

Marine & Environmental Research Institute

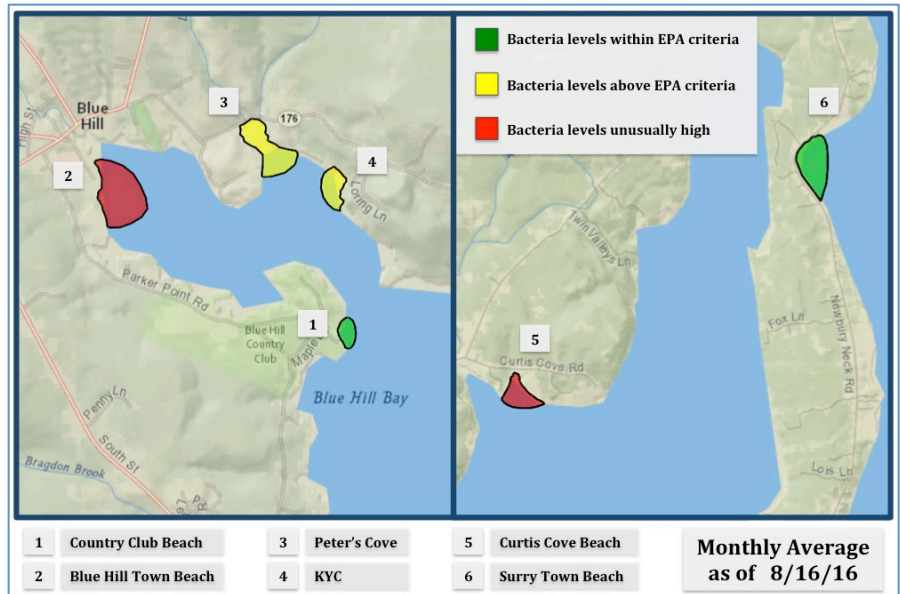
For more than a decade MERI has monitored water quality in Blue Hill Bay and reported concerns to the community. This report shares results of monitoring *Enterococcus* bacteria counts at local Blue Hill and Surry beaches. *Enterococcus* is an indicator human and animal fecal contamination. High levels can cause ear, eye, nose, and GI infections and children are very susceptible to bacteria-borne illness.

Monitoring Results - August 18, 2016

The most recent bacteria levels measured between August 16th and 18th at the Kollegewidgwok Yacht Club (KYC) boat ramp exceeded the EPA's criteria for bacteria levels in a single sample. Due to this the monthly average at KYC exceeds the EPA's threshold for safe swimming. Beach-goers should use their best judgment when swimming at KYC, as daily bacteria testing results can vary dramatically.

Bacteria levels measured at the Country Club Beach, the Blue Hill Town Beach, Peter's Cove, Curtis Cove, and the Surry Town beaches on August 18th all met water quality standards set by the EPA.

However, unusually high levels recorded on August 16th at the Blue Hill Town Beach have increased the monthly average at this location. Monthly average levels at Peter's Cove and Curtis Cove also exceed the EPA's threshold for safe swimming. EPA criteria states that bacteria levels should not exceed 104 cells per 100mL in a single sample or a monthly average of 35 cells per 100mL.



The monthly average bacteria level and the daily bacteria levels at the Country Club Beach and the Surry Town Beach were within EPA's criteria for safe swimming as of August 18, 2016.

The causes of the high bacteria counts at Blue Hill Town Beach, and KYC are most likely related to the amount of rain that fell on the area over the August 13-14 weekend. Significant rain events can cause large amounts of runoff, including fecal matter, to enter the water. The cause of the elevated bacteria levels at Curtis Cove and Peter's Cove, however, do not appear to be directly related to rainfall alone. The cause of the consistently high bacteria levels at these locations is unknown.

MERI has increased the frequency of testing at Curtis Cove, Peter's Cove, and the Blue Hill Town Beach, and the Town of Blue Hill has been advised. The MERI monitoring team will continue regular monitoring of all six local beaches and will post weekly updates and additional information at <http://www.meriresearch.org/content/beach-advisory>.

MERI Enterococcus Bacteria Testing Results – Daily and Monthly Average

LOCATION	8/18/16		8/16/16		AVERAGE 7/20 – 8/18
	SITE 1	SITE 2	SITE 1	SITE 2	
Country Club Beach			18.9	12.7	14.4
Blue Hill Town Beach	51.2	24.7	248.9	816.4	190.1
Peters Cove	21.4		107.6	7.4	59.6
KYC	128.7	83.6	331.4	79.2	83.8
Curtis Cove	6.3		196.1	5.1	210.9
Surry Town Beach			0	13.2	11.9

Data measured in Most Probable Number (MPN) for Enterococcus in a 100ml sample. Results in red above Maine Healthy Beaches and EPA criteria for marine water: 104 cells per 100mL daily or a monthly average of over 35 cells per 100mL.