

2008 Bacteria Data - Tributaries Enterococci Data

A number of groups of bacteria species are used to indicate the presence of human sewage and associated pathogens, or disease causing organisms. In Rhode Island two groups monitored in order to protect human health - fecal coliforms and enterococci. The USEPA has identified enterococci as better indicators of increased risks of contracting gastrointestinal illnesses from water contact than 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) adopted geometric mean density enterococci standards for contact recreation in all waters (fresh and salt) shortly after. In addition, as required under the National Shellfish Sanitation Program for shellfish waters 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 in the "Tidal Rivers Bacteria" file).

While URIWW's Analytical Laboratories are State certified, Watershed Watch data is intended for screening purposes only. However 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 Health Enterococci Standards:

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

RI Department of Environmental Management Enterococci Standards:

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.

Watershed code	MONITORING LOCATION	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	GEOMEAN
	WPWA RIVER & TRIBUTARY SITES	----	Most Probable Number of Enterococci per 100 mL					----
WD	Ashaway River @ Wellstown Rd.	86.5	108.9	122.3	-	-	-	104.8
WD	Ashaway River @ Rte 216	178.2	2419.6	73.8	-	-	-	316.9
WD	Chipuxet River @ Rte 138	5.3	34.4	42.9	-	-	-	19.9
WD	Glen Rock Brook	2	14.4	129.8	-	-	-	15.5
WD	Pawcatuck R @ Biscuit City Rd	8.5	22.2	272.3	-	-	-	37.2
WD	Pawcatuck R below Kenyon Ind.	40.2	42.8	no sample	-	-	-	41.5
WD	Pawcatuck River @ Rte 91	no sample	no sample	32.7	-	-	-	-
WD	Pawcatuck R @ Burdickville Rd	23.1	30.6	37.3	-	-	-	29.8
WD	Pawcatuck R @ Chase Hill Rd.	no sample	no sample	no sample	-	-	-	-
WD	Parmentier Brook @ Clark Falls Rd.	4.1	85.2	571.7	-	-	-	58.5
WD	Parmentier Brook @ Exit 93	32.7	86.4	601.5	-	-	-	119.3
WD	Queen River @ Rte 102	11	28.5	629.4	-	-	-	58.2
WD	Queen River @ Mail Rd	21.1	12.1	126.1	-	-	-	31.8
WD	Tomaquag Brk @ Woodville Rd.	1	8.0	78	-	-	-	8.5
WD	Tomaquag Brk @ Chase Hill Rd.	686.7	132.6	365.4	-	-	-	321.6
WD	Usquepaugh River @ Rte 2	23.8	34.4	27.2	-	-	-	28.1
WD	White Brook Pond Inlet	no sample	no sample	30.5	-	-	-	-

Lake Tributaries - Streams flowing into lakes and ponds - on the next page

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Watershed code	MONITORING LOCATION	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	GEOMEAN
	Lake - Trib name/location	----	Most Probable Number of Enterococci per 100 mL					----
WD	Asseconk Swamp	23.8	-	319.4	-	-	-	-
WD	Barber - Mud Brook	2	>200.5	14.2	-	-	-	>20.5
A	Belleville - RR Xing	129.8	201.4	601.5	-	-	-	250.5
A	Belleville - Sluiceway	9.6	14.5	45.7	-	-	-	18.5
WO	Georgiaville - Capron Pond	1	-	1011.2	-	-	-	31.8
WO	Georgiaville - Harris	13.4	-	3	-	-	-	6.3
SK	Nanaquaket - Quaket Brook	19.2	-	261.3	-	-	-	70.8
SK	Nanaquaket - Sin & Flesh Brook	109.1	-	135.4	-	-	-	121.5
SK	Nanaquaket - White Wine Brook	473	-	410.6	-	-	-	440.7
WD	Pasquisett Tributary	29.5	-	6.1	-	-	-	13.4
A	Secret - Oak Hill Creek East	59.4	-	173.2	-	-	-	101.4
A	Secret - Oak Hill Creek West	53.7	-	53.1	-	-	-	53.4
A	Secret - Shore Drive	125.9	-	135.4	-	-	-	130.6
WD	Shunock River @ Babcock	38.3	-	33.2	-	-	-	35.7
WD	Shunock River @ Hewitt	22.6	-	8.4	-	-	-	13.8
WO	Slack's Tributary A	< 1	-	9.7	-	-	-	9.7
WO	Slack's Tributary B	7.4	-	13.5	-	-	-	10.0
WO	Slack's Tributary C	2	-	6.2	-	-	-	3.5
WO	Slack's Tributary D	4.1	-	10.7	-	-	-	6.6
B	S&S - Balcom Brook	2	-	36.8	-	-	-	8.6
B	S&S - Keech Brook	4.2	-	9.7	-	-	-	6.4
B	S&S - O'Donnel Brook	< 1	-	32.4	-	-	-	32.4
TA	Stafford Inlet - Downstream	no sample	16.4	no sample	-	-	-	-
TA	Stafford - NE Cove	no sample	6.4	< 1	-	-	-	0.8
WD	Watchaug - Perry Healy	4.2	-	72.6	-	-	-	17.5
WD	Waterman - Rte 44	< 1	-	17.1	-	-	-	17.1
WO	Waterman - Saw Mill Rd.	45.7	-	1299.7	-	-	-	243.7
WO	Waterman - Golf Course	9.7	-	2419.6	-	-	-	153.2
WO	Waterman - Aldrich	457	-	816.4	-	-	-	610.8

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>).