



# BLUE WATER TASK FORCE

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# O'AHU WATER QUALITY REPORT

2024



BLUE WATER  
TASK FORCE

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# INTRODUCTION

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The Blue Water Task Force (BWTF) is the Surfrider Foundation's volunteer water quality monitoring program that provides critical information to protect public health at our beaches.

In 2024, the O'ahu BWTF program collected 515 water samples at 26 sites. Our BWTF Teams are composed of trained volunteers who sample biweekly.

Water quality samples are tested for the presence of enterococcus, a fecal bacteria that indicates the presence of human or animal waste in the water. Elevated levels of enterococcus increase the likelihood that other pathogens that can make people sick may be present.

The goal of BWTF is to fill in monitoring gaps and quickly communicate with the public where it is safe to swim and where bacteria levels are elevated. Water quality results are compared to the standards used by the Hawai'i Department of Health (HDOH) to issue swim advisories. Known as the Beach Action Value (BAV), this threshold is 130 colony forming units of enterococcus per 100mL sample (130 cfu/100mL).

The water quality information generated by the BWTF augments data that the HDOH provides through its beach water quality monitoring program. HDOH tests a limited number of beaches on each island, primarily those with lifeguards and in popular tourist areas. The BWTF, meanwhile, covers a variety of areas popular with local families and recreational users including surf spots and local swimming beaches.

Our data is also important in identifying chronically polluted sites that should continue to be prioritized for ongoing monitoring, as well as potential investigation into the sources of pollution.

Beachgoers should take precautions swimming, surfing, or recreating after heavy rain events for 24-48 hours. Do not enter brown water areas or where there is a warning sign for high bacteria levels. Community members are encouraged to check water quality results posted online before they head to the beach at [oahu.surfrider.org/bwtf](https://oahu.surfrider.org/bwtf). Current and historic data are available.



# ACCESSING DATA

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BWTF data is posted online 24-hours after it is collected (see website below). If you have questions about O'ahu BWTF data, please reach out to the below coordinators. You can also direct questions to Hanna Lilley (hlilley@surfrider.org), Surfrider Foundation's Hawai'i Regional Manager. The BWTF would not be possible without the dedication of our many volunteers and program coordinators (who are also volunteers). We appreciate our volunteers tremendously.

## O'AHU

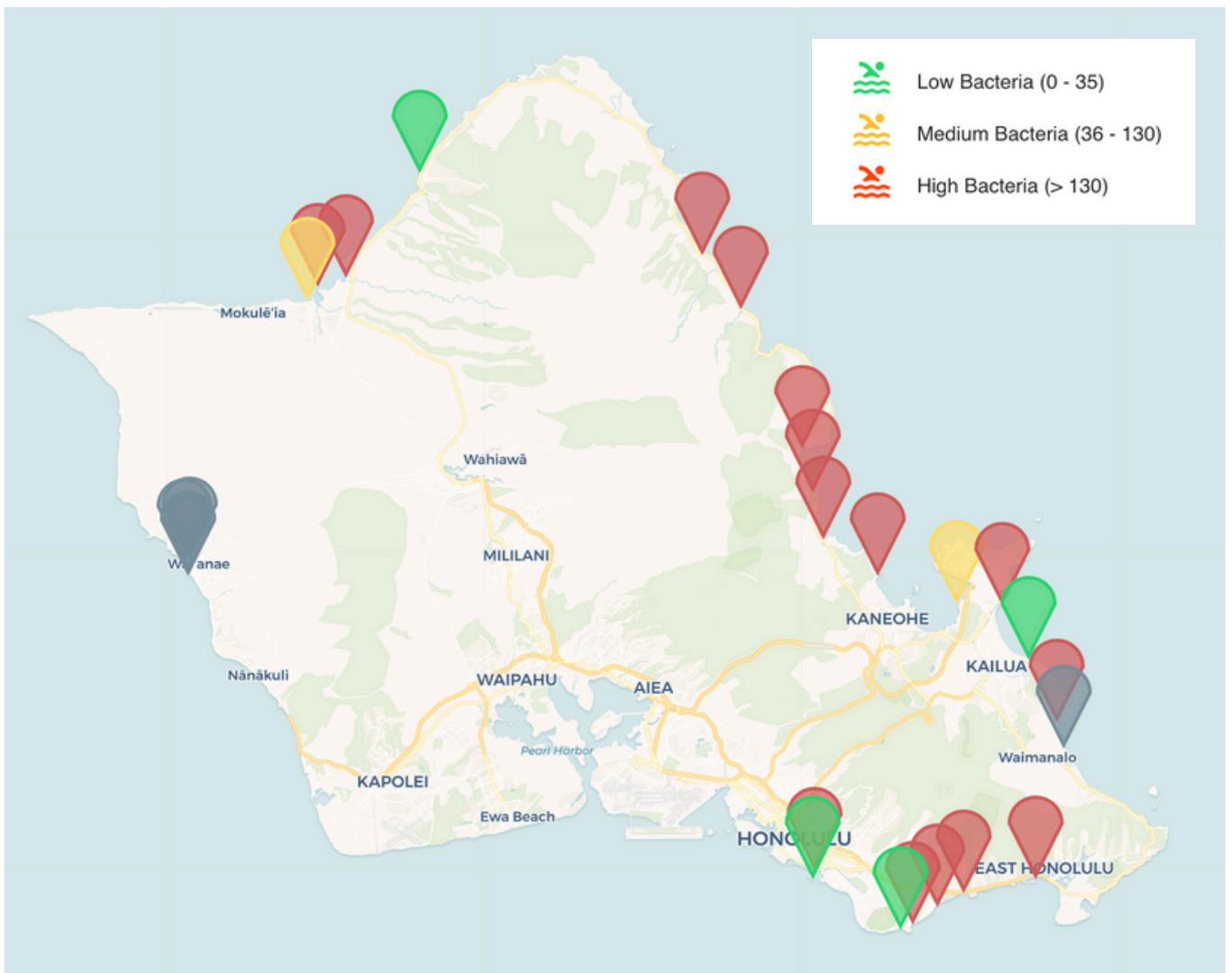
### **Program Co-Coordiators:**

- Dr. Dan Amato (bwtf@oahu.surfrider.org)
- Arleen Velasco (chair@oahu.surfrider.org)

View Data: <https://bwtf.surfrider.org/explore/44>

# O'AHU DATA SUMMARY

Please find an analysis of water test results below for 26 O'ahu sites (Map 2) that were monitored in 2024. Our water quality results indicate that certain sites frequently experience high bacteria levels that exceed state health standards (Table 2). Note BWTF results are recorded as Most Probable Number (MPN/100 mL), due to our testing methods.



Map 2. Blue Water Task Force sites on O'ahu that were sampled bi-weekly in 2024.

# O'AHU DATA SUMMARY

**TABLE 2: PERCENT OF O'AHU SAMPLES  
EXCEEDING HEALTH STANDARDS (> 130 MPN/100ML)**

SITE NAME	TOTAL SAMPLES	% HIGH BACTERIA (>130 MPN/100ML)
North O'ahu: Kahaone Place	15	0%
West O'ahu: Pōka'i Bay- outside	20	0%
West O'ahu: Pōka'i Bay- Inside	20	5%
North O'ahu: Pūpūkea Tidepools	16	6%
East O'ahu: Kailua Beach Park	25	8%
South O'ahu: Ka'alāwai (Black Point/Cromwells)	25	8%
South O'ahu: Magic Island Bowls	23	9%
West O'ahu: Pililā'au	20	15%
South O'ahu: Waialae Beach Park	24	21%
South O'ahu: Wailupe Beach Park	25	24%
East O'ahu: Mākao	8	25%
South O'ahu: Magic Island Canoe Launch	23	26%
East O'ahu: Waimanalo Stream	11	27%
East O'ahu: Kaimalino	25	32%
East O'ahu: He'eia Stream	20	35%
Inoaole Stream	14	36%
South O'ahu: Ka'alāwai (Black Point-East)	23	39%
East O'ahu: South Kaneohe Bay	25	44%
North O'ahu: Kaiaka Bay	15	47%
North O'ahu: Chocolates	15	<b>60%</b>
East O'ahu: Waiāhole Beach Park	25	<b>68%</b>
East O'ahu: Hakipu'u Boat Ramp	21	<b>71%</b>
South O'ahu: Kuli'ou'ou Stream	25	<b>72%</b>
West O'ahu: Kaupuni Stream	20	<b>80%</b>
East O'ahu: Kahalu'u Beach	24	<b>92%</b>
East O'ahu: Chings (Punalu'u Beach Park)	8	<b>100%</b>

Table 2. Indicates the percentage of total samples taken at respective sites that exceeded HDOH health standards for Enterococcus bacteria (>130 mpn/100mL). Note that the number of total samples is not consistent across sites.

# KEY OUTCOMES

2024 BWTF results are consistent with water quality trends from previous years. Across O'ahu, sites located at stream mouths, beaches with freshwater outlets, or in bays without much circulation are typically characterized by higher bacteria levels than at ocean sites with better circulation and more mixing. Seven sites had 50% of their samples exceed state health standards. Chocolates, Kaupuni Stream and Chings are all located in Priority 1 Cesspool areas and Kahalu'u Beach, Hakipu'u Boat Ramp, and Waiāhole Beach park are located in a Priority 2 Cesspool area ([link to Hawai'i Cesspool Prioritization Tool](#)), meaning that there is known cesspool contamination. The chronic pollution documented at these sites by the BWTF indicates the potential impact of wastewater pollution in these areas.

In addition, these seven sites are located at the mouth of streams or rivers. Chronic pollution at these sites may therefore also be attributed to land-based runoff from upland areas that is carried by freshwater streams and released into the ocean.



BWTF data also indicates that high bacteria levels are measured at many sampling sites during and following wet weather and brown water events. Beginning in November, the rainy season is characterized by large storm events with heavy rainfall. Particularly in the early part of the season, these storms serve to "flush" the islands and can result in large amounts of water, sediment, wastewater, and pollutants flowing downhill into the ocean.

Families, ocean users and the public should be aware of the poor water quality conditions and avoid any contact with these freshwater flows. The public should be particularly cautious after heavy rain events that lead to increased runoff and can prompt Brown Water Advisories. Even if you don't see a public notice posted, avoid brown water until conditions clear.

More exposed beaches and those that do not have direct freshwater inputs from streams or rivers generally test clean. These sites seldom show high bacteria levels because of the high volumes of water exchange and mixing that occurs at these sites. Bacteria at these sites, however, can be elevated after rainfall or other heavy storm events.

Note that not all high bacteria spikes were detected during brown water events. This demonstrates the importance of regular water quality monitoring programs. Before going to the beach, check out current water quality conditions at [www.bwtf.surfrider.org](http://www.bwtf.surfrider.org) and [water quality advisories](#) issued by HDOH.

# KEY OUTCOMES

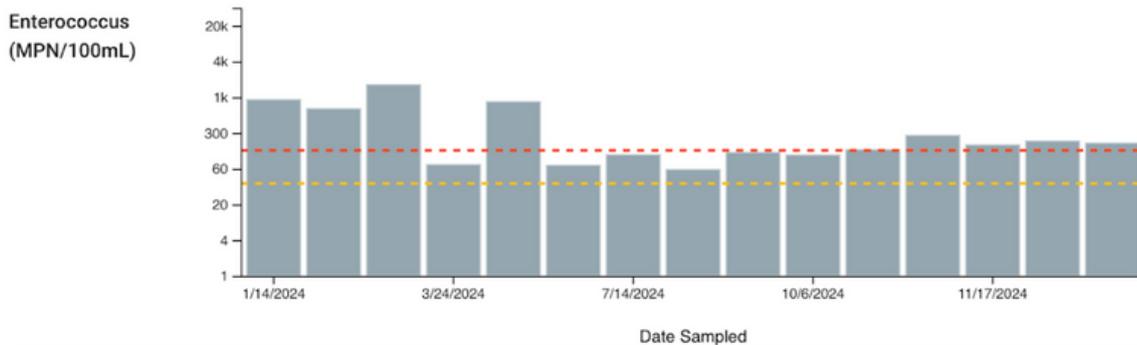
## PRIORITY SAMPLE SITE: CHOCOLATES

In 2024, 60% of the samples collected at this site exceeded health standards. This site is in a Priority 1 cesspool area, indicating high risk of cesspool related contamination. Situated at the mouth of 'Anahulu river, Chocolates receives significant land-based pollution. As a popular spot for swimming and other recreational activities, water quality here is a significant public health concern.

# 60%

OF CHOCOLATES  
SAMPLES IN 2024  
EXCEEDED HEALTH  
STANDARDS FOR  
BACTERIAL COUNTS

### Chocolates Results 2024



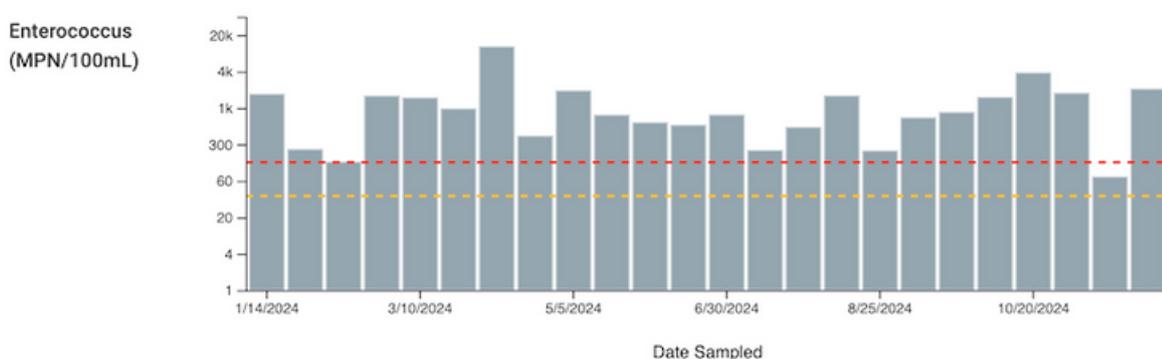
## PRIORITY SAMPLE SITE: KAHALU'U BEACH

Since 2018, O'ahu BWTF test results have indicated chronically high bacteria levels at Kahalu'u Beach. In 2024, 92% of the samples collected there exceeded health standards. High bacteria readings are likely related to the high density of coastal cesspools in this area, as well as the fact that Kahalu'u Beach is adjacent to a stream-fed lagoon and receives large amounts of land-based runoff. Previous studies by the University of Hawai'i also indicate the impact of wastewater contamination from cesspools at Kahalu'u.

# 92%

OF KAHALU'U SAMPLES  
IN 2024 EXCEEDED  
HEALTH STANDARDS FOR  
BACTERIAL COUNTS

### Kahalu'u Beach Results 2024



# LEGISLATIVE ACTION

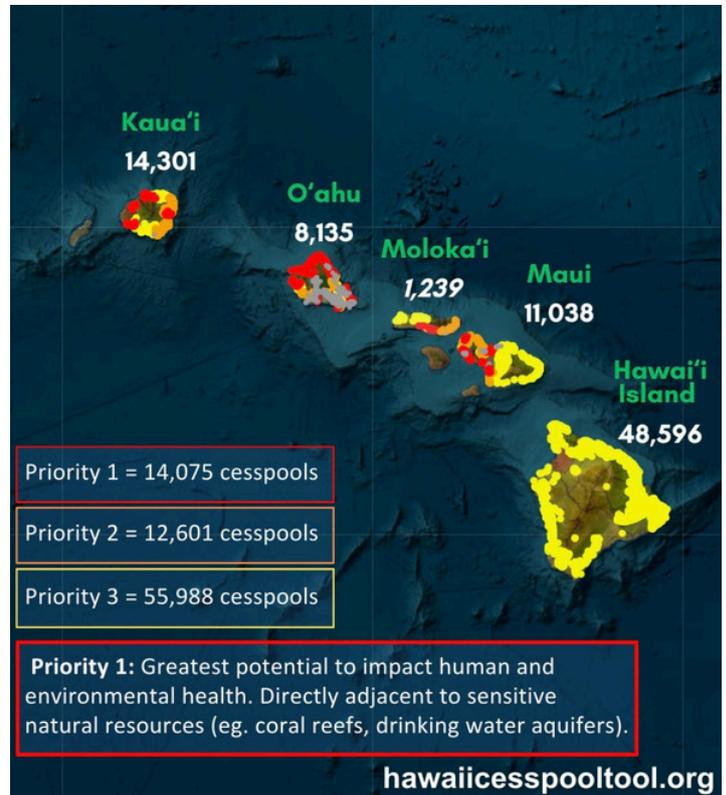
In addition to filling in water quality gaps across the state and informing beach goers about the safety of coastal waters, the Hawai'i Blue Water Task Force programs and their data also help drive important policy changes.

## FEDERAL LEVEL ADVOCACY

In March 2024, five Surfrider Hawai'i volunteers met virtually with federal representatives to advocate for sufficient funding and proper implementation of the BEACH Act grants program administered by the Environmental Protection Agency (EPA). Each of the volunteers, representing their respective chapters, shared annual water quality reports highlighting the chronic pollution along their respective coastlines, and the need for cesspool upgrades to address wastewater pollution.

## IMPROVING STATE WATER QUALITY MONITORING PROGRAM

Surfrider's Blue Water Task Force (BWTF) programs on O'ahu, Kaua'i, and Maui have long measured high bacteria levels where people enjoy a wide range of recreational activities in the water, but many of these sites are not tested by the beach program run by the Hawai'i Department of Health (HDOH). For many years, Surfrider has worked on building support in the Hawai'i State Legislature to mandate more robust testing coverage of beaches by the state's program. While the bill we supported last year did not pass, we were able to negotiate a compromise with the DOH that meets the bill's intent to sample beaches during both wet and dry weather. Previously, all sampling was suspended while Brown Water Advisories were in place.



Credit: Wastewater Alternatives and Innovations

## REDUCING THE IMPACT OF CESSPOOL POLLUTION

Hawai'i's 83,000 cesspools are one of the biggest threats to water quality across the state, discharging 52 million gallons a day of sewage into coastal waters. In recent years, Surfrider has played a key role in successfully urging the state government to finally move away from relying on these antiquated and ineffective systems for managing household wastewater. While this work is ongoing, each year Surfrider has been supporting new legislation to further the state's progress towards meeting the 2050 goal. In 2024 we helped pass legislation that will help identify priority areas where sewers and central wastewater infrastructure can replace cesspools (HB2743/Act 217).

# O'AHU COMMUNITY SCIENCE

## PŌKAĪ BAY AND WAI'ANAE LAB

In the summer of 2022, Carmen Guzman-Simpliciano was pushing her elected officials to undertake water quality studies in Pōkaī Bay on West O'ahu. Out of concern for her family and fellow community members developing rashes and other symptoms after swimming in Pōkaī Bay, Carmen and other West O'ahu residents have been sampling four Blue Water Task Force sites in Pōkaī Bay and Kaupuni Stream. In 2024, 80% of the samples collected from Kaupuni stream exceeded state health standards.

In late 2023, Surfrider Foundation O'ahu Chapter and Wai'anae High School were awarded funding to set up a BWTF lab at Wai'anae High School. Not only does this lab cut down on driving time for volunteers but it also allows the community to expand testing to additional sites along West O'ahu coastline and provides a valuable hands on learning experience for high school students processing water samples in their school lab. In 2024, community volunteers and Wai'anae High School students conducted 20 sampling events at four sites in Wai'anae.

## O'AHU XSTREAM TEAMS

In partnership with Sea Grant, the University of Hawaii and PaclOOS (Pacific Islands Ocean Observing System) the O'ahu Chapter is leading 'Surfrider Xstream Teams'. This four year study, funded by a federal grant from the U.S. Coastal Research Program, supports cutting edge research on O'ahu to advance rapid testing methods and develop predictive models to forecast pollution events in coastal waters.



### Surfrider Xstream Teams is working to address the following questions:

- How polluted is the water during large rain events?
- When is it safe to go back in the water?
- Where in the watersheds are pollutants entering the system?

Surfrider O'ahu BWTF coordinator, Daniel Amato is leading the study with 75 community volunteers who sample at 5 different watersheds on O'ahu (50 sites) during extreme rain events testing for fecal indicator bacteria (enterococcus), nutrients (nitrogen and phosphorus), wastewater indicators (sucralose and optical brighteners), microbial community structure, turbidity, salinity, and dissolved organic matter (DOM). As of April, 2025 - approximately 220 samples over 10 sample days and two extreme storm events have been processed in the first 2 years of this study. This data will provide us with a better understanding of the impacts that large rain and tide events have on water quality and public safety. We expect preliminary data to be available by the end of 2025.



This report is brought to you by the  
Surfrider Foundation Hawai'i Region.

[hawaii.surfrider.org](http://hawaii.surfrider.org)

Photo by Monica Andrea Photography