## **OARS Bacteria Monitoring Results - 2019**

Updated November 25, 2019

Following is a brief summary of OARS' monitoring results for *E. coli* bacteria at 6 locations in the Assabet, Sudbury, and Concord rivers. *E. coli* is used as an indicator of fecal contamination in water bodies, and the EPA has defined safety threshold values for recreational swimming and boating. The swimming threshold for single samples is 235 CFU/100 ml. The swimming threshold for the geometric mean of all samples for the season is 126 CFU/100 ml. Bacteria data is normally analyzed on a logarithmic scale because the bacteria multiply exponentially.

Seasonal Results (June 17, 2019 – September 23, 2019):

				%	
			Exceed-	Exceede	Geo-
Site #	Description	Samples	ences	d	Mean
ABT-077	USGS gage, Maynard	15	1	7%	121
ABT-162	Cox Street, Hudson	15	2	13%	161
CND-009	Rogers St. Bridge, Lowell	15	2	13%	147
CND-110	Rte 225 boat ramp, Billerica	15	0	0%	40
SUD-096	Route 20, Wayland	15	1	7%	51
SUD-237	Rte 135, Ashland	15	4	27%	151

Based on single sample results, one site exceeded the swimming threshold at least 25% of the time. Based on the geometric mean, three sites exceeded the threshold for the season. Two sites only had one exceedance over the summer, and one site never had any exceedances. None of our sites ever approached the boating threshold.



