

Surfrider Foundation Marin County Chapter Water Quality Update June 2016

Blue Water Task Force results for 2016

Water Quality Test Results Marin County

Location	No. of Tests	Low	Medium	High	% Low	% Medium	% High
Bayfront Park	23	10	7	6	43.48%	30.43%	26.09%
Stinson Beach	20	19	1	0	95.00%	5.00%	0.00%
Bolinas	22	21	0	1	95.45%	0.00%	4.55%
Jamaica Street, Tiburon	11	9	1	1	81.82%	9.09%	9.09%
Corte Madera Creek	2	2	0	0	100.00%	0.00%	0.00%
McNears Beach	3	3	0	0	100.00%	0.00%	0.00%
Totals	81	64	9	8			
Percentages	100.00%	79.01%	11.11%	9.88%			

Surfrider Foundation Marin has just completed its 10th year of participating in Surfrider's Blue Water Task Force (BWTF) program of water quality testing. We test local beaches and bay locations for Enterococcus, a bacteria that grows in fecal matter. Presence of bacteria such as Enterococcus and/or E. coli indicates the possibility of local sewage system failures.

Above are the results of the 81 water quality tests conducted by student volunteers from the Branson School and Marin Academy this past school year (Sept 2015 to May 2016). Overall results were basically good: 79% low bacteria, 11% medium and 10% high. Translation in simple terms of *High* is **EXTREMELY UNSAFE** for humans.

Look close at the results of the six locations. Note we have one problem area - Bayfront Park in Mill Valley. The ocean sites (Bolinas and Stinson Beach) are at the safe level over 90% of the time. Jamaica Street, which is the boat marina on the east side of the Tiburon Peninsula, is safe 80% of the time. Our two new locations this year - Corte Madera Creek and McNears Beach (a county park near Peacock Gap in San Rafael) had no measureable bacteria.

Based on 23 tests Bayfront Park was unsafe 56% of the time. However, with the Bayfront Park results are removed, overall quality improves by 14% -

Without Bayfront Park	No. of Tests	Low	Medium	High
Totals	58	54	2	2
Percentages	100.00%	93.10%	3.45%	3.45%

Given these results, Surfrider Marin recommends that you don't swim, sail, paddle or float in the Bay near Bayfront Park in Mill Valley.

Meet the Branson BWTF Team



Image: June 2016/Water Testers 5383

The Branson team (pictured above) conducted 76 tests this school year. Standing is Kathy Soave, faculty advisor, trained biologist and chair of the Science Department. Seated are: Melea Emunah, Evan Sievers and Jane Hatfield. Evan joined the team in January and collected water samples from the marina at Jamaica Street in Tiburon. The good news is the team will be back next year, and they have volunteered to carry on.

Marin Academy begins a BWTF Lab

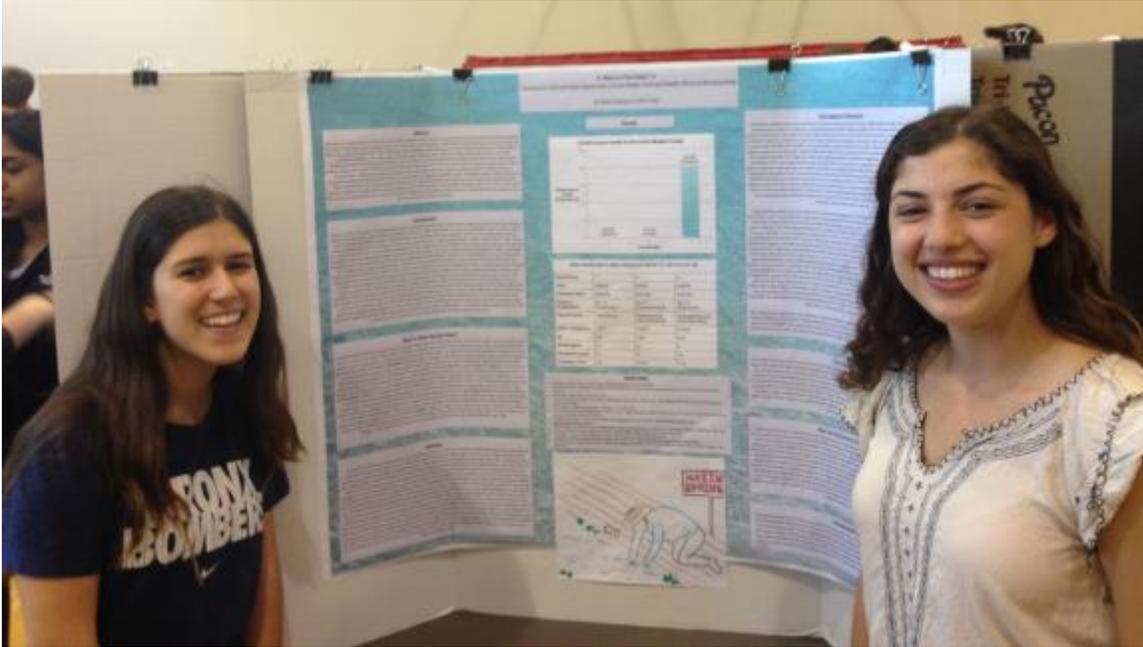


Image: Surfrider/Monthly Newsletter/June/Water Article 5860-1

More good news: above Marin Academy students Sofia Friedman and Celina Vidal presented their Corte Madera Creek water quality project at Marin Academy's Science Symposium. Their report included water quality test results from the school's newly installed BWTF testing equipment.

Surfrider Foundation Marin has set-up its second BWTF test lab at Marin Academy, a private high school in San Rafael. Congrats to Stori Oates, trained biologist, science teacher, and the school's research collaborative coordinator for initiating a water quality program. Surfrider Marin provided the equipment and the testing chemicals, and Stori established the lab, recruited and trained the students and in April began testing water samples from Corte Madera Creek and McNears Beach. Now that the system is up and running, Stori and science teacher Liz Gottlieb are finalizing water quality plans for a full year of testing beginning next August.

Outbreak of E. coli traced to Fairfax Creek

Here's why we test: *The Marin Independence Journal* (June 3) reported an outbreak of E. coli in a local creek in Fairfax:

Marin public health officials said test results have confirmed a form of E. coli that has now sickened four children is present in Fairfax Creek, which runs adjacent to Peri Park in downtown Fairfax.

“We were able through our public health lab to do more modern testing and were actually able to identify the exact strain,” Dr. Lisa Santora, Marin County’s deputy public health officer, said Thursday. The symptoms of toxin producing E. coli include severe stomach cramps, diarrhea (often bloody), vomiting and sometimes fever. Most people recover within five to seven days.

Fairfax Town Manager Garrett Toy said the town will pay for the county Department of Environmental Health to test Fairfax Creek’s water weekly for the remainder of the summer. New signs have been posted reading, “Danger bacterial contamination water contact may cause illness.” And yellow caution tape has been used to cordon off the creek in the area near Peri Park and Fairfax Town Hall.

Surfrider Foundation issues its 2015 Clean Water Annual Report

Mara Dias, Surfrider Foundation's Water Quality Manger, published her *2015 Clean Water Annual Report*, a summary of Surfrider's entire water efforts. Click on the link below to see the whole report. Here are a few highlights:

The Blue Water Task Force program is going strong and growing. In 2015, thirty-one labs, which are located along the west coast, the east coast, Alaska, Hawaii and Puerto Rico, processed 4,639 water samples collected from 317 distinct sampling sites. Bacteria levels were:

Low	70%
Medium	12%
High	18%

The majority of the water samples that failed to meet health standards were collected from freshwater sources such as rivers, creeks and marshes that are influenced by storm water runoff or at beaches near these outlets. This is consistent with national trends, which show that storm water runoff is the number one cause of beach closures and swimming advisories in the United States:

Note: our Marin results this past school year fit this same pattern.

Check out and download Mara's full report.

http://publicfiles.surfrider.org/Clean-Water_Annual-Report-2015.pdf