

## COMMITTEES

- Beaver Dam Creek Tributary Restoration Task Force
- Cornell University's Long Island Horticultural Research & Extension Center—Advisory Council
- Earth Team Coordinator
- Long Island Agriculture Environmental Stewardship Working Group
- Long Island Ag Forum Planning Committee
- Long Island Regional Envirothon
- Long Island Weed Management Area Working Group
- Lower Hudson-Long Island Resource Conservation & Development Council
- 2007 National Envirothon Committee
- New York State Conservation District Employees Association
- New York State Envirothon
- Long Island Sound Study North Shore Embayment Watershed Planning Program
- Peconic Estuary Technical Advisory Committee
- Suffolk County Department of Health Services Peconic River Project
- Suffolk County Vector Control Long Range Planning Committee
- Suffolk County Water Quality Protection & Restoration—Review Committee
- South Shore Estuary Reserve
- Southampton College's Environmental Education Advisory Board

## AWARDS

Congratulations to Elizabeth Condon, the SWCD Senior Account Clerk. She received the NYS SWCD Employees Association 2004 Division VIII Merit Award for her outstanding job performance. All Divisions across the state have the opportunity to nominate fellow co-workers. The SWCD staff wrote letters stating why she should win. Way to go Liz!

## NORTH SHORE EMBAYMENTS

The Suffolk County Soil and Water Conservation District (SWCD) assisted the Long Island Sound Study and Suffolk County Health Department in a research project to reduce the nitrogen loading from nonpoint source pollution. SWCD efforts focused on delineation of the watersheds and sub-watersheds that contribute runoff to the following embayments of the North Shore: Huntington Harbor, Northport Harbor, Nissequogue River, Stony Brook Harbor, Port Jefferson Harbor, Mount Sinai Harbor, Wading River, Mattituck Creek and Goldsmith's Inlet.

First, the watersheds and sub-watersheds were delineated using topographic maps. Then technicians, working as a two person team, ground-truthed each watershed boundary. Modifications were made to the maps for features such as natural depressions, recharge basins and storm sewer infrastructures.

Once final boundaries were determined, the SWCD staff prioritized the sub-watersheds within their respective watersheds. This was based upon the volume of runoff generated, the level of development, the size of the sub-watershed and the acreage of each soil hydrologic group. A soil's hydrologic group (A, B, C, or D) is one of the main variables that affects how much runoff will be produced in a sub-watershed. For example, an "A" soil will produce relatively little runoff because of its high infiltration capacity, whereas a "D" soil can infiltrate little precipitation and therefore produces more runoff, with all other factors being the same. Further considerations included the potential for stormwater runoff remediation and the occurrence of direct discharges of stormwater to the waterbody.

These factors were used to rank the sub-watersheds as having a low, medium or high priority within the watershed. A high priority sub-watershed typically contributed the greatest amount of stormwater runoff to the embayment due to a high level of development, large land area, large percentage of soils with low infiltration rates, or any combination of the above. If a sub-watershed was observed as having stormwater outfalls or an obvious course for stormwater remediation it was also labeled as high priority.

In general, the embayments located in the western portion of Suffolk County contain the highest level of development and therefore have numerous high priority sub-watersheds. There remains a fair amount of undeveloped land on the eastern end of Suffolk County and consequently those sub-watersheds contain fewer high priority rankings.

This invaluable work conducted by the SWCD will be compiled as part of a Watershed Management Plan for the Suffolk County portion of the Long Island Sound. The high priority sub-watersheds will be considered for remediation projects with the long-term goal of reducing the input of nitrogen into the North Shore embayments and ultimately the Long Island Sound.

"While it is logical to consider the most developed sub-watersheds as high priority because they generate the most runoff, every effort must be taken to preserve the less developed or lower priority sub-watersheds. If new development does occur, impervious surfaces should be limited and an emphasis placed on low impact development. This will mitigate the effects of stormwater runoff on our waterbodies," said Nicole Spinelli, SWCD District Technician.

## STORMIN' STORMWATER

The answer is "yes", SWCD is in the midst of the Phase II Stormwater Regulations introduced by the NYS DEC in 2003. Dave Gaspar, Stormwater Specialist, was welcomed to our staff in August. He comes directly from the Nassau County Soil & Water Conservation District and brings a wealth of knowledge with him. He graduated from Binghamton University in 2001 with a degree in Environmental Planning. His responsibilities for Suffolk County include all construction permitting site inspections. With an extensive area to cover, his time is well occupied. "I'm finding the public very cooperative and well educated on the stormwater regulations. Our goal is simply water quality," said Dave recently. His office is located in the NYS DEC, Region I, office in Stony Brook.



Contributing nonpoint source pollution to the North Shore Embayments through culverts similar to this one.



Contributing nonpoint source pollution to the North Shore Embayments through culverts.



# Suffolk County Soil & Water Conservation District



## Board of Directors

George Proios  
Chairperson  
Member at Large

Brian X. Foley  
Director  
County Legislator

Lloyd Corwin  
Director  
Farmer

Joe Gergela  
Director  
L.I. Farm Bureau

Andrew A. Crecca  
Director  
County Legislator

Legislator Andrew A. Crecca's tenure on the SWCD Board was short-lived. He was sworn in as Suffolk County Court Judge in December 2004.

## District Staff

Thomas McMahon  
District Manager

Elizabeth Condon  
Sr. Account Clerk Typist

Paul TeNyenhuis  
Sr. District Technician

Sharon Frost  
District Technician

Nicole Spinelli  
District Technician

Polly Weigand  
District Technician

Dave Gaspar  
Stormwater Control Specialist

USDA-NRCS  
Allan Connell  
District Conservationist

Brian Zimmerman  
Soil Conservationist Technician

# YEAR 2 IN REVIEW

## SWCD WELCOMES FSA & RD

In February 2004, two United States Department of Agriculture (USDA) agencies joined our office space, the Farm Service Agency (FSA) and Rural Development (RD). This savvy move consolidates services to farmers into one building making it convenient for the agricultural community. "We welcome the Farm Service Agency and Rural Development to their new home and our family. We look forward to a long prosperous relationship," said District Manager Tom McMahon.

The Farm Service Agency, a division of the U.S. Department of Agriculture, assists farmers in stabilizing farm income, conserving land and water resources, provides credit to new or disadvantaged farmers, and helps farm operations recover from the effects of disaster. Susan Pierzchanowski, Executive Director, heads up the agency. She is a longtime resident of Riverhead and has been working for Farm Service for 23 years. FSA Program Technician, Linda Haack, a Brookhaven resident, has worked for the agency for 10 years. They both are an asset to our office and the agricultural community.

Rural Development, also a USDA agency, helps improve the economy and quality of life in rural America through the various programs they administer. By empowering rural individuals, communities and businesses with the financial and technical assistance needed, they are able to overcome their diverse and unique situations. Janet Daniels, Manager, lives in Jamesport and has been working for Rural Development for 27 years. Linda Urig, RD Technician, has been with the agency for 25 years and Louise Allen, RD Assistant, 24 years. They have dedicated their careers to this important agency thereby improving our community.

"This is a positive step for the agricultural community in our area. Until now, the various farm agencies were in three different locations throughout Riverhead. Now, all the resources are located in one building, making it easier for the farmers to receive the services that are available," said Joe Gergela, Executive Director of the Long Island Farm Bureau and SWCD Board member.

This consolidation is a credit to George Proios, Chairman of the County Soil & Water District Board who, in 2000, convinced former County Executive Gaffney & Legislator Caracciolo that co-location to the proposed Cooperative Extension Building would be a major benefit to the agricultural community. The services provided by SWCD, Cornell Cooperative Extension, and the three USDA agencies NRCS, FSA and RD range from cost share programs, horticultural information, technical assistance, and educational programs, just to name a few.

"As we move into an era of heightened awareness of our natural resources, co-locating these agencies, with common objectives under one roof, will prove beneficial to the county through interagency efforts, the formation of partnerships and expanded staff knowledge. Each agency will have the opportunity to work to its full potential and ultimately benefit the county both environmentally and economically," said George Proios.



Sue Pierzchanowski  
FSA Executive Director



Linda Haack  
FSA Program Technician



Jan Daniels  
RD Manager



Linda Urig  
RD Technician



Louise Allen  
RD Assistant



Long Island Envirothon New York State winner examine an animal skull at the national competition.

### LONG ISLAND ENVIROTHON TEAM WINS THE STATES...

The Long Island Envirothon, coordinated by the Suffolk County SWCD, is the local component of a national environmental studies competition for high school students. On April 28, 2004 SWCD hosted the 6th annual Long Island Envirothon at St. John's University in Oakdale. The two top-scoring teams were sent to represent Long Island at the NYS Envirothon held in May at Morrisville College.

Farmingdale High School was the top-scoring team and the first from a down state school to claim victory. "This group of students are young, dedicated environmentalists. It was no surprise to me that they performed so well on the exams," said Tom McMahon, District Manager and Chairman of the Long Island Envirothon Committee.

In July, the students enjoyed traveling to West Virginia to compete in the Canon National Envirothon. "Experiencing West Virginia with the Farmingdale team was very gratifying. The students are inspiring naturalists and have the motivation to take on the world. I was fortunate to have the opportunity to accompany them to the competition," said Sharon Frost, Long Island Envirothon coordinator. Students from all over the U.S. and nine Canadian Provinces competed, making it the largest environmental studies competition in the world.

The 2005 Long Island Envirothon will be held on April 20, 2005 at St. John's University in Oakdale.

More information about the Long Island Envirothon is available on our website at [www.co.suffolk.ny.us/swcd/envirothon.html](http://www.co.suffolk.ny.us/swcd/envirothon.html)

### \$609,000+ FEDERAL GRANT MONEY

Twenty-four farms have been awarded over 609,000 dollars in federal grant money, thanks to the cohesive working relationship between the Suffolk County Soil & Water Conservation District (SWCD) and United States Department of Agriculture – Natural Resources Conservation Service (NRCS). The grant money has been awarded through two federally funded cost share programs, Environmental Quality Incentives Program (EQIP) and Agricultural Management Assistance (AMA). The funding will be used to implement Best Management Practices (BMPs) on more than 2,200 acres of farmland within Suffolk County.

The purpose of both programs is to promote agricultural production and good land stewardship as compatible goals for farmers. The specifications of the grant are consistent with the national priorities that include reduction of soil erosion, the protection of wildlife habitat, and the improvement of water and air quality.

The program begins with the SWCD and NRCS staff gathering information from farmers using the Agricultural Environmental Management (AEM) process. AEM employs a series of questionnaires created by conservationists in New York State. With this information the staff develops a conservation plan suited for the individual farm. These plans are instrumental in determining the BMPs that will best serve everyone.

"This is a tremendous accomplishment on the part of Suffolk SWCD and the NRCS staff. It shows their knowledge of the programs and dedication to the environmental issues we face in Suffolk County. It also gives me great pride in Long Island farmers who have taken the initiative to apply good stewardship practices on their farms," said Joe Gergela, District Board Member and Director of the Long Island Farm Bureau.

The grants have been awarded to farms in the following townships:

- In Brookhaven, a 7.8-acre horse farm will be receiving over \$8,482 dollars. One of the practices to be implemented is *prescribed grazing*. This is designed to reduce soil erosion through a system of grazing rotation. It will also aid in prevention of nutrients and pathogens from entering the South Shore Estuary.
- In Riverhead, thirteen farms, totaling 1,262 acres within the Peconic Bay Estuary and Long Island Sound watershed, will receive over \$303,000 dollars in federal funds. Several farmers have elected to install new *agricultural fuel storage facilities*. These facilities will protect our groundwater by replacing old fuel tanks with new double-walled tanks. In some cases, the NRCS Standards and Specifications were higher than our own Suffolk County Sanitary Code. These farmers were exempt from adhering to Suffolk County Health Code Article 12 but because they are using federal dollars, the installation of the tanks must follow the strict NRCS guidelines. Other BMPs chosen for implementation will help improve air and water quality and reduce soil erosion.
- In Southold, eight farms, totaling 411 acres, will receive over \$274,000 dollars for implementing BMPs. One farmer is converting over 120 acres into an organic operation. This is not an easy task for the farmer. First, she must improve the soil condition. The federal grant will help this farmer defray the cost of planting higher quality *cover crop*. This will reduce soil erosion and at the same time increase the organic matter and natural nutrients to the soil. All eight farms are located within the Peconic Bay Estuary watershed; the implementation of the BMPs that the farmers have chosen will help protect the health of this estuary.
- In East Hampton, one farm will receive a total of \$7,053 dollars. This farm is an organically-managed and community-supported agriculture operation. An assortment of BMPs will be applied to a total of 23 acres that will help protect the groundwater in East Hampton.

"It would be impossible for the NRCS staff to administrator this level of grant activity without the help of the SWCD staff. We are fortunate to have the opportunity to work together to see these BMPs implemented in Suffolk County," said Allan Connell, NRCS - District Conservationist.



A new fuel storage facility ready to be installed. This double-walled tank will provide extra protection against groundwater contamination



Aerial view of the high technology Animal Waste Treatment System under construction at Crescent Duck Farm.

### CLEAN WATER FOR THE PECONIC

In 2003, with help of Suffolk County SWCD, Crescent Duck Farm in Aquebogue was granted \$200,000 from the New York State Soil and Water Conservation Committee for installation of an Animal Waste Treatment System. The completion date for this two year project is scheduled for this summer. The state-of-the-art system will replace the existing aerobic lagoon and was designed to remove 99% of the nitrogen from the farm's effluent water. This system will significantly improve the quality of water in Flanders Bay.

At one time the Peconic Bay was known for having the most productive bay scallop beds in New York State. However, due to pathogens and other pollutants, shellfishing has experienced year-round closures. The installation of this Animal Waste Treatment System may lead to the reopening of shellfishing sometime in the future.

The existing system takes the wastewater from the duck houses and processing plant, starting with a concentration of 1000 ppm of nitrogen, and sends it through an aerobic lagoon. The lagoon is continually aerated, keeping the oxygen levels high thereby resulting in quicker decomposition. After the effluent water, now reduced to 35 ppm of nitrogen, is released into sand beds and allowed to seep into the ground, it eventually makes its way to the groundwater and/or the bay.

The new system sends the wastewater through two lagoons, aerobic and anaerobic, resulting in further decomposition. The effluent water is expected to be reduced to 10 ppm of nitrogen, or less. In addition, the anaerobic lagoon is designed to capture the methane gases released and use them for heating the anaerobic lagoon, keeping it at optimum temperatures.

Crescent Duck Farm, a family-owned business since 1920, is one of the largest on Long Island. Today they produce over one million ducks per year. Lloyd Corwin, the owner of Crescent Duck Farm, is dedicated to this project, spending over \$2,500,000 on engineering fees and equipment. "This system will reduce the nitrogen from an input of 1000 ppm to an output of 10 ppm, the level required by the Environmental Protection Agency (EPA) for drinking water", he said. "We are fortunate to have the Suffolk County SWCD work with us on this project, their experience with technical details and knowledge in grant administration has been invaluable." The final cost of the treatment system is said to be approximately \$3,000,000 dollars.

"The long-term benefits of executing this project will be realized both environmentally and economically for future generations," said George Proios Chairman of the District Board of Directors. "The District staff should receive recognition for their efforts in supervising a project of this magnitude."

"This farmer has demonstrated an incredible awareness and commitment to the surrounding natural resources. The implementation of this conservation practice will improve water quality and reduce the level of impairment in the Peconic Estuary," said Thomas J. McMahon, SWCD - District Manager.

### SWCD provides services...

#### Agriculture

- Engineering Practices
- Irrigation Design
- Ag. Value Assessment
- Agronomic Practices
- Erosion Control
- Conservation Planning
- Pest Management Techniques
- Cost-share Programs
- Transition Farming Assistance
- Technical Assistance



Nonpoint source pollution discharging to a north shore embayment like this is a way of the past.

- Installation Supervision
- Drainage Systems
- Agricultural Waste Systems

#### Landowners

- Bluff Erosion Recommendations
- Conservation Information
- Educational Materials
- Wildlife Watering Facilities
- Pond Assistance
- Soil Erosion & Drainage
- Soils Information
- Wetland Restoration Program
- Wildlife Management

#### Education

- Conservation Materials
- Programs Guides

#### Municipalities

- Nonpoint Source Pollution Remediation
- Site Plan & Subdivision Reviews



Nonpoint Source Pollution discovered by a District Technician in Suffolk County.