# ROELIFF JANSEN KILL

**Community Water Quality Monitoring Results** 

# 2016-2019



# What the Data Show



More: Explore a watershed map, data from each sampling site, year-to-year patterns and other info at <u>riverkeeper.org/water-quality/citizen-data/roeliff-jansen-kill</u>. See Entero and other water quality data from the Roe Jan at <u>waterlab.bard.edu/roe-jan</u>.

# **Community Science**

The water quality data presented here are based on an analysis of 319 samples collected since 2016 by Roe Jan Watershed Community. Samples were collected monthly (May to October) and processed by the Bard Water Lab. To get involved, visit www.roejanwatershed.org and click "Get Involved."

### 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 Roeliff Jansen Kill

The Roe Jan is named for Roeliff Jansen, a Scandinavian colonizer of the Hudson Valley. His wife Anneke Jans survived him, owning a 62-acre farm in what is now Manhattan.

#### **Signs of Progress**

The Roe Jan Watershed Community is dedicated to understanding and protecting the kill through community science and advocacy. The RJWC recently collaborated with Trout Unlimited on riparian tree planting. The watershed's rural nature and the trend toward organic agriculture help protect water quality in the Roe Jan.

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

How high were bacterial levels? EPA threshold: geometric mean should not exceed 30

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Hillsdale- Collins Street Extension
Copake- Roeliff Jansen Park stream access
Copake- Robinson Pond outlet
Copake- Noster Kill tributary at Route 7A
Ancram- Wiltsie Road Bridge fishing access
Ancram- Hall Hill Road Bridge
Gallatin- Gallatin Conservation Area*
Milan- Academy Hill Road fishing access
Clermont/Livingston- Kerley Corners Rd. Bridge*
Livingston- Below Bingham Mills Dam
Germantown- Sportsmen's Club
Livingston- RoeJan Creek Boat Club
Germantown- Lasher Memorial Park floating docks
Germantown- Cheviot Park floating docks

\*Sampling expanded to these sites in 2017.



21%	79%	22.0
25%	75%	40.6
13%	87%	16.6
30%	70%	40.7
25%	75%	31.3
26%	74%	30.5
24%	76%	27.6
13%	87%	23.7
11%	89%	14.9
%	92%	17.3
	96%	16.3
%	92%	11.4
	96%	6.6
%	92%	8.5
	<ul> <li>% of Samples Unacceptable</li> <li>% of Samples Acceptable</li> </ul>	

WATERSHED AN COMMUNITY



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