

MIAMI BLUE WATER TASK FORCE

2022 Water Quality Monitoring Annual Report

PROGRAM OVERVIEW

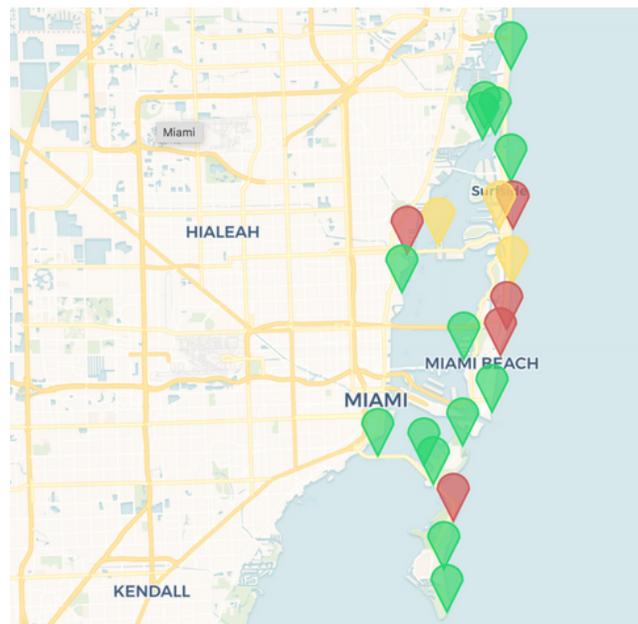
The Blue Water Task Force (BWTF) is the Surfrider Foundation's volunteer water quality monitoring program that provides critical water quality information to protect public health at local beaches. Water quality samples are tested for the presence of enterococcus, a fecal bacteria that indicates the 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 Florida Department of Health (FL DOH) to issue swim advisories, specifically greater than 70 colony forming units of enterococcus per 100mL sample (70 CFU/100mL). Beachgoers should take precautions swimming, surfing, or recreating after heavy rain events. Do not enter brown water areas, or where there is a warning sign for high bacteria levels. Water quality data can be accessed at bwtf.surfrider.org.

WHERE WE SAMPLE

In 2022, Miami Chapter volunteers collected samples from a total of 24 sites along Biscayne Bay, from Bill Baggs Cape Florida State Park in the south to Sunny Isles in the north. Samples were collected from sites in beach, canal, and bay locations on a weekly basis throughout the year, and were processed at the Chapter's BWTF lab in Miami Beach. To complement the monitoring done by the Florida Department of Health, the Miami BWTF collects samples on Thursdays, whereas FL DOH tests beaches on Mondays; therefore, the Miami BWTF provides timely water quality results for weekend recreation.



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RESULTS

Table 1 shows the percentage of samples that exceeded state health standards at 24 sampling sites in 2022. At two sites, over 50% of the samples exceeded state standards, although it is worth noting that Little River Pocket Park only has eight samples (**Table 1**). The seven sites with the most consistently high bacteria levels, including Parkview Kayak Launch, North Bay Village, and Dog Beach, are all located in the bay. Higher pollution rates at these sites may be attributed to land-based runoff from inland areas that is carried by canals and released into the bay. Comparatively, ocean beaches tend to have lower percentages of bacterial exceedance, likely due to dilution.

High bacterial counts indicate the presence of human and/or animal waste in these waters, which may threaten public health. Potential sources of pollution include leaking septic systems, sewer line failures, animal agriculture, pets, birds, and other wild animal waste. These data are important in identifying chronically polluted sites that should continue to be prioritized for public health and safety. Families, ocean users, and the public should be aware of areas with poor water quality conditions and seek to avoid them.

Site Name	Total Samples	% High Bacteria (>70 mpn/100mL)
Key Biscayne: Towers	35	0%
Sunny Isles: 174th St	52	0%
Key Biscayne: Beach Club	45	2%
Surfside Beach: 93rd St	51	2%
Miami Beach: South Pointe Park	48	4%
Miami Beach: 30th Street Beach	52	6%
Virginia Key: Darwin Beach at RSMAS	48	6%
Key Biscayne: Bill Baggs Cape Florida State Park	46	7%
North Biscayne Bay: Oleta River State Park Beach	46	7%
North Biscayne Bay: Sandspur Island NW	44	7%
Key Biscayne: Presbyterian School	23	9%
Key Biscayne: Crandon Park South	48	10%
Miami Beach: 53rd St Beach	51	10%
North Biscayne Bay: Haulover Sandbar N	45	11%
Virginia Key: North Beach	46	11%
Miami Beach: Collins Park, 21st St	50	12%
Miami Beach: North Shore Ocean Terrace, 73rd St	53	15%
Miami Beach: Purdy/Sunset Harbor Kayak Launch	51	20%
Virginia Key: Dog Beach	50	24%
Miami Beach: Purdy/Sunset Harbor Boat Launch	22	36%
Miami: Morningside Park	8	38%
North Bay Village: 360 Condo	17	47%
Miami: Little River Pocket Park	8	75%
Miami Beach: Parkview / Kayak Launch	52	85%

Table 1. Percent of samples at each site that exceeded state health standards of 70 CFU/100 mL over the last 10 years.

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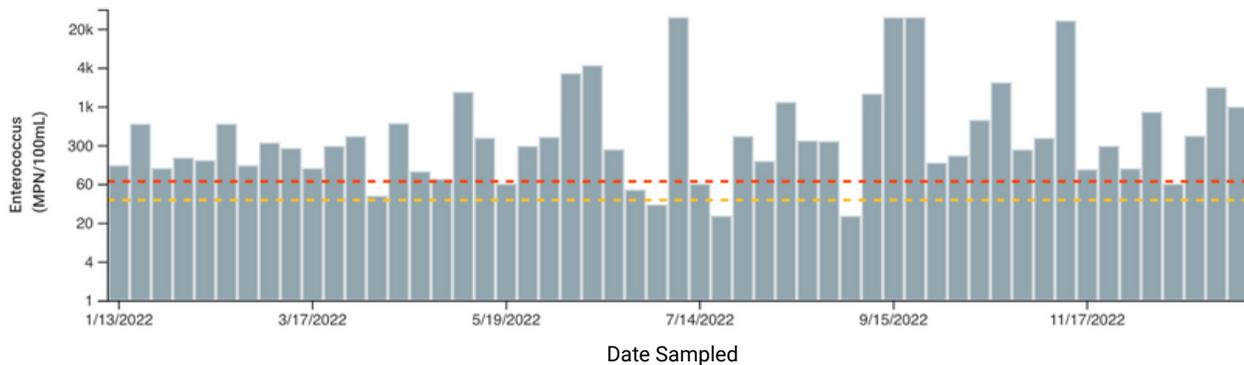
PRIORITY SITE - MIAMI BEACH: PARKVIEW / KAYAK LAUNCH

In 2022, 85% of samples taken from Parkview/Kayak Launch exceeded state health standards. The Park View Island canal has been under a no-contact-with-water advisory since March 2020. Despite the high bacteria levels and no-contact advisory, people can still be found swimming and kayaking in the canal. Efforts are being made to pinpoint the sources of pollution at this site.

85%

OF PARKVIEW KAYAK LAUNCH SAMPLES EXCEEDED HEALTH STANDARDS FOR BACTERIAL COUNTS IN 2022

Miami Beach: Parkview / Kayak Launch Results



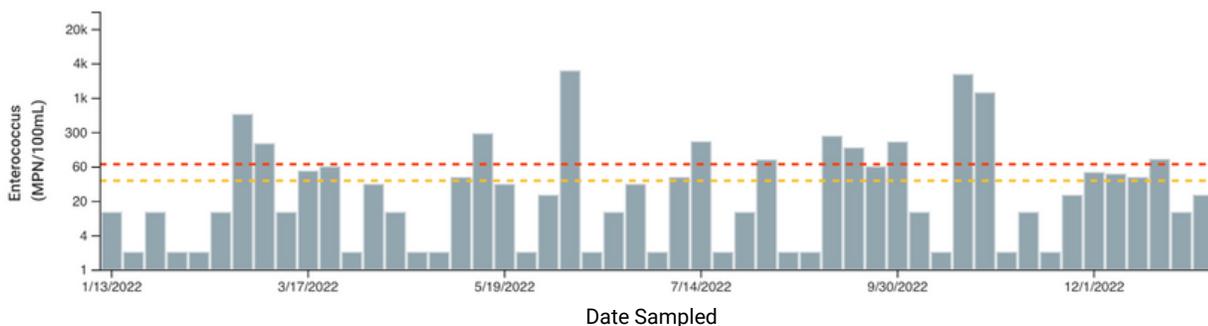
PRIORITY SITE- VIRGINIA KEY: DOG BEACH

In 2022, 24% of samples taken from Dog Beach exceeded state health standards. As the name suggests, this is a popular dog and picnic area where many people come to paddle board, kayak, and swim. There have been no swim advisories issued at this beach in the past.

24%

OF DOG BEACH SAMPLES EXCEEDED HEALTH STANDARDS FOR BACTERIAL COUNTS IN 2022

Virginia Key: Dog Beach Results



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PRIORITY SITE - MIAMI BEACH: NORTH SHORE OCEAN

TERRACE, 73RD ST

In 2022, 15% of samples taken from North Shore Ocean Terrace exceeded state health standards. This ocean site is located directly east of Parkview Kayak Launch. Typically, ocean sites contain less bacteria compared to bay and canal sites due to dilution; therefore, 15% is certainly a percentage worth noting. Individuals visiting the ocean should avoid recreating near river mouths of storm drains, which tend to have higher concentrations of land-based pollutants.

15%

OF NORTH SHORE OCEAN
TERRACE SAMPLES
EXCEEDED HEALTH
STANDARDS FOR
BACTERIAL COUNTS IN
2022

North Shore Ocean Terrace, 73rd St Results

