

## 2017 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	18-May	15-Jun	13-Jul	10-Aug	7-Sep	5-Oct	GEOMEAN
		----- Most Probable Number of Fecal coliform per 100 mL -----						
NA	BH - Elks Club	<10	<10	20	<10	31	-	<10
NA	BH - Bristol Harbor Inn	<10	10	20	<10	42	-	<10
NA	BH - Silver Creek	331	2247	3654	2046	1376	-	1502
NA	BH - Silver Bridge	402	2014	284	2708	195	-	656
NA	BH - DaPonte/Wood St.	123.6	88	1017	8	241	-	116
NA	BH - Silver West	83.9	1633	-	2595	906	-	753
NA	BH - Silver East	110	358	759	233	888	-	362
NA	BH - Windmill Pt	20	<10	<10	<10	31	-	<10
NA	BH - Mill Pond	20	31	52	<10	-	-	13
NA	BH - Sanroma	10	10	99	<10	87	-	15
NA	BH - Bristol Yacht Club	<10	<10	<10	<10	10	-	<10
NA	BH - Brito Dock	<10	<10	<10	<10	<10	-	<10
NA	BH - Herreshoff	<10	<10	31	<10	<10	-	<10
MH	BH - Annawamscutt Dr	10	<10	53	<10	31	-	<10
MH	BH - Kickemuit	-	<10	31	<10	<10	-	<10

### Tiverton Coastal Sites Fecal Coliform Data

Watershed code	Monitoring Location	18-May	15-Jun	13-Jul	10-Aug	7-Sep	5-Oct	GEOMEAN
		----- Most Probable Number of Fecal coliform per 100 mL -----						
SK	Tiverton Basin boat launch	<10	20	478	<10	<10	-	<10
SK	Industrial Way trib to Sin and Flesh	44.8	86	-	216	906	-	166
SK	Quaket Creek - Below pond	14.8	34	-	-	Dry	-	22
SK	Tributary Borden from south	204.6	81	276	-	98	-	145
SK	Tributary Borden from east	15.8	131	-	-	-	-	45

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.

**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	18-May	15-Jun	13-Jul	10-Aug	7-Sep	5-Oct	GEOMEAN
		-----	Most Probable Number of Enterococci per 100 mL					-----
NA	BH - Elks Club	<10	<10	<10	<10	20	-	<10
NA	BH - Bristol Harbor Inn	<10	<10	<10	<10	164	-	<10
NA	BH - Silver Creek	228	845	1553	816	3441	-	966
NA	BH - Silver Bridge	203	1607	1868	2248	5475	-	1496
NA	BH - DaPonte/Wood St.	23.1	13	146	345	4352	-	145
NA	BH - Silver West	27.2	597	-	82	12031	-	355
NA	BH - Silver East	85	106	910	284	12997	-	497
NA	BH - Windmill Pt	20	<10	<10	<10	20	-	<10
NA	BH - Mill Pond	<10	75	10	10	-	-	<10
NA	BH - Sanroma	10	<10	99	41	<10	-	<10
NA	BH - Bristol Yacht Club	<10	<10	<10	<10	<10	-	<10
NA	BH - Brito Dock	<10	<10	<10	<10	<10	-	<10
NA	BH - Herreshoff	<10	<10	10	<10	31	-	<10
MH	BH - Annawamscutt Dr	<10	<10	10	10	75	-	<10
Mh	BH - Kickemuit	-	<10	10	<10	<10	-	<10

**Tiverton Coastal Sites Enterococci Data**

Watershed code	Monitoring Location	18-May	15-Jun	13-Jul	10-Aug	7-Sep	5-Oct	GEOMEAN
		-----	Most Probable Number of Enterococci per 100 mL					-----
SK	Tiverton Basin boat launch	<10	<10	453	20	<10	-	<10
SK	Industrial Way trib to Sin and Flesh	228	663	-	172	1296	-	428
SK	Quaket Creek - Below pond	203	4	-	-	DRY	-	28
SK	Tributary Borden from south	23.1	61	646	-	583	-	152
SK	Tributary Borden from east	27.2	50	-	-	-	-	37



Image of the Herreshoff Marine Museum from Bristol Harbor (<https://herreshoff.org/>)