2023 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 2023, Miami Chapter volunteers collected samples from a total of 31 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.





RESULTS

Table 1 shows the percentage of samples that exceeded state health standards at 31 sampling sites in 2023. At three sites, over 50% of the samples exceeded state standards (**Table 1**). Many of the 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.

		% High Bacteria
Site Name	Total Samples	(>70 mpn/100mL)
Key Biscayne: Dog Friendly Beach	1	0%
Miami: Yacht Club Marina	11	0%
Miami: Yacht Club Swim Spot	5	0%
North Biscayne Bay: Oleta River State Park Beach	21	5%
North Biscayne Bay: Sandspur Island NW	21	5%
North Biscayne Bay: Haulover Sandbar N	53	9%
Miami Beach: 53rd St Beach	52	10%
Sunny Isles: 174th St	51	12%
Key Biscanye: Bill Baggs Cape Florida State Park	45	13%
Miami Beach: North Shore Ocean Terrace, 73rd St	52	13%
Surfside Beach: 93rd St	52	13%
Virginia Key: North Beach	28	14%
Virginia Key: Darwin Beach at RSMAS	48	15%
Miami Beach: Normandy Shores	27	15%
Miami Beach: 35th Street Beach Count	40	15%
Miami Beach: Collins Park, 21st St	46	15%
Key Biscanye: Beach Club	45	18%
Virginia Key: MAST Academy	47	19%
Miami Beach: Purdy/Sunset Harbor Boat Launch	5	20%
Virginia Key: Dog Beach	48	21%
Miami Beach: Pinetree Park Kayak Launch	44	23%
Miami Beach: South Pointe Park	52	23%
Miami Beach: 6500 Indian Creek	12	25%
Miami Beach: Purdy/Sunset Harbor Kayak Launch	52	25%
North Bay Village: 360 Condo	52	25%
Miami Beach: 30th Street Beach	7	29%
Key Biscayne: Crandon Park South	45	36%
Miami Beach: Pelican Harbor Kayak Launch	19	47%
Miami: Morningside Park	43	51%
Miami Beach: Parkview / Kayak Launch	52	73%
Miami: Little River Pocket Park	44	89%

Table 1. Percent of samples at each site that exceeded state health standards of 70 CFU/100 mL in 2023.

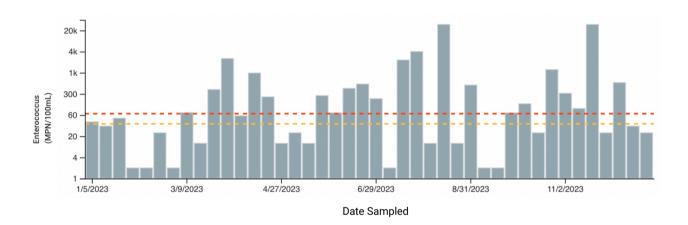


PRIORITY SITE - MIAMI: MORNINGSIDE PARK

In 2023, 51% of samples taken at Morninside Park exceeded state health standards. Despite these findings, the park remains a popular spot for outdoor activities, offering scenic views of Biscayne Bay and downtown skyline, along with amenities such as a kayak launch. The county is taking several measures to address this concern, including increasing public education efforts and inspecting storm drains and other potential sources of pollution.

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OF MIAMI: MORNINGSIDE
PARK SAMPLES EXCEEDED
HEALTH STANDARDS FOR
BACTERIAL COUNTS IN
2023

Miami: Morningside Park Results



INSERT PHOTO OF MORNINGSIDE

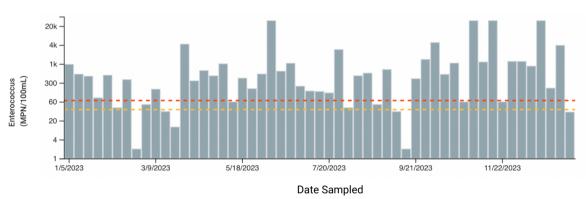


PRIORITY SITE - MIAMI BEACH: PARKVIEW / KAYAK LAUNCH

In 2023, 73% 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.

OF PARKVIEW KAYAK
LAUNCH SAMPLES
EXCEEDED HEALTH
STANDARDS FOR BACTERIAL
COUNTS IN 2023

Miami Beach: Parkview Kayak Launch Results



PRIORITY SITE- MIAMI: LITTLE RIVER POCKET PARK

In 2023, 89% of samples taken from Little River Pocket Park exceeded state health standards. Efforts are underway to pinpoint the sources of pollution at this site. This park remains an important recreational space for the community, offering a green oasis in an urban setting.

Miami: Little River Pocket Park

89%
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PARK SAMPLES EXCEEDED
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