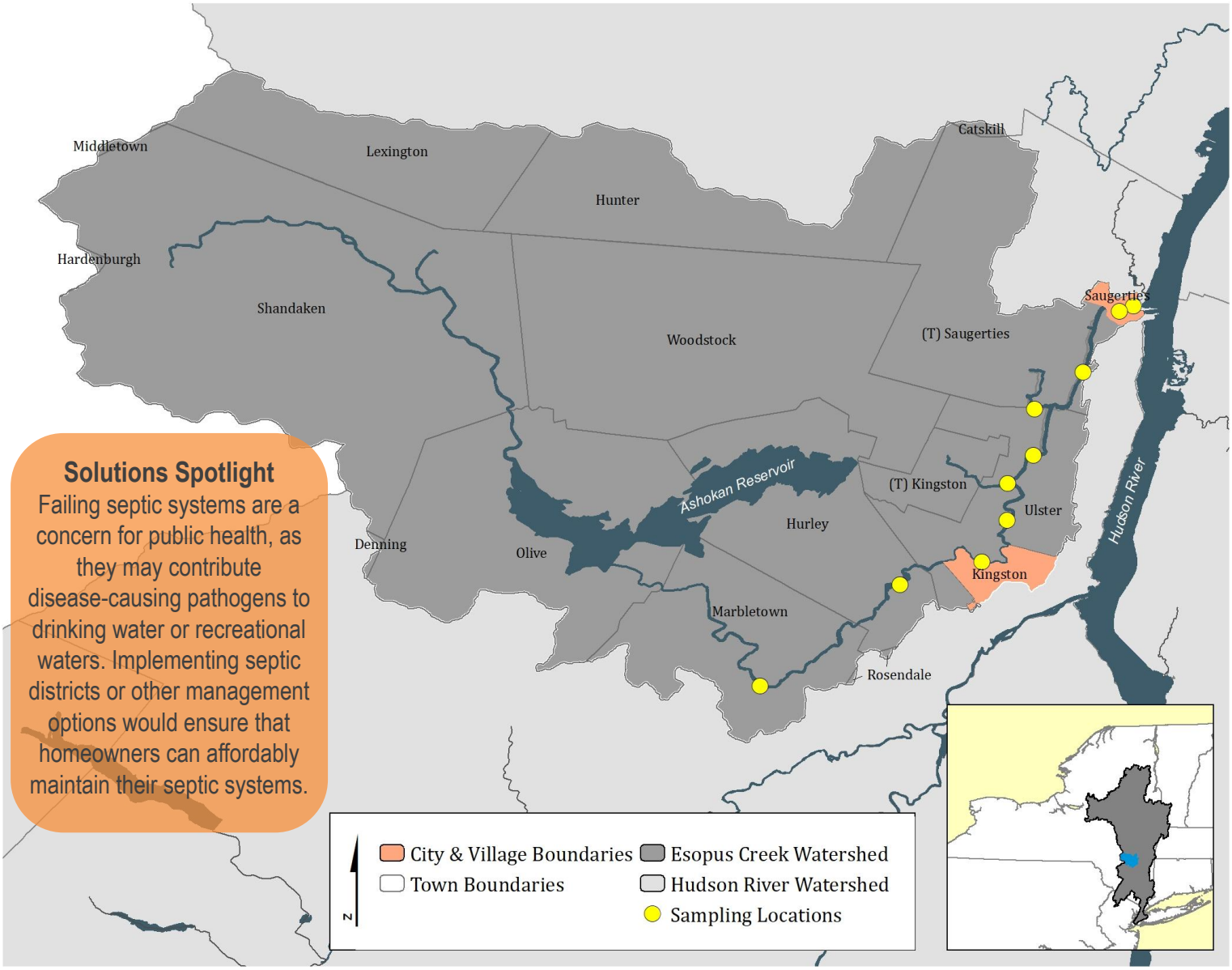
ESOPUS CREEK

Entero Water Quality Monitoring Results 2012-2022

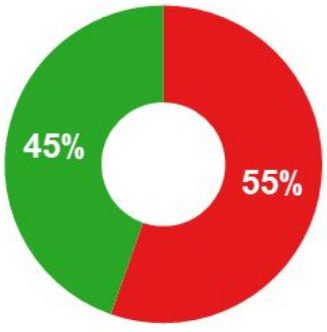


Solutions Spotlight

Failing septic systems are a concern for public health, as they may contribute disease-causing pathogens to drinking water or recreational waters. Implementing septic districts or other management options would ensure that homeowners can affordably maintain their septic systems.

What portion of our samples were safe for swimming?

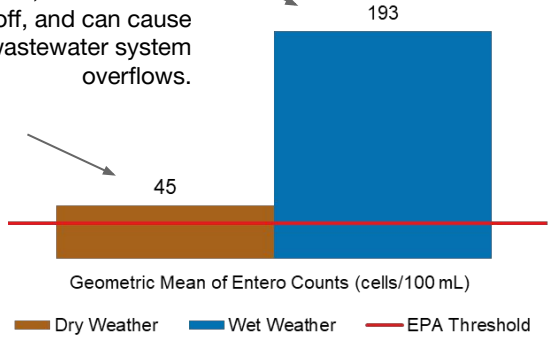
No one swims in average (geometric mean) water, so to help understand risk this graph shows the percent of samples that met the single sample EPA guidelines for safe swimming, and the percent of samples that didn't.



How does weather affect 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.



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

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NY's clean water advocate

Community Science

The water quality data presented here are based on an analysis of 549 samples collected since 2012 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.

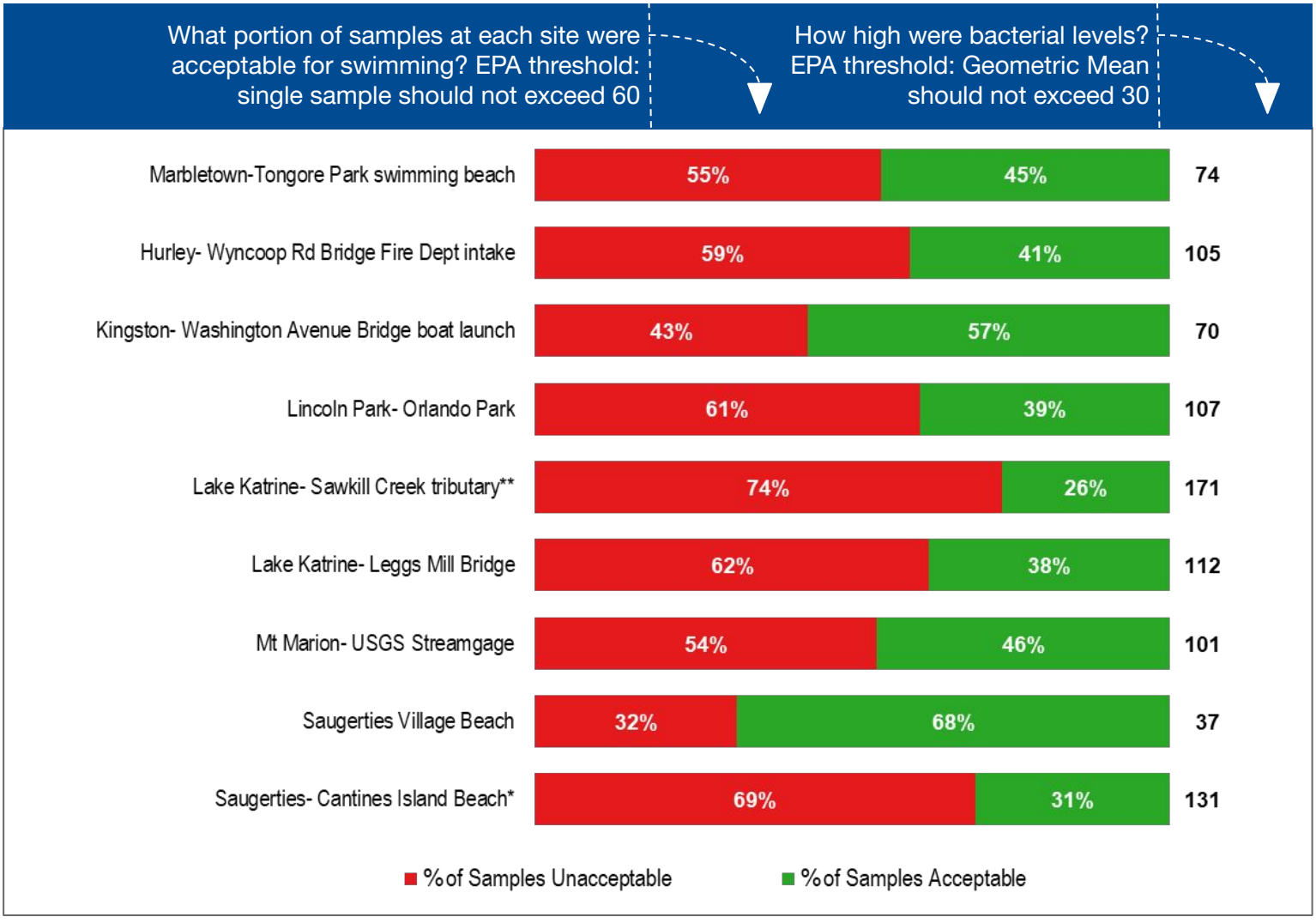
While research continues, the EPA has set thresholds to define if water is safe for swimming based on decades of science relying on measurements of these bacteria. Data are shown in Entero cells per 100 mL.

About the Esopus Creek

The lower Esopus Creek begins at the outlet of the Ashokan Reservoir, and flows through a bedrock canyon before turning to the northeast and flowing through a wide, agricultural floodplain.

Signs of Progress

The Esopus Creek Stream Management Plan (SMP) is underway and for summer of 2023 there will be field work along the Lower Esopus to inform the management plan. The SMP will outline a community driven vision for the Creek and will include an implementation plan.



Sampling began in 2012 and expanded to these sites in *2012 and **2013

Esopus Creek Water Quality 2012-2022