

2009 Greenwich Bay Watershed Bacteria Data: Fecal coliform and Enterococci

A number of groups of bacteria species are used to indicate the presence of human sewage and associated pathogens, or disease causing organisms in water. Fecal coliform are one group, and its monitoring is required under the National Shellfish Sanitation Program for shellfish waters and as an indicator of overall water quality. Thus RIDEM assesses fecal coliform levels in marine waters or waters that discharge directly to marine waters.

While URIWW's Analytical Laboratories are State certified, Watershed Watch data is intended for screening purposes only. Our data are very valuable for targeting areas of concerns and for tracking potential sources of bacterial contamination. Samples may have been collected over a period of days for each collection period, so may reflect dry versus wet weather or rain event values. Please contact Watershed Watch for specific sample dates.

Any result above the state standard is considered unsafe, and swimmers should refrain from swimming until results return to acceptable levels, or at least for several days after heavy rain.

RI Department of Environmental Management Standards:
Shellfish Waters - Not to exceed 14 fecal coliform per 100 mL.

(USEPA regulations require tributaries to meet receiving waters standards at the point where they enter.)

Non-designated Bathing Beach (Fresh) Waters Geometric Mean Density - Not to exceed 54 enterococci per 100 mL.

Designated Bathing Beach (Fresh) Waters Geometric Mean Density - Not to exceed 33 enterococci per 100 mL.

Marine Waters Geometric Mean Density - Not to exceed 35 enterococci per 100 mL.

RI Department of Health standards for recreational contact (i.e. swimming):

Fresh Waters - Single sample not to exceed 61 enterococci per 100 mL.

Marine Waters - Single sample not to exceed 104 enterococci per 100 mL.

Greenwich Bay Tributaries Fecal Coliform Data

	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	GEOMEAN
Freshwater Tributary Monitoring Site	Number of Fecal coliform colony forming units per 100 mL						
GB #1 - Maskerchugg @ Rt 1	13	not run	300	42	448	not run	93
GB #2 - Burger King	48	1040	8000	2400	2440	1540	1238
GB #3 - Rte 115 pipe	40	1144	8000	850	2560	40	563
GB #4 - Mill Creek	32	122	7000	280	440	120	272
GB #5 - Health Center (Headwaters)	100	1140	6000	120	2320	200	580
GB #6 - Tuscatucket Brk	36	1920	77	20	~16000	12	165
GB #7 - Southern Crk	84	784	6560	290	2040	140	574

Greenwich Bay Tributaries Enterococci Data

	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	GeoMean
Freshwater Tributary Monitoring Site	-----	Most Probable Number of Enterococci per 100 mL					-----
GB #1 - Maskerchugg @ Rt 1	44.8	2419.6	397.8	648.8	294.0	544.6	406.0
GB #2 - Burger King	28.8	1119.9	> 2419.6	> 4840	> 4840	645	> 1028
GB #3 - Rte 115 pipe	37.4	920.8	> 2419.6	922.2	> 4840	163.1	> 627
GB #4 - Mill Creek	38.3	128.1	1299.7	311	1297.6	663	345.7
GB #5 - Health Center (Headwaters)	57.3	613.1	> 4839.2	262.8	4839.2	191.1	> 588
GB #6 - Tuscatucket Brk	20.8	>2419.6	139.4	119.1	> 2419.6	23.8	> 191
GB #7 - Southern Crk	54.6	547.5	> 2419.6	393.6	3465.8	118.2	> 476
In Bay Marine Monitoring Sites	-----	Most Probable Number of Enterococci per 100 mL					-----
GrBay #6 - Ponaug Marina	<10	20	>2005	41	2142	221	> 96
GrBay #8 - Little Rhody Boat Club	42	10	111	164	52	146	62.2
GrBay #9 - Warwick Cove Marina	-	< 10	31	42	31	10	14.2