

COMMUNITY GRANTS PROGRAM



CASE STUDY

Project “Reduce Rain Runoff” expands green infrastructure on Long Island

Sustainable Long Island (SLI) is a nonprofit 501(c)(3) organization founded in 1998 whose mission is to advance economic development, environmental health and social equity for all Long Islanders. SLI is the nonprofit leader in brownfield redevelopment and community planning on Long Island.

SLI works with community, government and business leaders to identify priorities for sustainable development and practical strategies to build safer and stronger healthier communities through programs such as brownfield redevelopment, community revitalization, food equity and environmental justice. Environmental health, including resource use/conservation and pollution prevention, is integral to each program area and is a core component of sustainability and SLI's mission.

Challenge

According to the EPA, the total reported water infrastructure needs for the United States included \$42.3 billion for stormwater management. Locally, stormwater runoff is one of the top water quality issues across Long Island. When it rains, impervious surfaces such as roads, roof tops, parking lots, and most driveways prevent water from being absorbed into the ground, which is known as stormwater runoff. This flowing water picks up and transports pollutants like oil and grease, toxic metals, pet waste, litter, pesticides, herbicides and fertilizers. These pollutants also can flow into storm drains that empty directly into Long Island's many waterbodies.

Much of Long Island's stormwater runoff discharges untreated into local bays, lakes and beaches through a series of outfall pipes and drains. With little in the way of natural vegetation to capture and filter this stormwater on land, what enters these bodies of water is more likely to contain pollutants.

Solution

SLI's new initiative “Reduce Rain Runoff” implemented a rainwater capture and storm water management program to better conserve water within Long Beach and East Islip. The project emphasized the importance of community green infrastructure practices and made it possible to expand green infrastructure process in additional communities in the future.

SLI designed and installed rain gardens within the City of Long Beach and East Islip High School. As an additional component of the grant, SLI implemented a community challenge with the East Islip Green Academy students who worked to design and build a rain garden on the school's property. Students were challenged with creating a PowerPoint presentation that emphasizes the positive impacts and benefits of green infrastructure, such as a rain gardens, rain barrels, green roofs, etc. in residential, educational, commercial and public settings.

CHALLENGE

- Stormwater runoff impacting water quality issues across Long Island

SOLUTION

- “Reduce Rain Runoff” implemented a rainwater capture and storm water management program to better conserve water within Long Beach and East Islip
- SLI designed and installed rain gardens within the City of Long Beach and East Islip High School
- SLI implemented a community challenge with the East Islip Green Academy students that worked to design and build a rain garden on the school's property

RESULTS

- Two (2) rainwater capture systems designed and implemented in Long Beach and East Islip
- 1,300 materials (flyers & brochures distributed and 11 community events attended
- Over 10,000 East Islip community members and 2,500 East Islip members of the High School community were reached

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As an educational component of this initiative, SLI developed educational materials to raise awareness and included practical, easily implementable techniques to reduce rain runoff at home or in the workplace in order to improve resiliency, enhance water quality and protect and improve the local environment.



With the help and support of the City of Long Beach and volunteers from the community, Sustainable Long Island built the Sherman Brown Rain Garden as part of the Reduce Rain Runoff program. (Photo Credit: Sustainable Long Island)

Results

With the implementation of two (2) rainwater capture systems in Long Beach and East Islip, this project had tangible positive effects on the environment. The rainwater capture systems reduced flooding from stormwater runoff, increased the areas that allow for water recharge above a sole source aquifer and reduced carbon emissions through the planting of new rain gardens, trees and bioswales.

SLI created awareness of this program by disseminating 1,300 materials (flyers & brochures) and attending 11 community events. As a result, over 10,000 East Islip community members and 2,500 East Islip members of the High School community were reached.



Photo Credit: Sustainable Long Island



Sustainable Long Island, along with the City of Long Beach, recently held a "Reduce Rain Runoff" Community Challenge for students at the Long Beach Middle School. Students were tasked with creating a work of art that emphasizes the benefits of green infrastructure. Artwork submissions included posters, sketches, and flow charts.

Online Media

Sustainable Long Island Website
Facebook
Twitter
LinkedIn

Resources

Reduce Rain Runoff Flyer
Reduce Rain Runoff Residential Brochure
Reduce Rain Runoff Commercial Brochure

TESTIMONIAL

"Rainwater capture efforts like barrels and gardens help conserve water and promote the infiltration of rainwater, recharging ground water supply and positively impacting water quality in an environmentally sound manner," said Ann Fangmann, Executive Director of Sustainable Long Island. "The fund received from NYSP2I made it possible to develop our Reduce Rain Runoff project, and as a result of our educational outreach, this effort will aid in advancement of additional projects in our area."

– Ann Fangmann, Executive Director
Sustainable Long Island

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10 Regional Technology Development Centers

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