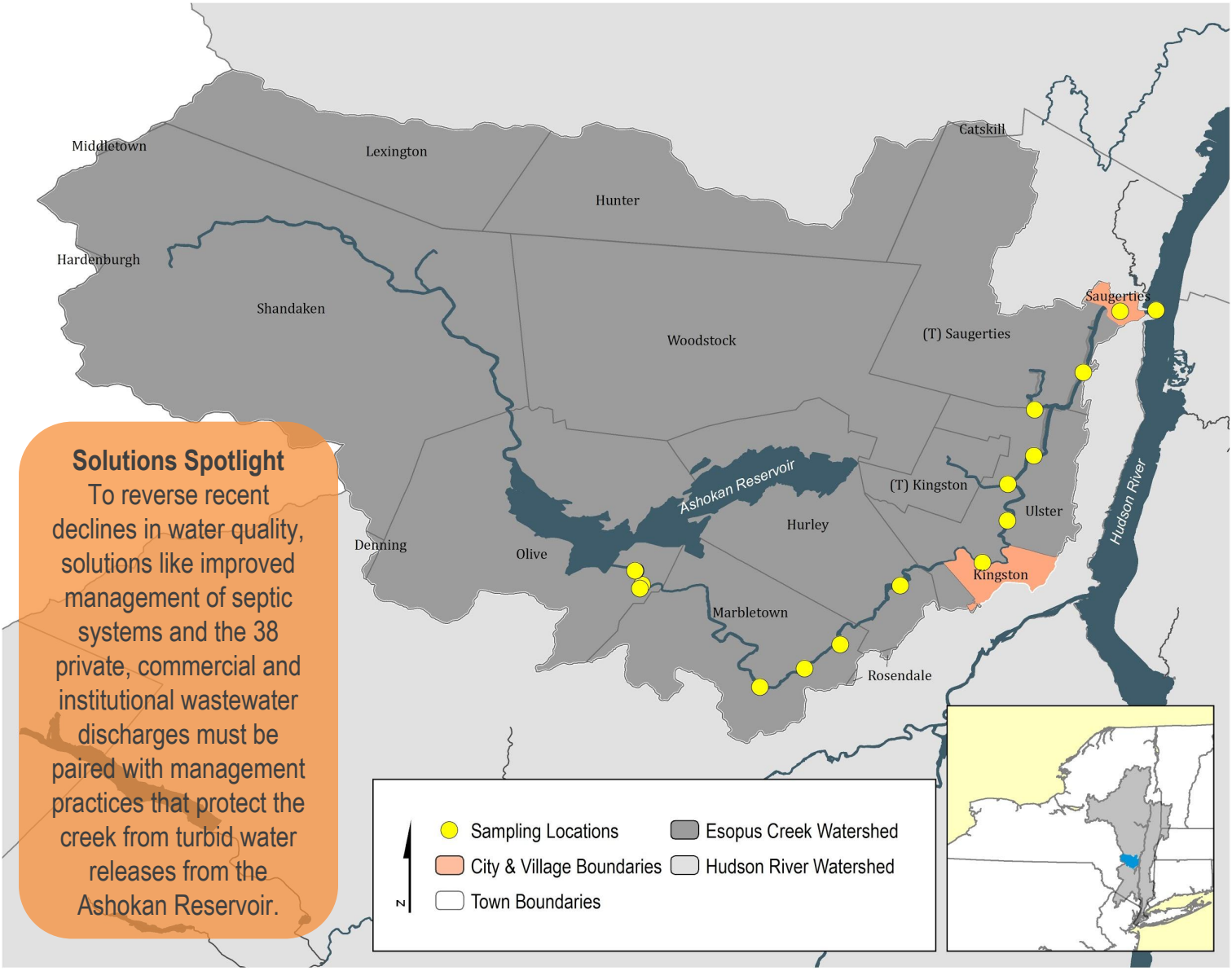
ESOPUS CREEK

Community Water Quality Monitoring Results 2010-2018

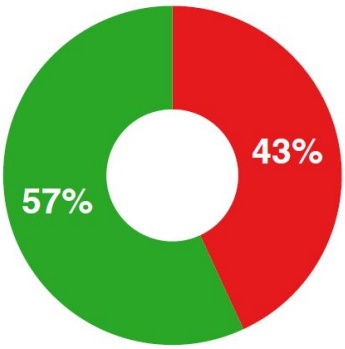


Solutions Spotlight
To reverse recent declines in water quality, solutions like improved management of septic systems and the 38 private, commercial and institutional wastewater discharges must be paired with management practices that protect the creek from turbid water releases from the Ashokan Reservoir.

What the Data Show

What portion of samples were safe for swimming?

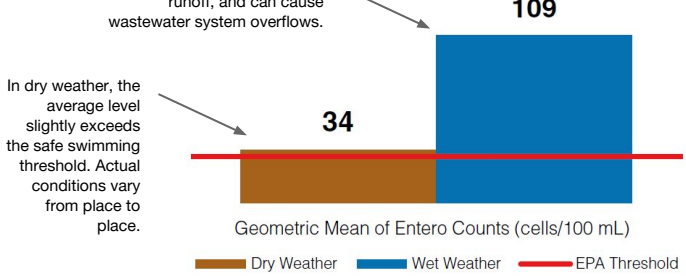
More than half of samples collected at non-tidal sites met the EPA guideline for safe swimming.



How high were the bacteria levels?

Bacteria levels are much greater after rainfall, which causes runoff, and can cause wastewater system overflows.

In dry weather, the average level slightly exceeds the safe swimming threshold. Actual conditions vary from place to place.



More: Explore a watershed map, data from each sampling site, year-to-year patterns and more at riverkeeper.org/water-quality/citizen-data/esopus-creek

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Community Science

The water quality data presented here are based on an analysis of 607 samples collected since 2010 by Marbletown ECC members, Riverkeeper, and watershed residents. Samples are collected monthly (May to October) 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, inadequate sewage treatment, urban or farm runoff, septic system failures, wildlife and contaminated sediment.

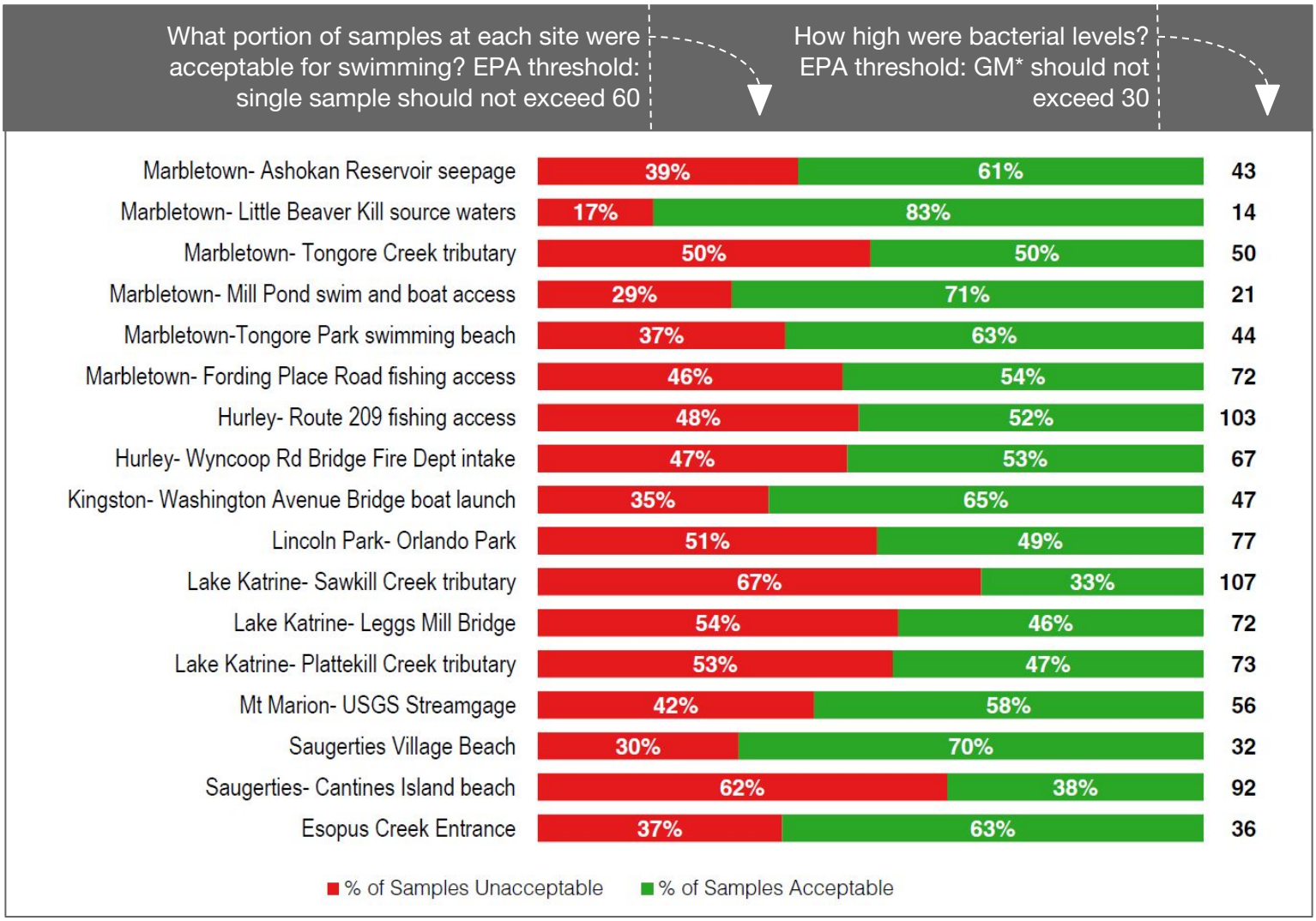
While research continues, the EPA has set thresholds to define if water is safe for swimming based on decades of science relying on measurements of these bacteria. Data are shown in Entero cells per 100 mL.

About the Esopus Creek

The lower Esopus Creek is home to one of the region's commercial kayak rental businesses. The tidal reach is a state-designated significant wildlife habitat.

Signs of Progress

The Town of Ulster plans to extend sewer service to two neighborhoods, alleviating concerns about septic systems. An innovative project drew attention to Tannery Brook, an historic, partly buried stream in Kingston. Since 2013, 93 volunteers have removed 5,700 pounds of trash from the Esopus during Riverkeeper Sweep events.



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