



2015-2016 NEWSLETTER

Nassau County Soil & Water Conservation District

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The District Today

A Message from the District:

Throughout the years, the Nassau County Soil and Water Conservation District has been working to promote conservation efforts throughout Nassau County. These past two years have been filled with many great projects and opportunities. We are proud to continue our work and are looking forward to an extremely productive year in 2017. We would like to thank everyone who helped us make 2015 and 2016 so great.

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Stormwater Pollution & Green Infrastructure Solutions

The Nassau County Soil and Water Conservation District and the New York State Department of Environmental Conservation produced an educational film: Stormwater Pollution and Green Infrastructure Solutions. This film highlights stormwater runoff impacts throughout New York State and showcases several green infrastructure solutions to help mitigate these issues. The goals of this film are to educate the public, municipal officials, planners, and developers about stormwater pollution and to

encourage the use of green infrastructure, smart growth principles and best management practices to help curb these impacts. New York State has some of the most developed areas in the U.S. As a result, surfaces constructed with impervious materials like concrete and asphalt create large amounts of “dirty” stormwater runoff during rain events. After precipitation, stormwater runoff flows over these impervious surfaces collecting and transporting pollutants such as excess nutrients,

litter, petrochemicals, and bacteria/pathogens from animal waste. Stormwater is then directly discharged into streams, lakes and bays via a Municipal Separate Storm Sewer System (MS4). The water quality of these receiving waterbodies is of major concern due to high concentrations of pollutants that are transported and deposited by stormwater runoff. This translates into real socioeconomic impacts to our region due to harmful algal blooms, fish kills, sediment erosion and beach closure due to bacterial contamination.

We would like to give a special thank you to all of our wonderful contributors

Bob DeLuca	Brian Schneider
Eileen Keenan	Joan Mathews
Dr. Robert Brinkmann	Rob Weltner
Rusty Schmidt	Lillian Ball
Shino Tanikawa	Gwen Schantz

To view the film and download an educational packet, please visit our website, www.NassauSWCD.org



Cedarmere Pond Pulls



In recent history, the surface of Cedarmere Pond has been overwhelmed with several aquatic invasive species. If left untreated, these invasive aquatic plants will grow larger, preventing sunlight from penetrating the water column, and creating a hypoxic (lacking dissolved oxygen in the water) condition. Sunlight penetration through the water is critical for native aquatic plants to flourish, because they need to absorb sunlight to live. Invasive aquatic plants can be removed or harvested by simply pulling them out by hand. The goal is to try and remove the entire plant, including the root system, by pulling, grubbing, or raking.

Rooted plants are carefully dislodged from the pond floor so that the entire plant can be collected and removed from the pond. Invasive plants and plant fragments removed from the pond are then carted off-site so that they do not wash back into the water and propagate themselves. The Nassau County SWCD, in conjunction with the Friends of Cedarmere, hosted pond clean-up days, on 9/12/2015, 6/11/2016, and 9/10/2016. With the help of many volunteers, we were able to pull and remove thousands of pounds of invasive plants. This produced a noticeable difference in the pond, and was a great success.



Mill Pond Restoration

The Nassau County SWCD, in conjunction with the Town of North Hempstead, hosted a wetland restoration event on May 13th and 14th, 2015. We planted over 3,500 *Spartina Alterniflora* and *Spartina Patens* plants along the 6,000 sq. ft. shoreline. Approximately 10 volunteers assisted us, and we were visited by North Hempstead Town Supervisor Judi Bosworth and Councilwoman Dina De Giorgio. The site is owned by the Town of North Hempstead and has been rehabilitated in the past. However, the *Phragmites* has since returned, and impaired the ecosystem's ability to function. The *Phragmites* has decreased water quality of this tidal pond by creating a large, dense, monoculture that out

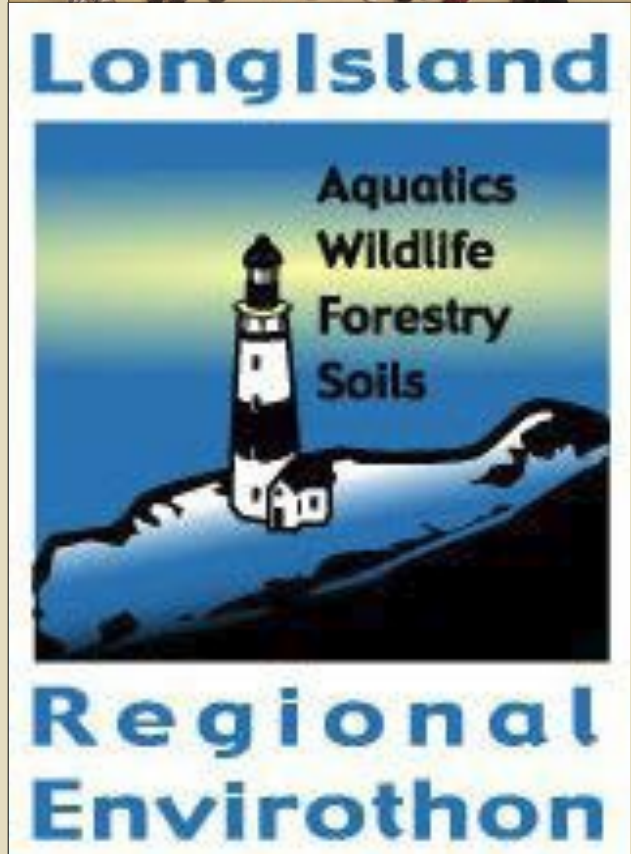


competes native plants and displaces wildlife as well as critical marine organisms. Once established, *Phragmites* spreads vigorously by an extensive root system. Because of *Phragmites'* ability to quickly regrow after cutting, the use of a systemic herbicide is necessary to ensure the removal of this invasive plant. The Town of North Hempstead is coordinating the herbicide application with a New York State certified commercial pesticide applicator. After this is applied, the Town of North Hempstead, and NCSWCD will plant additional *Spartina alterniflora* in various areas of the pond.

Long Island Regional Envirothon

On April 28th, 2015 and April 20th, 2016, the Suffolk County and Nassau County Soil and Water Conservation Districts hosted their 17th and 18th Annual Long Island Regional Envirothons at Old Bethpage Village Restoration Plaza and the USDAN Center for Performing and Creative Arts. The Envirothon is an environmental studies program for high school students from both Nassau and Suffolk Counties. All high schools are allowed to have two teams of 3-5 people. One team from Nassau County and one team from Suffolk County are chosen as winners and are presented with scholarships. The Envirothon is based on five subject areas: aquatics, forestry, soils, wildlife, and the current issue—which change annually. Each one of these subject areas are managed by a station master, who is tasked with supervising their station during the event. The current issue for 2015 was “Urban Forestry”, and 2016 was “Invasive Species: A Challenge to the Environment, Economy, and Society” The students conducted research on the topics, and were then tested in each subject area with a 25 question multiple choice test. Finally, students give an oral presentation based on a current environmental issue. The winners of the 2015 Envirothon were Chaminade High School and Lindenhurst High School. The Winners of the 2016 Envirothon were Great Neck South High School and Sachem North High School

We would like to give a special thank you to our excellent sponsors and all those that made this event possible.



Tree and Shrub Sale

We held our Third Annual Tree and Shrub Sale on April 17th and 18th, 2015. Native and non-invasive plants were sold to the public at low costs. These plants are meant to replace those lost due to storm damage, and will revitalize our parks, preserves, and residential property. These inexpensive bare-root seedlings and transplants were sold in bundles of 10, along with various seed mixes. Native shrubs are beneficial because they require less maintenance and less water to grow in their native area, they are also resistant to the climate conditions and resistant to the predators found in their native habitat. In addition, native shrubs will provide food for animals, and help prevent erosion.



trees & Shrubs

- Eastern White Pine
- Colorado Blue Spruce
- Balsam Fir
- Tulip
- Red Maple
- White Oak
- Elderberry
- Cedar White Dogwood
- White Flowering Dogwood
- Crabapple Sargent
- Native Birch
- Arrowwood

Conservation Packs

- Conifer Transplants/
Christmas Trees
- Native Flowering Plants
- Butterfly Pack
- Songbird Pack

Seed Mixes:

- Sunny
- Shady
- Bird & Butterfly

Raingardens



storm drains, which lead to our surface water (streams and bays) and groundwater (drinking water source). Compared to a same size patch of lawn, raingardens allow about 75% more water to soak into the ground! Raingardens also provide wildlife habitat and add beauty to neighborhoods! On April 22nd, 2015 (Earth Day), approximately 100 National Grid volunteers helped install a 1,200 sq. ft. raingarden at Muttontown Preserve in Syosset, NY. In addition, volunteers cleared hiking trails. This was a huge success; thank you to everyone that made this event possible.

Raingardens are designed to soak up stormwater runoff from roads, roofs, driveways, patios, and any other impermeable surface. They may look like regular flower gardens but they are so much more. When it rains, a raingarden fills with a few inches of water and allows it to slowly filter into the ground, rather than allowing it to run off into



Planting for Clean Water

In 2015, the Nassau County SWCD received a grant from the Long Island Sound Futures Fund to enact the Planting for Clean Water program. This grant funded the construction of three raingardens. These raingardens will protect the Long Island Sound from pollution carried by stormwater runoff. The location of each raingarden was carefully chosen and built where it would collect the most stormwater runoff.

We would like to give a special thank you to the Cornell Cooperative Extension's Master Gardener program, the Friends of Cedarmere, the Village of Bayville, the Village of Centre Island, the Nassau County Department of Public Works, and the Nassau County Parks Department for all of their help. With their assistance, were we able to complete these projects.

Next year the Nassau County Soil and Water Conservation District will be hosting three raingarden workshops. If you are interested in building a raingarden of your own, please fill out an interest form on our website.

Bayville Village Hall:

The first raingarden was built at Bayville Village Hall in Bayville, NY. This raingarden collects runoff from the street, instead of allowing it to enter the storm drain located further down the road. We also included a bluestone bridge, which allows viewing of the raingarden in its entirety.



A fully dug raingarden. Cedarmere Preserve.



A completed raingarden. Centre Island.



Planting the final plant. Bayville Village Hall.



The bluestone bridge. Bayville Village Hall

Cedarmere Preserve:

The second raingarden was built at Cedar-
 mere Preserve in Roslyn, NY. This raingarden
 was built in two sections, with a path divid-
 ing the two areas. Large boulders were hand-
 -placed and used as a retaining wall behind
 each raingarden, allowing for each section
 to catch the maximum amount of water. We
 also incorporated a drainage pipe around
 the parking lot which overlooks the
 raingardens; this is meant to catch the wa-
 ter flowing over the parking lot, and bring it
 into the raingarden to be filtered. Once in
 the drainage pipe, water flows down into
 the first raingarden, and once that
 raingarden is full, an overflow pipe under-
 neath the path leads water into the second
 raingarden.



The top of the raingarden. Cedarmere Preserve



Installing the drainage pipe. Cedarmere Preserve

Centre Island:

The third raingarden was built near the en-
 trance to Centre Island in Oyster Bay, NY.
 This raingarden is in a vital location, because
 it is located less than 25 feet from the
 shoreline. Water captured here would oth-
 erwise be flowing freely into Oyster Bay and
 subsequently the Long Island Sound. The
 raingarden is placed along the street, cap-
 turing stormwater runoff and filtering it.
 Each of these raingardens came with their
 own unique challenges and rewards. The
 raingardens we built will work to protect
 water quality in the Long Island Sound for
 years to come.



Installing a catch basin. Cedarmere Preserve



The finished raingarden. Centre Island

Grant Park Tree Transplant



As a part of Reforest Nassau, the Nassau County Soil and Water Conservation District, and over 50 volunteers planted trees at Grant Park on April 19th, 2015. These trees were the first of many to be planted. In the coming year, the district plans to implement many more projects like this one. “Reforest Nassau” is filling a crucial need in the region by reforesting areas impacted by storm damage. The campaign is meant to improve air quality, coastal resiliency, wildlife habitat and aesthetics of the County.

The vision of the Reforest Nassau program is to work with residents, municipalities, school districts, not-for-profit organizations, landscapers and others to raise native bare root trees at “grow-out stations” throughout Nassau County. Planting more trees in Nassau County will promote an increase in ecosystem activities, improve the air quality, and provide additional habitat for wildlife.



Erosion & Sediment Control Training

During 2015 and 2016, the district hosted six Erosion and Sediment Control Training classes. The classes are meant to teach trainees about the principles of stormwater runoff control. In total, about 500 contractors, engineers, municipal staff, and equipment operators were trained. This training is required under the NYS Department of Environmental Conservation's Stormwater Permit GP-0-15-002, which states all developers, contractors, and subcontractors must identify at least one trained individual from their company that will be responsible for implementation of the SWPPP (Stormwater Pollution Prevention Plan), and have at least one trained individual on site on a daily basis when soil disturbance activities are being performed. In addition, developers must have a qualified inspector conduct regular site inspections in accordance with GP-0-15-002. This year's trainings were held at Old Bethpage Village Restoration. The cost of the training was \$100 per person, and included lunch,



training materials, a certificate, and a certificate ID card. Participants at this year's trainings were trained by Jake Wedemeyer, C.P.E.S.C., from Ulster County Soil and Water Conservation District.

Outreach

The Nassau County Soil and Water Conservation District places a large emphasis on public outreach. Most of the time, our outreach is based at events throughout the county. This allows us to speak with residents and share information about the ground and surface water quality, raingardens, and the Long Island Regional Envirothon.



Here are just a few of the events in which the district participated in:

- Harbor Fest, Port Washington
- LI Horticulture Society, Presentation
- Long Island Fair, Old Bethpage
- Massapequa Park Street Fair
- Teacher Resource Day
- Conservation Education Day

Technical Assistance

Natural Resources Management:

- Agricultural Environmental Management (AEM)
- Stream corridor restoration
- Wetland construction and restoration
- Shoreline protection

Project Implementation:

- Grant/contract administration
- Inter-agency cooperative agreements
- Project survey & design
- BMP implementation on public/ private lands

Protecting Public Health & Safety:

- Water supply protection
- Water quality monitoring

Land Use Planning:

- Soil interpretations
- Soil surveys
- Site plan reviews
- Stormwater management
- Recreation & open space planning
- Farmland protection
- Wetlands protection
- Watershed protection plans

Public Involvement:

- Public participation/stakeholder advisory groups
- Identifying key audiences
- Communication plans
- Consensus building
- Coalition building
- Networking
- Environmental education



Board of Directors and Staff

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