UPPER HUDSON RIVER

Community Water Quality Monitoring Results

2016-2018



What the Data Show



How high were the bacteria levels?



Overall bacteria levels barely exceed EPA's recommended safe-swimming level, even after rainfall, which causes runoff, and can cause wastewater system overflows. However, data from certain sampling sites, point to the need for local water quality improvements.

More: Explore a watershed map, data from each sampling site, year-to-year patterns and more at <u>www.riverkeeper.org/water-quality/citizen-data/upper-hudson-river</u>



Community Science

The water quality data presented here are based on an analysis of 434 samples collected by watershed residents and staff of Jarrett Engineers. Samples were collected in June, August & October of 2016, and from May to October in 2017-2018, and processed by Riverkeeper. To get involved, contact Sebastian Pillitteri at spillitteri@riverkeeper.org.

Why We Measure Bacteria

Fecal indicator bacteria such as *Enterococcus* ("Entero") usually do not make us sick. But because they live in the guts of warm-blooded animals, when these bacteria are present in water, pathogens that can make us sick may also be present.

Sources of fecal bacteria may include sewer overflows and failures, inade-

quate sewage treatment, urban or farm runoff, septic system failures, wildlife and contaminated sediment.

While research continues, the EPA has set thresholds to define if water is safe for swimming based on decades of science relying on measurements of these bacteria. Data are shown in Entero cells per 100 mL.

About the Upper Hudson River

The Hudson River begins at Lake Tear of the Clouds, on New York's highest peak, Mount Marcy. The "upper" part of the river is the portion above of the Federal Dam at Troy, which forms a barrier to the tides. More than 83,000 people use the Upper Hudson as a drinking water source.

Signs of Progress

In 2018, state and local communities committed to over \$23 million in wastewater infrastructure improvement projects in the Upper Hudson. A watershed plan is being developed by the Upper Hudson River Watershed Coalition.

What portion of samples at each site were acceptable for swimming? EPA threshold: single sample should not exceed 60

How high were bacterial levels? EPA threshold: GM* should not exceed 30 ¦

Newcomb- Tahawus Road Bridge Newcomb- Whitewater access point Johnsburg- Warren County canoe access Warrensburg- Warren County Fish Hatchery boat launch Warrensburg- Schroon River at Paper Mill Park boat launch Lake Luzerne Wayside Beach Lake Luzerne- Hudson above Lower Sacandaga River confluence Hadley- Lower Sacandaga River at whitewater recreation area Corinth Beach Moreau Lake State Park boat launch Glens Falls- Haviland Cove Beach Glens Falls- Kayak launch at Feeder Canal Trail Moreau informal access point Fort Edward- Bradley Beach kayak launch Fort Edward- Above Lock 7 at floating docks Fort Edward- Champlain Canal at East Street Moreau- DEC Roger's Island Pool launch site Saratoga- Hudson Crossing Park Greenwich-Batten Kill at informal access point Schuylerville municipal boat launch Schuylerville- Fish Creek at Schuyler's Canal Park Saratoga informal boat launch Stillwater- Riverfront Park kayak launch Schaghticoke- Lock 4 State Canal Park Schaghticoke- Hoosic River tributary at Powerstation Road Schaghticoke- Hoosic River before Hudson confluence Mechanicville municipal canoe and kayak launch Halfmoon- Lighthouse Park kayak launch Schaghticoke municipal boat launch Troy- Hudson above Mohawk River

15%	85%	6	11
7%	93%		12
7%	93%		15
7%	93%		7
8%	92%		10
13%	87%		8
21%	79%		33
20%	80%		
13%	87%		
13%	87%		
25%	75%		35
7%	93%		
36%	64%		29
	67%	33%	72
7%	93%		15
29%	71%		24
6	60% 40%		71
31%		69%	29
57	'%	43%	82
20%	8	0%	28
	64%	36%	161
13%	87%		33
27%		73%	29
50%		50%	60
85%			15% 160
79%		2	1% 164
53%		47%	60
38%		63%	46
	73%	27%	6 264
47%		53%	45

*The geometric mean (GM) is a weighted average of all samples.

Upper Hudson River Water Quality