



New York Sea Grant is a joint program of Cornell University, the State University of New York, and the National Oceanic and Atmospheric Administration (NOAA).

New York State has 3,400 miles of diverse coastline and is the only state in the U.S. bordering both the Great Lakes and Atlantic Ocean. More than 85% of NY's population lives in a coastal region.



New York Sea Grant regional offices provide innovative research, technical assistance, and outreach on such issues as water quality, coastal resilience, marine & freshwater fisheries, invasive species, algal blooms, aquaculture & seafood, coastal literacy, and shoreline community development.

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NYSG Focus Areas
for this project summary:
Environmental Literacy and
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Resilient New York
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Stormwater Debris Reduction Program Piloted in Rochester Will Expand to Other Cities

NYSG applies cutting-edge technology and community engagement to create actionable solutions to protect Great Lakes' ecosystems and urban communities.

Stormwater debris clogs infrastructure, harms urban waterways, and contributes to 2.75 million pounds of plastic pollution annually in Lake Ontario. These issues disproportionately affect underserved communities and threaten the Great Lakes. Addressing this challenge requires innovative approaches to debris interception, expanded community outreach, and scalable solutions to protect local, regional, and national water resources. With \$1.2 million in NOAA funding, New York Sea Grant (NYSG) is scaling proven methods and advancing technologies to tackle marine debris, protect the Great Lakes, and engage communities in sustainable environmental solutions that deliver measurable impacts.

NYSG, the Rochester Institute of Technology and local partners collaborated to install LittaTraps in 14 storm drains. Samples of stormwater debris from the traps are collected monthly, weighed, sorted as anthropogenic or organic, and categorized by type of material. The data is extended to the community through educational efforts, such as youth recreation center programming, after school clubs, and in-school programs by a Rochester City School District Nature-Based Learning Coach (47 hours of instruction provided in 2024). Community/neighborhood cleanups collect trash (weighed and sorted) that would otherwise eventually enter storm drains. This project combines hands-on community engagement, stormwater curriculum, and cleanups, resulting in measurable debris reduction and has prevented more than 60 pounds of debris from directly entering the local stormwater system. Community cleanups collected 300 pounds (10,152 pieces of debris). The debris included cigarette butts and tobacco products, food wrappers and containers, metals among other items. More than 100 community members and 150 students were engaged by educational programs and cleanups, significantly raising awareness about stormwater pollution.

In 2025, the project will expand to Buffalo and Syracuse, and 50 additional LittaTraps will be installed in Rochester. This new effort is expected to intercept an estimated 10,000 pounds of debris and establish a foundation to provide long-term environmental benefits for these urban communities and the Great Lakes.

Project Partners/Funders:

- Rochester Institute of Technology • Monroe County Dept. of Environmental Services
- City of Rochester Departments of Recreation & Human Services and Environmental Services
- H2O Hero • Rochester City School District • Museum and Science Center
- Seneca Park Zoo • Shawn Gubern/SRG Management Firm • Syracuse University
- University at Buffalo • Funding: National Oceanic and Atmospheric Administration



Collecting debris from a Rochester LittaTrap site. NOAA funding will expand this effort to Buffalo and Syracuse. Photo: Jacob Anderson/NYSG