## 2024 Bacteria Data - Warren Harbor Sites: Fecal coliform and enterococci

In Rhode Island two groups of bacteria are monitored to indicate the presense 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 RED text).

## Warren Harbor Sites Fecal Coliform Data

Watershed code	Monitoring Location	19-May	16-Jun	14-Jul	11-Aug	8-Sep	20-Oct	GEOMEAN
			Most Proba	ble Numb	er of Feca	coliform	per 100 m	L
WA	Palmer River @ Wallis Street	73	10	31	6131	10	10	49
WA	Warren River - Ginalski	63	<10	20	1091	<10	10	16
WA	Warren River - Wharf Tavern ROW	-	<10	20	10	<10	<10	<10
WA	Warren River - Bridge Street Access	20	10	160	254	<10	10	21
WA	Warren River - Jacobs Pt	31	<10	<10	10	10	<10	<10
MH	Kickemuit - Broken Bridge	31	-	450	155	121	41	101
MH	Kickemuit - Shore Drive	<10	<10	216	<10	30	<10	<10
Warren Harbor Sites Enterococci Data								
Watershed code	Monitoring Location	19-May	16-Jun	14-Jul	11-Aug	8-Sep	20-Oct	GEOMEAN
		Most Probable Number of Enterococci per 100 mL						
WA	Palmer River @ Wallis Street	75	<10	10	2143	10	10	23
WA	Warren River - Ginalski	109	<10	<10	384	<10	<10	<10
WA	Warren River - Wharf Tavern ROW	-	<10	<10	10	<10	<10	<10
WA	Warren River - Bridge Street Access	41	<10	10	306	10	10	15
WA	Warren River - Jacobs Pt	20	<10	20	178	10	<10	<10
MH	Kickemuit - Broken Bridge	<10	-	465	41	86	74	41
MH	Kickemuit - Shore Drive	10	<10	63	<10	<10	<10	<10
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The Warren Harbor Commission initiated monitoring of the embayments along the Warren and Palmer Rivers as part of an effort to foster shellfish restoration in these areas.

RIDEM Primary Contact Recreationa/Swimming Geometric Mean Density (Geomean): Not to exceed 35 enterococci per 100 mL. (Exceedences in red)

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



Safe Routes to School project will replace the Broken Bridge, destroyed in the 1938 Hurricane, with a pedestrian bridge in Warren (Image from https://www.dot.ri.gov/projects/BrokenBridge/index.php)