

2006 Bacteria Data - Rivers Enterococci Data

disease causing organisms. In Rhode Island the two groups monitored in order to protect human health are fecal coliforms and enterococci. The USEPA has identified enterococci as better indicators of increased risks of contracting gastrointestinal illnesses from water contact than the fecal coliforms. Therefore the Rhode Island Department of Health (RIHealth) adopted single-value enterococci standards for licensed swimming beaches in 2004, and the Rhode Island Department of Environmental Management (RIDEM) is in the process of also adopting enterococci for contact recreation standards on all waters (fresh and salt.) In addition, as required under the National Shellfish Sanitation Program and as an indicator of overall water quality, RIDEM continues to assess fecal coliform levels, particularly in marine waters or waters that discharge directly to marine waters (fecal coliform data is available for marine waters and shellfish area tributaries under the "Marine Bacteria" file.)

For several years URI Watershed Watch used an USEPA approved membrane filtration method with mE media on primarily salt water samples for analyzing enterococci. In order to produce the most relevant data for our communities as possible, in 2006 Watershed Watch began using the RIHealth preferred IDEXX method for analyzing enterococci on all waters, and is also now a State certified laboratory.

Watershed Watch data is intended for screening purposes only, but is 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 Health standards for recreational contact (i.e. swimming):

Fresh Waters - Not to exceed 61 enterococci per 100 mL.

Watershed code	MONITORING LOCATION	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	GEOMEAN
		----	Most Probable Number of Enterococci per 100 mL					----
CE	Bailey's Brook	12.6	-	613.1	517.2	196.8	5.2	83.6
NA	Buckeye Brook #1 @ Novelty Rd	793.6	104	980.4	304.4	4352	21.6	363.7
NA	Buckeye Brk #2 @ Lockwood Brk	252.4	134	2419.6	> 2419.6	419.8	> 2419.6	773.8
NA	Buckeye Brook #3 @ Warner Brook	108.8	92.8	727	104.6	225.4	721.8	223.6
NA	Buckeye Brook #4 @ Mill Cove	140	41	158.5	980.4	30.6	228	135.6
WD	Falls River D - Step Stone	<1	45.3	88.5	25.3	26.9	13.1	12.4
WD	Falls River C - Austin Farm	6.3	12.4	> 200.5	62.4	21.3	15	27.0
WD	Falls River B - Sand Banks	<1.0	23.8	> 200.5	93.3	21.1	13.4	8.4
WD	Falls River A - Twin Bridges	<1.0	17.8	200.5	95.9	28.1	23.8	16.9
GB	GB #1 - Maskerchugg	38.9	109.1	30.6	501.2	40.4	866.4	114.7
GB	GB #2 - Burger King	462	-	42.2	129.6	50.4	558.4	148.0
GB	GB #3 - Pipe @ Rte 115	170.4	-	21.8	157.6	72.7	506.8	116.6
GB	GB #4 - Mill Creek	373.6	66.3	344.8	190.4	42.5	3465.8	249.2
GB	GB #5 - Hardig Upstream	49	97.8	162.4	360.9	979.5	99	173.5
GB	GB #6 - Tuscatucket Br	601.5	62	107.6	109.2	1732.9	52.9	185.1
GB	GB #7 - Southern Creek	93.2	142.1	770.1	122.3	38.4	2827.2	226.6
TH	Moosup Upstream	24.7	18.5	816.4	261.3	163.2	39.8	92.7
TH	Moosup A - Fairbanks	<1	16.4	200.5	53.7	13.7	4.1	10.0
TH	Moosup B - Trestle Trail	<1	17.8	165.2	113.7	17.8	2	10.3

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M	Moshassuck River - Collyer Field	31.6	85.6	87.6	435.2	> 2419.6	5177	331.8
PE	NR 01- Gilbert Stuart	10.4	21.3	8.7	21.3	16.9	-	14.7
PE	NR 11 - Mettatuxet Brook	-	20	980.4	770.1	201.4	-	234.8
PE	NR 12 - Mumford Brook	771	444.8	816.4	290.9 / 2419.6	> 24196	-	1304.4
PE	NR 13 - Near Lakeside Rd.	112.2	<10	< 10	<10 / 14.6	42	< 10	4.9
PE	NR 14 - Lakeside Outfall	143	<2	< 10	226 / >24196	278.4	31	48.4
PE	NR 15 - Crooked Brook Farm	< 10	178.5	39.9	>2419.6	18.9	10.4	39.0
PE	NR 16 - Crooked Brook School	< 10	31.5	37.9	dry	28.2	< 2	8.0
WD	Pawcatuck River - Bradford	128.1	72.7	-	547.5	-	-	172.1
WD	Queen @ Sand Bridge (TNC)	1	-	106.7	242.86	105.9	23.1	36.3
WD	Queen @ Locke Brk	1	<1	193.5	166.4	7.5	14.6	8.4
WD	Queen @ Sherman Brk	3.1	8.7	135.4	344.8	35	6.3	25.5
H	Saw Mill Inlet	-	-	344.8	206.4	613.1	> 4839.2	683.4
WD	Shickasheen @ Rte 2	-	1011.2	24.6	73.3	90.9	18.1	78.6
WD	Shickasheen @ Miskiania Road	-	129.8	53.1	193.5	248.1	5.3	70.6
WD	Shickasheen @ Barber Pond Outlet	-	19.2	7.5	1	20.7	3.1	6.2
WD	Shickasheen @ Rte 138	-	137.6	36.4	71.7	113	17.3	58.8
WO	Woonasquatucket R @ Cricket	146	34.2	69.5	235.9	14.5	30.1	57.4
WO	Woonasquatucket R @ Donigian	63	55	72.8	307.6	58.3	44.3	76.5

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

Fresh Waters - Not to exceed 61 enterococci per 100 mL.

A factsheet describing how bacteria are monitored, what bacterial indicators are, where bacteria come from and how we can all help to reduce bacterial input into our local water resources is available at <http://www.uri.edu/ce/wq/ww/resources/Bacteria.pdf>

See the Rhode Island Department of Health beach monitoring website (<http://www.ribeaches.org/>) for additional information about beach monitoring and state standards.

The Rhode Island Department of Environmental Management website has information on State efforts to restore waters impaired by bacteria and other pollutants (<http://www.dem.ri.gov/programs/benviron/water/quality/index.htm>).

