



A publication of Wayne County Soil & Water



Annual Report 2012

Water Quality Protection In Sodus Creek Watershed, Rose, NY



In late 2011, the District began working on the approved NYS Agricultural Non-Point Source Abatement and Control grant for Sodus Creek Watershed. Sodus Creek Watershed is the largest tributary to the Great Sodus Bay and contributes a significant amount of sediment and phosphorus pollution. This grant program cost shares farms/landowners through NYS Environmental Protection Fund and helps to reduce the impact through implementation and education of new and/ improved farming practices and management opportunities. The Sodus Creek Watershed began in 2004 with phase one in partnership with USDA NRCS and continues now in 2011 with partnership with five (5) farm businesses for control of potential non-point source pollution.

Our Agricultural implementation program is overseen by Terry Reynolds

Mouton Farms Participates in Protection of Sodus Creek

Scott and Amanda operate a family dairy farm and farm directly within the critical areas of drainage for Sodus Creek. The Moutons have implemented BMPs through Phase 1 of our watershed program to improve their manure storage facility, along with implementing various individual practices through conservation tillage and field rotation.

This 100 cow dairy will have improvements for its barnyard area, feed management water controls and diversion system for water filtration in one of the main farm adjoining fields to improve water runoff and filtration of daily operations.

The project was installed in the late months of 2011 and completed January of 2012. Reynolds designed the project with farm management in consideration. He stated, "The area near the bunk silo previously was unstable with no hard surface to provide a cleanable surface for spilled silage. This allowed dirty water to mix with clean water and mud. The project was designed to take care of the problem consisted of installing millings and grading and shaping to redirect surface water. Implementation of this project stabilized the soil and prevents water contamination and runoff into the flow path of Sodus Creek.

Implementation of all three of these projects limits nutrients, manure, silt/ sediment, and pathogens from Sodus Creek.



Before: Implementation



After: Implementation

Ag NPS Abatement & Control Grant Program

This grant program was established in 1994 by the State of New York to assist farmers in preventing water pollution from agricultural activities by providing technical assistance and financial incentives. County Soil & Water Conservation Districts apply for the competitive grants on behalf of farmers and coordinate funded activities. Grants can cost-share up to 75% of project costs or more if farm owners or operators contribute, in the following two areas:

1. Planning; funds awarded to conduct environmental planning
2. Implementation; funds awarded to construct or apply management practices

The New York State Soil & Water Conservation Committee and the Department of Agriculture & Markets coordinate the statewide program and allocate funds provided by the NYS Environmental Protection Fund on a semi-annual basis. Since the program began in 1994 more than \$50 million has been awarded to 53 Soil & Water Conservation Districts across the state to help farmers reduce and prevent agricultural sources of Nonpoint Source (NPS) Pollution.

Wayne County Soil and Water Conservation District began agricultural planning strategically in 2009 and has over 40 farm plans in the works. Prior to planning at the District, the Natural Resource Conservation Service did farm planning and the District assessed in implementation of Best Management Practices (BMPs) through grant programs in the Sodus Bay Watershed, in 2005.

Because of these efforts, the District has been able to secure five (5) grants through this program to assist over 25 farms with cost share for environmental impacts through BMP installation.

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 Chris Hotto, Drainage Specialist, District Technician
 Scott DeRue, Water Quality Specialist, District Technician
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Lindsey M. Gerstenslager

Challenging the Conservation Conditions for 2012

Lindsey M. Gerstenslager, District Manager

The 2012 year has been busy with conservation as usual. The only difference this year is we had to make modifications to when we were able to complete implementation due the unusual weather. The Soil & Water Conservation District was chartered back in 1944 in Wayne County by the State of New York. The mission and purpose of our existence is to help to reduce human and natural impacts on Wayne County's natural resources through implementation and education of conservation practices.

Overall, the three core programs (Agricultural Drainage, Agricultural Environmental Management and Aquatic Vegetative Control) were all successful with goals that had been set for productivity at the beginning of the year. Please understand our internal goals are set with us knowing some of the limitations of the program before the beginning of the season. (i.e. mechanical breakdowns of equipment, limited personnel, weather considerations, program changes of direction and funding sources.)

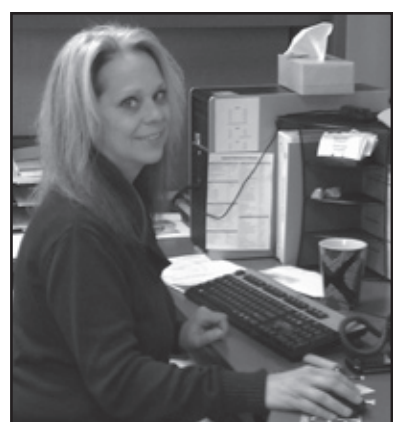
AGRICULTURAL DRAINAGE - The Agricultural Drainage program is run by Chris Hotto of Sodus, NY and utilized local businesses for construction and implementation. Contractors are actively bid in the early winter in 2012 for a hope of an active drainage system. This year's program was able to install two large projects this year; one in the Town of Sodus on North Centenary Road and one in the Town of Galen located on Tyre Road. In addition, to the new projects over eight (8) miles of agricultural drainage projects were maintained and 16 miles assessed affecting 7 watersheds and over 200 residents. In addition, maintenance on 4 drainage culverts were completed along with management of five (5) wildlife (beaver) situations were remediated during trapping season or under a DEC approve permit.



AGRICULTURAL ENVIRONMENTAL MANAGEMENT - New York State's Agricultural Environmental Management (AEM) program is run by Ron Thorn of Clyde, NY and works with farmers, who voluntarily participate in farm planning for water quality and soil health protection. In conjunction with USDA's Natural Resource Conservation Service and Farm Service Agency, with a annual program start date beginning in May, to date over 750 hours have been spent working directly with over 28 farms to help to reduce impacts from livestock, nutrient management, pasture management/prescribed grazing management, field crop erosion control, soil health and water quality.

The second part of AEM is implementation of the plan. In addition to the USDA programs farmers can apply for assistance with through NRCS and FSA, NYS offers a program almost annually to allow farmers to apply for funding through grants. These grants are better known as the NYS Agricultural Nonpoint Source Abatement and Control program. For more information: <http://www.nys-soilandwater.org/aem/aemfunding.html>

In recent years because of active planning and farmer participation, the District has been successful in achieving four of these grants bringing a cost share of NYS assistance totaling \$1.5 million dollars for farms in 5 watersheds in Wayne County. These cost share funds provide match for the construction dollars, design and inspection, permitting, education, follow up and connections to other local programming efforts. This program is overseen by Terry Reynolds of Fairmount, NY. Terry comes to us with over 30 years of experience from Onondaga County Soil & Water and has been working with our District for over 2 years now. This year the implementation program has installed over 15 systems working with the farmers and our partners in USDA. The grants focus on water quality protection and all of the participants are located within 500 feet from a water course that has been prioritized through an Ag Advisory Committee and Local Working Group. Before and after the installations, the District completes stream monitoring to see the relative impacts that are made from the changes of implementation. Since construction first began in 2011, we will have data at the end of 2013 that will be able to show some of the impacts.



From the Desk of Cathy Comfort:

2012 provided many opportunities to sharpen our abilities to track finances through professional use and development of QuickBooks. Efficient tracking, monitoring, auditing and a system of executive checks and balances will leave us with a better picture of our abilities to operative for the 2013 season.

In the spring of 2013, thank you to the Conservation Employees Association's Frank Bratt Scholarship, Cathy will be training to be a QuickBooks Pro and will take the knowledge she learns to assist our District but others around the state as requested.

AQUATIC VEGETATIVE CONTROL - The Aquatic Vegetative Management program provides services of removal of nutrients from five embayments in Wayne County; Maxwell Bay, Sodus Bay, East Bay, Port Bay and Blind Sodus Bay. This program is overseen by a team of people because of the scope of the work to be done. Scott DeRue of Palmyra, NY is our Water Resource Specialist and focuses on water quality analysis and assessment, vegetation surveys, individual watershed planning and oversees our Water Quality Coordinating Committee. Mike Walker of Sodus, NY is our Crew Leader and has been with the District seasonally for ten years. He handles daily operations from May to Sept/Oct with the equipment and the crew.



This year we were unfortunate to be able to only run two aquatic weed harvesters for services across all four townships. While this did reduce the ability for removal the total amount of hours worked: 1380 in relation to the tons of nutrients removed: 1214 was comparable for the last three years. In 2013, we will be back to harvesting with three harvesters and anticipate to begin the middle of June. This is to be determined based on weed grow and maturity stands.



Aquatic Harvesting Efficiency

	2010	2011	2012
Total Hours of Equipment Operation	1810 hours	1818 hours	1380 hours
Total Tons Removed	1710 tons	1430 tons	1214 tons

One of the District's biggest challenges is getting information out to the public due to limited staff and time resources but in 2012 thanks to our many great partners we have been able to carry out many messages, information and educational updates from the regulatory sources, NYS and our land grant institutions. A special thank you goes out to County Planning – Ag Development Board, WC Farm Bureau, Cornell Cooperative Extension, Water & Sewer Authority, County Highway/Garage, County Printing, USDA NRCS & FSA, Wayne County Departments, Towns & Villages, SOS Inc. and the many other community groups that have helped the District be so successful with reaching out to the community in 2012.

Please visit us on the Web!
www.waynecountynysoilandwater.org



Ron Thorn,
Ag Planner



Agricultural
Environmental
Management

AEM has five levels or "Tiers" of planning and assessment

Tier 1 – Farm Inventory or Summary

Basic farm data is recorded: owner and/or operator's names, location of the farm, products, livestock numbers, and acres farmed. General questions about practices such as crop rotation, manure management, and pesticide use are asked.

Tier 2 – Farm Assessment

These worksheets ask about characteristics and operational procedures on the farm. A potential level of risk is assigned based on that information. Existing stewardship and conservation practices are recorded. SWCD staff process the information from Tier 2, creating a summary which will include basic recommendations for the farmer to consider if planning continues to Tier 3.

Tier 3 – Development of a Conservation Plan

The farmer may choose to address one or more concerns identified in Tier 2. Projects undertaken range from simple cropland erosion control plans (Tier 3A) barnyard water management plans and Agricultural Mixing Facilities. Tier 3B includes a Comprehensive Nutrient Management Plan (CNMP) that addresses agricultural runoff, agricultural waste and nutrient management issues. Tier 3B plans are required by federal and state law for large livestock operations designated as Confined Animal Feeding Operations (CAFOs). Tier 3 plans are used to prepare cost estimates and to apply for cost-share funding from state and federal sources.

Tier 4 – Implementation of Best Management Practices (BMPs)

When both grant and personal funding sources are committed, implementation of BMPs can take place. SWCD and NRCS staff assist in preparation of designs and construction plans and will work with contractors to ensure proper installation.

Tier 5 – Follow Up and Evaluation

After conservation practices or management recommendations have been implemented, evaluation takes place to assess the effectiveness of the practices. Tier 5 is similar to the Tier 2 process. A revised farm assessment is prepared to again evaluate potential risk levels for farm operations. For example, if a leachate collection system was installed for a bunker silo, the potential should be considerably reduced. **Tier 5A** is used for non-CAFO farms; **Tier 5B** is required for CAFOs.

Common Concerns:

These practices help reduce the chance of pollution:

Manure and Nutrient Management - Balancing rates and timing of manure and fertilizer applications with the nutrient needs of crops prevents leaching or runoff of excess nutrients to groundwater or surface water bodies.

Barnyard and Farmstead Runoff Prevention - Farmsteads are areas of concentrated activities with collections of feedstocks, manure, silage leachate, milkhouse waste and agricultural fuels and chemicals. There is high risk of runoff from these areas.

Pesticide Storage and Application - Farmers who do not hire custom applicators and who store and apply pesticides must follow safety restrictions for proper storage, mixing and application.

Petroleum Storage - Farms with 1100 or more gallons of total petroleum storage capacity must be registered with DEC. Provisions must be in place to prevent spills and leakage.

Water Supply - Farmers need to prevent contamination risks to their own well and those of their neighbors. Close proximity and condition of the wells may increase risk of contamination.

Pasture Management - Proper grazing management insures maximum utilization of forage, as well as reducing damage to pastures by overgrazing. Alternative water sources for livestock keep animals out of streams.

Stream and Floodplain Management - Riparian buffer areas filter runoff and provide other benefits such as channel and stream bank stability, wildlife habitat, enhanced water quality and aquatic habitat.

Agricultural Environmental Management (AEM) has been adopted by New York State as a process to assist farmers in evaluating potential environmental risks on their land and to provide assistance in implementing practical, cost effective means to address those risks. Participation in the program is voluntary, and the Wayne County Soil and Water Conservation District, USDA Natural Resources Conservation staff and private sector crop advisors are ready to partner with individual farmers in assessing concerns and identifying realistic solutions.

Agriculture Value Assessments

In 2012, the staff completed 161 soil group worksheets within Wayne County as a part of the Agriculture Value Assessment Program. Agriculture Value Assessments help tax assessors to determine the amount of land available for land owners to be allowed the Agriculture Tax Exemptions. In an effort to increase AEM awareness and participation the price for Soil Group Worksheets have been adjusted to \$25 but if the farmer fills out a Tier 1 (one time) worksheet the cost will be \$15 and if a Tier 2 visit and assessment is completed a full one time refund is in order.

Program Update: Ag Non-Point Source Abatement & Control Grant Program

One proposal for Round 18 for four farms in the Lower Ganargua Creek Watershed was submitted but unfortunately it was not funded. For Round 19 two proposals with four farms each from the Lower Ganargua Creek Watershed separated as North and South was submitted included the four farms from Round 18 plus an additional four farms.

For up and coming grant opportunities different strategies have been discussed including the Salmon Creek West/Pultneyville Harbor and Port Bay Watersheds as well as continued/expanded involvement of previously funded areas. If you own a farm in these watersheds and interested in implementing an Agricultural Nonpoint source project in conjunction with AEM please contact Ron Thorn at 315.946.4136 or rdtswcd@rochester.rr.com.

What is Nonpoint Source (NPS) Pollution?

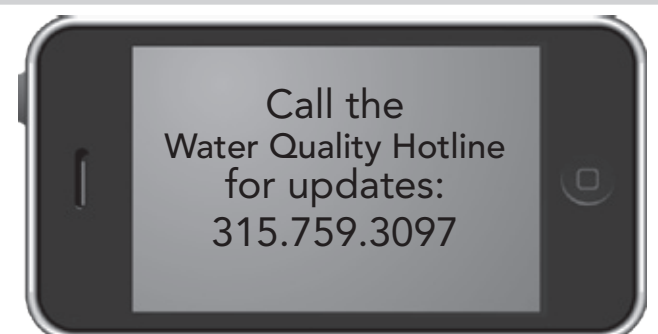
The primary cause of New York's remaining water quality challenges can be attributed to NPS pollutants. According to the Federal Environmental Protection Agency:

NPS pollution is caused by rainfall or snowmelt moving over and through the ground. As the runoff moves, it picks up and carries away natural and human-made pollutants, finally depositing them into lakes, rivers, wetlands, coastal waters, and even our underground sources of drinking water. These pollutants include:

- Excess fertilizers, herbicides, and insecticides from agricultural lands and residential areas;
- Oil, grease, and toxic chemicals from urban runoff and energy production;
- Sediment from improperly managed construction sites, crop and forest lands, and eroding streambanks;
- Salt from irrigation practices and acid drainage from abandoned mines;
- Bacteria and nutrients from livestock, pet wastes, and faulty septic systems;
- (taken from EPA's Polluted brochure EPA-841-F-94-005, 1994)

Information from <http://www.nys-soilandwater.org/aem/nonpoint.html>

Wondering where the weed harvesting crew is located during the summer months?



Call the
Water Quality Hotline
for updates:
315.759.3097



Scott DeRue,
District Technician

Aquatic Vegetation Control Program

Introduction

Mechanical harvesting has proven to be a short-term, effective and environmentally safe means by which to control excessive aquatic plant growth and is one of the few options to completely remove nutrients from a waterbody. The Wayne County Soil & Water Conservation District has administered an Aquatic Vegetation Control program in Wayne County's Lake Ontario embayments since 1988.



Preparation for each season begins in May while harvesting operations are performed, on average, from early June to mid-September and continues through a planned period of maintenance into November. The AVC program employs four to five crew members for four, 10-hour work days a week. Annual startup and end dates are dependent on seasonal growth variations reliant on numerous factors and access for the equipment to the waterbody. Final determination of when and where the harvesting operation will begin is made based on observations by District staff and described in the Aquatic Plant Mechanical Harvesting Policy (see next page) A team of the District technical staff has day to day responsibility for the coordination and implementation of the program and seasonal laborers are hired to operate the harvesters and associated equipment.

The pattern of operation for harvesting aquatic plants varies per situations, conditions, and location. The most common pattern is to harvest from docks-end outward to a point in which the 'weeds' become less dense and mechanical harvesting efficiency lessens. The annual goal of the program is to capture and remove 1000 tons of nuisance aquatic plant material over the length of the season. The mechanical harvesting component is evaluated by comparing time spent on respective activities to the amount or tonnage removed and assistance provided to the public. The District will continue to share results and lessons learned with adjacent County efforts, and adapt management policy and practices where recommended.

Results and Discussion

Harvesting operations were carried out for 71 days between June and September 2012. The final removal amounts for each bay are as follows; Sodus Bay – 990 tons, East Bay – 54 tons, Port Bay – 170 tons. Total amount removed from the three (3) embayments was 1214 tons. The general rule has been that one (1) harvester load is equal to two (2) tons of wet plant material.

Table 1. illustrates the time distribution of daily activities in the harvesting operation for the entire 2012 season. The results represent 10 hours of operation per machine, meaning three machines equal 30 hours of operation per day.

Distribution of Daily Activities

2012 Activity	Hours	Percentage
Maintenance Down Time	13	1%
Transport Down Time	21	2%
Operation	1346	98%
Total	1380	

Variations in the amount removed and time spent between the 3 bays are due to the physical characteristics of each. Sodus Bay being the largest (3,150 acres and 20 miles of shoreline) will annually have the potential to grow more 'weeds.' Another important characteristic is the size of each bay's Littoral Zone; the portion of the water body where adequate sunlight penetrates to promote photosynthetic activity in plants and is usually defined by a certain depth. In Wayne County's bays, the littoral depth is approximately 10-12 feet. The area of littoral zone of each bay is as follows: Sodus Bay – 1,575 acres (50%); Port Bay – 132 acres of 475 total acres (28%); and East Bay – 174 acres of 189 total acres (92%). With nutrients entering the bays from multiple sources and with adequate sunlight penetration to extended depths, aquatic plants have to ability to form expansive 'weed beds' within each bay.

Comparing 2011 and 2012, total operating time decreased from 2065 hours in 2011 to 1346 hours in 2012. This is due to the program only operating 2 harvesters this season, due to mechanical issues, instead of the usually 3. The average total operating time per harvester can be determined by dividing the total operating time by the number of harvesters in operation. When comparing 2011 and 2012, there is a similar resulting hours per harvester; 688 hours/harvester for 2011 and 673 hours/harvester for 2012. In 2011, the operating season lasted 75 days while proceeding to October 11th. As stated above, the 2012 operating season was 71 days while only going to September 13th. The operating season for 2011 represented an extension of the season while 2012 represented an addition of overtime hours on Fridays through July and August. There were plans to continue the 2012 season further into the fall months but below average water levels restricted the use of a number of the programs access sites and the safe operation of the equipment.

Transportation time represents the time it takes to remove a harvester from one bay in order to launch into another. Transportation time for 2012 was significantly less than that of 2011 due to one harvester being inoperable for the season and access site restrictions associated with low water levels. The harvesters were unable to operate within Blind Sodus Bay and Maxwell Bay due to the angle of the launching area in relation to the water depth. The trailer the harvesters are transported and launched from would not work in these areas.



Maintenance related down time was drastically decreased from 2011 to 2012. This was primarily due to the fact that mechanical issues related to the #2 harvester were recorded at the conclusion of last season (2011), but were not recorded for 2012, as #2 was not available for the entirety of the season. The #2 harvest had its diesel engine replaced with a new one, complete hydraulic valve change, and was repainted during the summer of 2012. Maintenance issues were mostly related to the moving parts systems of the harvesters' cutting mechanics and the conveyance system. Structurally, #1 may have a small

Acknowledgment

The success of this program depends greatly on numerous groups and individuals. The Wayne County Soil & Water Conservation District would like to thank the following for their support:

- Wayne County Board of Supervisors
- Town of Sodus
- Town of Huron
- Town of Wolcott

Wayne County SWCD Board of Directors

The numerous private landowners who provided access for equipment.



leak(s) that have allowed water to seep into the hull. This causes the harvester to list to one side. This problem is mitigated during the season by routinely pumping the water out of the hull. During the off season, the harvester will be pressure tested to locate the leak(s) and appropriate patching will take place. The operating crew and crew leader make a superb effort to return the harvesters to operation as soon as possible when mechanical issues occur. Harvester #3, built in 2009, continued to perform at an extremely high level and with its barge design, is able to bear more material and be more stable with heavy loads of plant material compared to the pontoon design of the older machines. In general, mechanical harvesters are proficient machines that design engineers are continuously improving to increase their efficiency.

Despite not having the #2 harvester for the entire season, the AVC program had a strong year. Figure 1 represents the annual removal totals since the program was first installed in 1988. Figure 1 outlines that the program was able to exceed the annual goal of 1000 tons in 2012. This season's amount removed was lower than the previous three years, mostly due to the use of only two harvesters rather than the usual three, but still illustrates improvements of the AVC program over the last few years. Fluctuations from year to year are affected by numerous variables that are outlined in the Aquatic Plant Mechanical Harvesting Policy and discussed further in this report.

The most important factor that influenced plant biomass in 2012 was the seasonally mild winter of 2011-12 which saw Lake Ontario water levels peak in February-March while historically peaking around June, July, and August. A lack of ice cover over the embayments was also caused by the mild weather. This allowed abundant UV light to reach the plants, especially in late winter – early spring, which allowed early season species, such as Curly-Leaf Pondweed, to flourish. Curly-leaf pondweed (*Potamogeton crispus*) is an invasive species in New York. With its expanded growing season, curly-leaf pondweed created a



dense canopy cover in areas that are infested with it, not allowing other, more beneficial plant species from growing. Also, this expansive growth most likely allowed for more production of the plants turions, or seeds, that overwinter.

The summer of 2012 also experienced an extended drought period, when coupled with peak high water levels in the early spring, created certain issues with low water levels. According to data from the US Army Corps of Engineers, water levels for Lake Ontario were 6 to 9 inches below the long term average and precipitation was significantly below the average for July and August during the harvesting season. Local citizens believed that the water levels were more like 10-12 inches lower than usual. As previously stated, low water levels limited the use of certain access site and even access to entire bays. The harvesters could not be launched successfully at both Maxwell and Blind Sodus Bay. While on Sodus Bay, the harvesters were unable to use the access site located at Third Creek because the shoreline conveyor could not be set up on stable substrate. The dump trucks would have to back too far into the water and would be at increased risk of becoming trapped in the mucky sediment.

Aquatic Vegetation Mechanical Harvesting Policy

Revised March 27, 2012

Criteria which determines when and where aquatic vegetation is to be harvested includes:

- 1.) Climate: Increased light, high water temperatures and low water levels associated with the harvesting season increase the likelihood of excessive plant growth. Harvesting operations will be delayed if environmental conditions jeopardize the safety of the crew members and equipment.
- 2.) Funding: Securing funds from multiple agencies and municipalities determines the duration of the harvesting season and prioritizes areas to be harvested.
- 3.) Plant Species: Although native plants have the potential to cause congestion of navigable water, the removal of invasive plant species is important to a healthy balanced ecosystem. Areas with excessive non-native plants will receive precedence.
- 4.) No-Cut Areas:
 - a.) Native Plants – These areas have significant populations of beneficial or protected native plants. Native plants are encouraged to spread into areas where invasive plants have been removed. These areas are the most difficult to determine because of constantly changing climate and environmental conditions.
 - b.) Machinery Hazards – These are areas of rocky structure, submerged cribs, ruins and shallow areas where harvesting equipment cannot operate due to potential damage to equipment. These areas include in between and around docks.
 - c.) Undeveloped Shoreline – These are undeveloped areas where constant access is not needed.
 - d.) Sensitive Habitat – These are important fish spawning and juvenile fish cover areas and sanctuaries for various turtle species identified by the NYS DEC.

The SWCD staff will perform regular reconnaissance surveys in order to evaluate areas and determine when and to what extent mechanical harvesting is appropriate.

Mechanical harvesting effectiveness is dependent on access location for the programs shoreline conveyors and dump trucks. The closer the access point, the more effect the harvesting operation can be.

An alternate access site for this area was unavailable so the areas along Briscoe Cove Road, Mary Drive, Shaker Tract Road, and the northern portions of Ann Lee Drive were not harvested. In 2011, 126 tons of plant material were removed from this area. Another area on Sodus Bay where access was limited due to the low water levels was at what is called Sills Cove at the end of Sills Road. Areas harvested from this access site include the areas along the southern portion of South Shore Road, Sills Road, Emerald Point Road, and the entire outlet of Second Creek which contains a significant amount of water chestnuts (*Trapanatans*). With the addition of a new access site located off of Emerald Point Road, the harvesters were able to work these areas and also did it more efficiently. Most of the plant material removed from this area is from the outlet of Second Creek. With the new access site closer to this area, the harvesters were able to double the amount of material removed for the same amount of time spent there in previous years. This demonstrates how important it is to have optimal access site for offloading the harvested weeds.

AQUATIC continued on page 7...





Christopher Hotto

Agricultural Group Drainage Program 2012 Accomplishments

Prepared by: Christopher Hotto, District Technician, Soil Resource Specialist

It was a successful year for the drainage program. We were able to complete two new projects and seven maintenance projects throughout the construction season. The new projects totaled about one mile of ditch. Work on the projects has vastly improved residential and agricultural drainage, reducing severe flooding issues in those areas. The seven maintenance projects that were completed totaled about eight miles of streams and agricultural ditches. Work on these projects consisted of mowing, dipping and removal of blockages.

North Centenary Road Project: This was a new project in the town of Sodus and was about .7 miles in length. The project was completed because several landowners were experiencing severe flooding because the stream channel had become completely filled in with sediment in sections due to fallen trees. Work consisted of clearing an access path along the creek, as well as cleaning out and reshaping the channel to allow proper flow. We also replaced two culvert crossing that were in poor condition. After the project was complete we hydroseeded all disturbed areas to stabilize and reduce erosion.



During Excavation



Excavation Complete



Four Weeks After Hydroseed

Bills Road Project: This was a maintenance project located in the town of Walworth. The entire project is about 1.75 miles long. We mowed the whole project and dipped about one mile of the project. We also lowered a culvert that was too high, causing drainage problems. The project directly affects 18 landowners in the Red Creek West watershed. The project helps maintain proper drainage for agricultural and residential property.



Bills Road Mowing



Bills Road Dipping

Ki-Ham-Law Project: This was a .75 mile long maintenance project in the town of Macedon. We mowed both sides as well as dipped out the ditch. A long stick excavator had to be used for some of the dipping because of the extreme depth and width of the ditch. This project maintains drainage for a large area of agricultural land and directly affects three landowners within the Red Creek West Watershed.



Before



After

Route 31 Project: This was a maintenance project located in the town of Galen. The entire project, about 1.25 miles, was mowed. This project affects five landowners within the Melvin brook watershed. The project helps maintain proper drainage for primarily agricultural land.

Salmon Creek: We completed removal of major blockages two different times during the summer, both caused by large fallen willows. The first was removed just west of Tuckahoe road; the town of Williamson assisted us by trucking the debris to their landfill. The second blockage was removed from the creek about 200 yards south of the Hamilton Street Bridge.

Tyre Road Project: This was a new project in the town of Galen. The project was about a third of a mile in length. Work on this project involved deepening an existing ditch and extending it further along the base of a hill to catch and divert water away from agricultural and residential property. We also installed a tile drain to drain a depression that flooded regularly. This project was also hydroseeded upon completion to stabilize disturbed areas.



Before



After

Route 14 Project: This was a simple maintenance project in the town of Lyons. We mowed the entire project, which is about one mile in length. The project is in the Erie Canal East watershed and directly affects seven landowners. The project maintains proper drainage of low lying agricultural land and helps reduce flooding after storm events.

Mink Creek II Project: This was a maintenance project in the town of Williamson. The project was about two miles long, all of which was mowed. We also removed several blockages north of Lake Road that were caused by fallen willows. Some small sections of the creek could not be maintained because of poor access. This project maintains drainage on eight properties within the Mink Creek watershed.

Second Creek Project: This was a maintenance project in the town of Sodus. Over the summer beaver moved into the creek and built multiple dams backing up a large amount of water. When trapping season opened we had a trapper come in, he removed two beavers from the creek. The town hired a trapper to remove beaver further up stream where they were causing problems with a culvert. We then removed three beaver dams and mowed the entire project, about one mile in length. This project directly affected seven landowners in the Second Creek watershed. Maintenance on Second Creek helps reduce severe flooding and ensures proper drainage for agricultural and residential property.

Critical Area Seeding and Mulching

We got off to a good start with our critical area seeding and mulching program. We were able to hydroseed 6.5 acres on numerous projects throughout the county. These included the two new drainage projects, two farm projects and the canal trail project in the town of Arcadia and Village of Newark. The Towns and the Water & Sewer Authority were very helpful in getting us access to water sources for filling the hydroseeder near each of the sites. We will be ready to keep expanding the program for next year, as we hope to hydroseed more acres of critical area than this year.



North Centenary Road Project



Canal Trail, Village of Newark



Canal Trail, Village of Newark

Envirothon

In 2012, the Wayne County Soil & Water District changed partners because of student participation opportunities to work with the Central/Western New York region (Ontario, Seneca, Yates, & Wayne Counties). Each year the Envirothon event is held on the FLCC campus in Canandaigua in March or April.

Wayne County had 4 teams from 2 schools. School representing the County included Red Creek and Clyde-Savannah. The 2013 regional competition will be held in the mid-April and the State Competition will be held at SUNY Morrisville, Morrisville, NY May 30 & 31. <http://www.nysenvirothon.net/>

Team from Red Creek won for Wayne County and placed 13th out of 48 counties at the state event which was held at Hobart & William Smith Colleges in Geneva.

For more information on the Envirothon visit www.nysenvirothon.net



Clyde-Savannah Bad Ashes



Red Creek Rams



Red Creek Team 3



Red Creek Genus Envy

AQUATIC continued from page 5...

Recommendations

As with every season, 2012 brought about numerous obstacles and opportunities for improvement to the AVC Program. For the 2012 season, the District continued the use of a Water Quality Hotline so the public could access more information related to the AVC program and other water quality related news. A possible recommendation for the future would be to incorporate similar notifications into the District's website as well as other associated entities.

An issue that is apparent each year is the need for more and closer access sites for off-loading plant material. A significant majority of the shoreline is privately owned and heavily developed. Access depends on permission from the land owner. This season proved this point with the addition of a new access site near Second Creek on Sodus Bay. In 2011, an average of two harvesters worked approximately 7 days and removed 92 tons of material from this area. This season, two harvesters spent approximately 4.5 days there and removed 89 tons of material. This equates to an increase in approximately 7 loads a day by being able to offload in close proximity. SWCD staff continually pursues access sites on both public and private lands in an effort to improve efficiency.

As stated above, the program usually operates three harvesters, two of which that were in operation this season. The third was undergoing a refurbishment. The equipment is kept in very good condition due to a rigorous maintenance program, but overall wear is a factor. The District must continue to explore new avenues to dedicated funds solely for the upkeep of equipment, including dump trucks and conveyance systems. The District must also identify opportunities to purchase new technologies to improve the effectiveness of the program.

The final recommendation is to continue the numerous effort of watershed education. The District made valuable steps at providing the public with information on various watershed management initiatives throughout the County. The most important aspect of this effort is the realization that we, as a community, are responsible for protecting our watershed and the valuable natural resources within it.



Find us on
Facebook

On Facebook?

Friend request Wayne SoilnWater for continued updates and notifications of information on local conservation efforts.

District's 2012 Tree and Shrub Sale

The Wayne County Soil and Water Conservation District's (SWCD) main focus is mitigating natural and human impacts on water quality, soil health and other abundant natural resources.

Annually, we host a Forever Green Tree and Shrub sale to promote continued conservation efforts throughout the year and that conservation is for everyone!

The District's 2012 Tree and Shrub Sale offers multiple species of bare root seedling and transplants for uses including windbreaks, wildlife habitat, backyard conservation, and erosion control. We offer various evergreen trees, deciduous hard- and soft-wood, deciduous shrubs, ground cover species, and an assortment of 'Conservation Packs.' We also have handmade, Hemlock wood nesting/roosting boxes for wood ducks, bluebirds, and bats.

Order form is at right, but can also be accessed on our website at www.waynecountynysoilandwater.org or by calling 315.946.4136.

Ten ways to use trees:

1. Cut erosion – Rows of trees break the wind on flatter lands and healthy forests protect soil from water erosion on slopes.
2. Improve air & water quality – A forest Floor of leaves and decaying wood acts as a giant sponge by absorbing, filtering, and holding water: one acre of trees provides fresh, clean oxygen for seven people and will clean the air polluted by eight cars operated for 12 hours.
3. Increase income – Properly managed trees can provide excellent sources of income, such as the sale of trees or wood products.
4. Save energy - Recent studies shows that windbreaks can reduce winter fuel consumption by 10 to 30 percent. Trees also save energy by shading — one tree has the cooling effect of five air conditioners.
5. Protect livestock - Trees reduce the wind and can significantly reduce animal stress. Livestock not only need less feed, but their gains are higher. Shade provided by trees is also helpful to animals during hot summer days.
6. Sound barrier - Trees and windbreaks reduce noise from high-speed traffic and other sounds. Plant leaves, branches and twigs all absorb sounds of different frequencies.
7. Home for wildlife - Wooded areas create valuable cover, nesting and breeding areas for upland game and songbirds. In winter, when all other food is blanketed with snow, seeds and fruits of trees and shrubs provide food for non-migratory species.
8. Living snow fence - If you live in snow country, properly locating a living fence of trees and shrubs parallel to your driveway or highway helps hold snow on the fields and off the roads.
9. Improve crop yields - Soil particles blown by strong winds frequently damage small crops. Yields also may be lowered by the effects of hot winds. Trees protect against these hazards.
10. Beautify the countryside - Well-kept wooded areas, windbreaks and other tree plantings undeniably enhance the aesthetic value of individual farms and the countryside.

From: USDA-NRCS

2013 TREE & SHRUB PROGRAM

Wayne County Soil & Water Conservation District
10 Leach Road • Lyons NY 14489 • (315) 946-4136

Trees and shrubs must be ordered in quantities listed or multiples of those listed. Please call for any orders over 1000 of one species.

Name & Approximate Size	Price Per Unit	Quantity of Species	Price
CONIFER SEEDLINGS:			
Balsam Fir 8-14"	\$25 per 25 or \$60 per 100		
Canaan Fir 8-14"	\$25 per 25 or \$60 per 100		
Concolor Fir 10-18"	\$25 per 25 or \$60 per 100		
Douglas Fir 10-18"	\$25 per 25 or \$60 per 100		
Fraser Fir 8-14"	\$25 per 25 or \$60 per 100		
Colorado Blue Spruce 10-18"	\$25 per 25 or \$60 per 100		
Norway Spruce 10-18"	\$25 per 25 or \$60 per 100		
White Pine 10-18"	\$25 per 25 or \$60 per 100		
CONIFER TRANSPLANTS:			
Balsam Fir 10-18"	\$15 per 10 or \$110 per 100		
Douglas Fir 18-24"	\$15 per 10 or \$110 per 100		
Fraser Fir 14-24"	\$15 per 10 or \$110 per 100		
Colorado Blue Spruce 18-24"	\$15 per 10 or \$110 per 100		
Norway Spruce 18-24"	\$15 per 10 or \$110 per 100		
Am. Arbor Vitae (White Cedar) 18-24"	\$15 per 10 or \$110 per 100		
White Pine 18-24"	\$15 per 10 or \$110 per 100		
DECIDUOUS SHRUBS:			
American Beauty Bush 12-24"	\$15 per 10 or \$40 per 50		
Elderberry 18-24"	\$15 per 10 or \$40 per 50		
Forsythia 12-24"	\$15 per 10 or \$40 per 50		
Juneberry (Serviceberry) 18-24"	\$15 per 10 or \$40 per 50		
Red Leaf Rose 18-24" NEW!	\$15 per 10 or \$40 per 50		
Smoke Tree 18-24" NEW!	\$15 per 10 or \$40 per 50		
Sweet Mockorange 18-24" NEW!	\$15 per 10 or \$40 per 50		
Weigela 18-24" NEW!	\$15 per 10 or \$40 per 50		
DECIDUOUS TREES:			
American Beech 18-24"	\$15 per 10 or \$40 per 50		
Paper Birch 18-24"	\$15 per 10 or \$40 per 50		
River Birch 18-24" NEW!	\$15 per 10 or \$40 per 50		
Red Maple 18-24"	\$15 per 10 or \$40 per 50		
Sugar Maple 18-24" *NY's State Tree*	\$15 per 10 or \$40 per 50		
Burr Oak 18-24" NEW!	\$15 per 10 or \$40 per 50		
Pin Oak 18-24" NEW!	\$15 per 10 or \$40 per 50		
Red Oak 18-24"	\$15 per 10 or \$40 per 50		
Sawtooth Oak 18-24" NEW!	\$15 per 10 or \$40 per 50		
White Oak 18-18"	\$15 per 10 or \$40 per 50		
White Flowering Dogwood 18-24"	\$15 per 10 or \$40 per 50		
GROUNDCOVERS:			
Hosta	\$13 per 10		
Myrtle	\$28 per 50		
Pachysandra	\$28 per 50		
VARIETY PACKS: name & species included			
	Price Per Unit	Quantity of Packs	Price
Butterfly Tree & Shrub Pack: 10 plants, 2 each of: American Beauty Bush, Butterfly Bush, Blazing Star, Lilac, Apricot Beauty Daylily. (Shrubs are 18-24", Plants are dormant, rooted clumps)	\$15		
Evergreen Tree: 10 plants, 2 each of: Colorado Blue Spruce, Douglas Fir, White Pine, Canaan Fir, Norway Spruce. (Species are seedling size.)	\$17		
Fern Plant Variety Pack: 10 plants, 2 each of: Cinnamon, Christmas, Ostrich, Maidenhair, New York. (Plants are dormant, rooted clumps.)	\$18		
Perennial Plant Pack: 10 dormant plants, 2 each of: Bonanza and Christmas Carol Daylily, Blue King and Snow Queen Iris, Autumn Joy Sedum. (Plants are dormant, rooted clumps.)	\$18		
Suburban Conservation Tree & Shrub:			
10 plants, 2 each of: Douglas Fir, Colorado Blue Spruce, White Flowering Dogwood, Juneberry, Sugar Maple. (Conifers are transplant size.)	\$20		
Wildflower Plant Pack: 10 dormant plants, 2 each of: Black-eyed Susan, Oxeye Daisy, Bluebells, Wild Geranium, Red Trillium, Autumn Joy Sedum. (Plants are dormant, rooted clumps.)	\$18		
OTHER ITEMS			
Name:	Price Per Unit	Quantity	Price
Bat Box: Bats consume large quantities of insects; encourage them to stay in your area by providing shelter.	\$20 for 1 or \$50 for 3		
Bluebird Nest Box: Provide habitat for New York's State Bird!	\$15 for 1 or \$40 for 3		
Wood Duck Box: Excellent opportunity for anyone to be involved in wildlife management.	\$25 for 1 or \$65 for 3		
Marking Flags	\$9 for 100 or \$0.10 each		
Fertilizer Tablets, 20-10-5	\$10 for 100 or \$0.10 each		
Please do not add sales tax.			TOTAL \$

Please Read: All seedlings are bare root stock. Consult our catalog for a detailed description of what a bare root plant is. Stock may be used for wildlife habitat, erosion control, reforestation, windbreaks, landscaping, Christmas trees, etc. All trees and shrubs sold are to be used for these conservation practices. Trees and shrubs are sold with the understanding that they will not be removed from the planted site for resale with the roots attached. Orders are filled on a first-come, first-serve basis. The District reserves the right to refund payment on items if they should become unavailable. The District will NOT be responsible for the success or failure of plantings.

Name:

Address:

Phone: ()

Email:

Order with payment due Fri. March 22, 2013

Checks payable to Wayne County SWCD • Location: 8338 Ridge Road; Alton, 14551

Pickup dates/times: Thurs. April 18, 12:00 pm – 7:00 pm • Fri. April 19, 8:00 am – 5:00 pm • Sat. April 20, By Appointment

*NOTE: We now accept MasterCard, Visa, American Express and Discover credit cards.

To place an order by credit card please call 315.946.4136 for details.*