

2016 Bacteria Data - Bristol Harbor and Tiverton Sakonnet River Tributaries: Fecal coliform and enterococci

In Rhode Island two groups of bacteria are monitored to indicate the presence of human sewage and associated pathogens, or disease causing organisms - fecal coliforms and enterococci. The Rhode Island Department of Health (RIHealth) uses a single-value enterococci standard for licensed swimming beaches. The Rhode Island Department of Environmental Management (RIDEM) uses a geometric mean approach for contact recreation standards on all other waters (fresh and salt). In addition, as required by the National Shellfish Sanitation Program for shellfish waters and their tributaries and as an indicator of overall water quality, RIDEM assesses fecal coliform levels.

While URIWW's analytical laboratories are certified by the State, URIWW 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. 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 fecal coliform standards:

Shellfish Waters - Not to exceed 14 fecal coliform per 100 mL (Exceedence indicated by **YELLOW** text).

Salt Waters Primary Contact/Swimming Standard - Not to exceed a geometric mean value of 50 fecal coliform per 100 mL. (Swimming standard exceedence indicated by **RED** text).

Save Bristol Harbor Sites Fecal Coliform Data

Watershed code	Monitoring Location	12-May	9-Jun	7-Jul	4-Aug	1-Sep	29-Sep	GEOMEAN
		----- Most Probable Number of Fecal coliform per 100 mL -----						
NA	BH - Elks Club	<10	52	<10	<10	10	<10	<10
NA	BH - Bristol Harbor Inn	29	86	<10	<10	20	20	15
NA	BH - Silver Creek	75	794	840	<20	<10	20	178
NA	BH - Silver Bridge	1789	5510	946	320	316	73	640
NA	BH - DaPonte/Wood St.	45.7	12033	<10	186	52	134	95
NA	BH - Silver West	261.3	2603	279	2909	223	798	679
NA	BH - Silver East	186	6152	74	-	-	-	439
NA	BH - Windmill Pt	<10	31	183	20	<10	<10	18
NA	BH - Mill Pond	<10	193	10	86	41	10	20
NA	BH - Sanroma	<10	<10	10	<10	<10	31	<10
NA	BH - Bristol Yacht Club	<10	<10	10	<10	<10	<10	<10
NA	BH - Brito Dock	<10	<10	10	10	<10	<10	<10
NA	BH - Herreshoff	<10	10	10	<10	<10	20	<10
MH	BH - Annawamscutt Dr	<10	10	<10	<10	-	75	<10
MH	BH - Kickemuit	<10	10	10	<10	<10	<10	<10

Tiverton Coastal Sites Fecal Coliform Data

Watershed code	Monitoring Location	12-May	9-Jun	7-Jul	4-Aug	1-Sep	29-Sep	GEOMEAN
		----- Most Probable Number of Fecal coliform per 100 mL -----						
SK	Nanaquaket Beach	<10	20	-	10	<10	<10	<10
SK	Sin and Flesh Brook - Rte 24	-	181	2755	Dry	Dry	Dry	706
SK	Sin and Flesh Brook - Fish Rd	73.3	152	944	118	Dry	Dry	187
SK	Sin and Flesh Brook - April Lane	40.4	44	112	80	Dry	Dry	63
SK	Quaket Creek - Main Rd	3	187	135	Dry	Dry	Dry	43
SK	Penny Pond	2	-	115	Dry	Dry	Dry	15
SK	Borden Brook - Main Rd.	22.2	25.0	1302	Dry	Dry	Dry	90

The Tiverton Harbor Commission initiated monitoring of the embayments (protected estuary or lagoon along a coastline) along the Sakonnet River, a tidal strait that separates Aquidnick Island from the mainland of eastern Rhode Island. These sites represent outstanding local resources known for their natural beauty, habitat for shell and other fish, birds and coastal fringing marshes. Protection of these areas is critical for current and future generations. In 2015 the Tiverton Open Space Commission added Borden Brook to further that goal and to develop information for managing protected open space in town.

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RIDEM Primary Contact Recreational/Swimming Geometric Mean Density (Geomean):

Not to exceed 35 enterococci per 100 mL.

RIHealth standards at licenced beaches: Not to exceed 60 enterococci per 100 mL

Save Bristol Harbor Sites Enterococci Data

Watershed code	Save Bristol Harbor Sites	12-May	9-Jun	7-Jul	4-Aug	1-Sep	29-Sep	GEOMEAN
NA	BH - Elks Club	<10	109	<10	<10	<10	10	<10
NA	BH - Bristol Harbor Inn	<10	10	<10	<10	10	<10	<10
NA	BH - Silver Creek	565	14540	538	20	10	<10	245
NA	BH - Silver Bridge	419	8704	1090	1916	218	63	686
NA	BH - DaPonte/Wood St.	16.8	12033	30	25	115	40	94
NA	BH - Silver West	51.2	6488	235	199	41	31	164
NA	BH - Silver East	58.3	2472	145	-	-	-	275
NA	BH - Windmill Pt	10	63	20	<10	<10	<10	<10
NA	BH - Mill Pond	10	637	31	10	20	10	27
NA	BH - Sanroma	<10	63	<10	<10	<10	<10	<10
NA	BH - Bristol Yacht Club	<10	41	<10	<10	<10	<10	<10
NA	BH - Brito Dock	<10	<10	20	<10	<10	<10	<10
NA	BH - Herreshoff	<10	30	<10	42	<10	10	<10
MH	BH - Annawamscutt Dr	<10	31	<10	<10	no sample	31	<10
Mh	BH - Kickemuit	<10	<10	<10	<10	<10	<10	<10

Tiverton Coastal Sites Enterococci Data

code	Monitoring Location	12-May	9-Jun	7-Jul	4-Aug	1-Sep	29-Sep	GEOMEAN
		-----	Most Probable Number of Enterococci per 100 mL					-----
SK	Nanaquaket Beach	<10	<10	-	<10	<10	<10	<10
SK	Sin and Flesh Brook - Rte 24	-	233	256	Dry	Dry	Dry	244
SK	Sin and Flesh Brook - Fish Rd	6.2	171	228	489	Dry	Dry	104
SK	Sin and Flesh Brook - April Lane	20.3	126	249	464	Dry	Dry	131
SK	Quaket Creek - Main Rd	3.1	19.4	20	Dry	Dry	Dry	11
SK	Penny Pond	<10	-	21	Dry	Dry	Dry	5
SK	Borden Brook - Main Rd.	7.4	127.4	464	Dry	Dry	Dry	76



Sin and Flesh Brook, looking upstream from its outlet at Nanaquaket Pond.

Photo from <http://www.quahog.org/attractions/index.php?id=64>