a thriving and productive garden for the community. When complete, this Ocean Friendly Garden and community gathering site will inspire urban water conservation, food security, cultural education, native plantings and hands-on learning. Most importantly, the garden will be a place for the families in this densely developed urban area to connect with the land, or 'aina.' Surfrider and Permablitz Hawai'i volunteers have already started clearing and preparing the soil for planting. The community is looking forward to seeing this site fully transformed into a beautiful native garden and cultural space in the coming months.

Thank you to the Harold K.L. Castle Foundation for their support of the O'ahu Chapter's Ocean Friendly Gardens program.