

Wayne County Soil & Water Conservation District



Conservation at the Core of Wayne County



Building participation and community involvement in Wayne County

Conservation is Stewardship

FEBRUARY 21, 1944, LYONS NY,

75 YEARS

2019 Conservation Impacts

- \$2.523 million dollars of conservation economic development
- 473 Water Quality & 528 Land Use Management Technical Assessments
- 27 Water Quality Sampling points in 3 watersheds in the Central Canal Corridor each month
- 2,257 feet of Stream Bank Stabilization
- 2,237 feet of Lake Ontario Shoreline Stabilization design
- 7750 Tree & Shrub Seedlings Distributed
- 1064.5 fruit shrubs & perennial packs for pollination distributed
- 92 pond management assistance
- 338 fish stocked & 55 grass carp
- 812 loads of aquatic invasive species removed from 4 embayments
- 500 feet of roadside swale maintenance
- 257 students educated on soil health, habitat, community water quality and invasive
- 97 participates at Wayne County Envirothon at Montezuma Audubon Complex
- 164 Ag Value Assessment Worksheet
- 1 Denitrifying Bioreactor
- 9.75 miles of Ag. drainage corridor
- 32 non-point source pollution mitigation systems on 12 farms
- 86 culvert assessments for aquatic connectivity and maintenance
- 83 permit assistant opportunities
- 22 grants written for \$1.123 million dollars for future local conservation
- 4.6 acres of conservation cover through 10 projects of hydroseeding
- 6.2 acres of 1 Riparian Buffer project
- 2 mine reclamation plans for 22 acres
- .25 acres of wetland restoration



Wayne County adopted a charter from New York State to form a Soil and Water Conservation District (District) to serve as a local agency prepared to manage and conserve the soil, water and natural resources of Wayne County and that was just the beginning. Shortly following that adoption the first District Board of Directors set a precedent for the County to begin a journey of natural resource stability for decades to come. The District Board's Membership is directed through McKinney's Law, Chapter 52b, Section 9 of the consolidated laws of New York State and by adopted by the Wayne County legislature which gives

the time through various programs. The District's conceptual birth provided the County with another tool for building community sustainability through natural resource protection; first with one seasonal employee and now today with a team of nine specialty trained full/part time employees and five seasonal employees to provide technical assistance to the municipalities, landowners and schools of Wayne County. In 2019, the District celebrated 75 years of continued conservation community service. coverage genome, which is what we have, you should be able to relatively



1970 Field Day tree planting

authority and outlines responsibility of activities of the District. District Board of Directors is comprised of specific representation from a representing farmer from Wayne County Farm Bureau, a Wayne County Pomona Grange Member, a Member at Large and two County Legislation Members. Over 75 years, more than 30 people of the local Wayne communities have served various terms on the District Board; often addressing the conservation needs of the community at

easily say whether it's a dog or a wolf, but we still can't say and that makes it even more interesting," Dalén said. He added that the scientists are about to do a third round of genome sequencing, which might solve the mystery. Interestingly enough, through a historical review, many of the 27 different programs today, have been a topic of focus over the last 75 years; including Soil Health, Crop Tillage Management, Conservation Cover, Erosion Management, Forestry, Farm Planning and outreach awareness.

All of these programs still run today in some form and in partnership with many other local and state organizations. Conservation builds and mitigates the over use of local natural resources and is the foundation cornerstone to community sustainability. It provides longevity opportunities for clean water and water quality and addresses the many needs of the time old tail of reduce, reuse and recycle.

Today, much like the changing needs of all social, technological and industrial aspects of the communities in Wayne County, the people and inhabitants of the County, need a healthy environment to thrive in all other areas. Conservation is the means to working slowly and steadily over time to address the protection, and mitigation of pollution for water quality. It is that important to preserve that life blood. For 75 years, conservation has been a background noise to all communities, with the District to provide technical services, direction and assistance to all local communities to protect water quality through different lens.

In 2020, the District is beginning to reassess local needs and assist in addressing the gaps that are related to community conservation with hopes of continuing the partnership will all the municipalities, local homeowners, agencies and businesses. These assessments will drive program opportunities and assist in funding reclamation for conservation in the future. Communities County wide have a part in conservation, whether in water quality, or land stewardship. Dr. Suess's the Lorax, provides a great reminder to us all that, "Unless someone like you cares a whole awful lot, nothing is going to get better. It's not." Continue the conservation and look for ways to improve your life and community.

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*Dr. Theodor 'Seuss' Geisel Day
March 2, 2020*

2019 Board of Directors

- Mark Humbert, Chairman, Farm Bureau
- Lynn Chatfield, Vice Chair - Wayne County Board - Town of Wolcott
- Steve Olson, Treasurer - Member at large
- Nick Deming, Wayne County Board - Town of Marion
- Patricia VanLare, Pomona Grange Member

2019 Conservation Staff

- Lindsey Gerstenslager MEd, District Manager
- Bethany Comella, Conservation Sec./Treasurer
- Ronald Thom, CCA, Conservation Program Manager, Ag Planner
- Chris Hotto, CPESC., Senior District Technician
- Scott DeRue, CPESC., Senior District Technician
- Terry Reynolds, Agriculture Implementation Specialist, Senior District Technician
- Ian Priestley, CCA, District Technician, AEM Specialist
- Drew Starkey, Program Specialist, District Technician
- Maxine Appleby, Conservation Public Relations Specialist

Community Conservation

Building conservation connections and community awareness

Habitat 4-H Camps



Bird box installation at Camp Beechwood as part of partnership with CCE of Wayne County's Youth Summer Camp Program.

For the third year in a row, The Wayne County Soil and Water Conservation District has had the pleasure of working with the 4-H Camp Beechwood Summer camp. In previous years the District covered topics like soil health and invasive species ecology through hands on demonstrations and educational games. This year interactive learning continued through tactile development by introducing habitat improvement by building two different models of bluebird houses with the campers.

Before beginning construction, there were a review of some basic facts about blue birds and the importance in New York State. For starters, blue birds are our state bird! New York was one of last states to adopt an official state bird in 1970, and we are the only state to claim the eastern bluebird (*Sialia sialis*) as our representation. The runner up was the robin.

These lowland dwelling birds have a white belly with a red breast, while their head, back, tail and wings are dark blue for the males. Females have a similar blue color on their wings and tail, with a dull brown head and back. If there is a mild winter, they will stay in New York provided they have food, shelter, and a source of water that does not freeze.

Bluebirds will nest in sparsely wooded areas, like orchards, but prefer open fields and park like areas. They are territorial animals, so nesting boxes should be spaced 300' away from one another. As a general rule of thumb, if you can see another nesting box, it is probably too close. Their diet consists largely of insects, but will also eat berries such as black cherries (*Prunus serotina*), American elderberries (*Sambucus canadensis*) and flowering dogwood (*Cornus florida*.)

The younger group of campers began by building the bird boxes. Campers then split up into groups of two and worked through the assembly process at an even pace. The first group chose to build the shoebox-shaped standard bluebird house. The older group, decided to assemble the triangular shaped Peterson bluebird house. The lesson included a review of the specific features of the bird houses, such as the ventilation slots/holes, shape of the entrance, and the pivoting front panel that opens to clean out the nest at the end of each season.

During the afternoon, campers grabbed their bird houses and everyone hit the trails to install the boxes. Ideal locations were chosen and prior to installation the group paused to discuss the different habitats along the hike. Bird houses can be found along both the eastern and western entrances to the park, and the large open area in the center of the park.

Interested in purchasing bird houses or plants to attract wildlife? Contact the District office today or shop online. There are 5 different types of bird and bat habitat boxes available year round, visit www.waynecountyNYsoilandwater.org.



Giant Hogweed Workshop

March 2019, the District, FL-PRISM, and NYSDEC answered a request for public safety and management update training for the Local County and town highway departments. While this training was still focused on invasive species, the topics shifted from aquatic plants to terrestrial plants and insects. Giant Hogweed is a large invasive plant that has been found in multiple locations around the County. Its 2-3' wide leaves and massive height (over 12' tall) with a huge dinner-plate-sized white flower make this plant stick out in the landscape and along the roadside.

Giant Hogweed on the other hand, poses a threat to human health. If left unchecked it can spread and take over a section of a field or roadside, but the main concern is the light sensitive rash caused by its oils. The phytotoxins found in the stems, leaves seeds and flowers causes a very severe burn-like rash when it contacts human skin. This burn can last for months after the initial exposure, and the skin must be kept out of sunlight until it has healed completely.

As a result of this training, highway crews throughout the summer identified suspicious plants that looked like Giant Hog Weed. There are a handful of plants that grow in a similar fashion, and luckily post inspection, none of the reported plants were new areas of Giant Hogweed. If they had been NYSDEC would have been contacted and their strike team would have removed the plants free of charge.



SPOTTED LANTERNFLY



BE ON THE LOOK-OUT

Lycorma delicatula, or Spotted Lanternfly (SLF), is an invasive plant hopper from Asia. In the United States, it was first found in Pennsylvania in 2014. It is not yet established in New York State. SLF threatens the agriculture and forestry industries, and is also a nuisance pest. The nymphs and adults feed on over 70 different plants with piercing sucking mouthparts.

An invasion could have the potential to damage multiple agricultural crops in New York. SLF is a pest of apples, grapes, hops, maple, walnut, and others. New York is estimated to produce more than 30 million bushels of apples each year, while grapes in New York are valued at an annual harvest of \$52.8 million. Additionally, the expanding hops industry and the maple and timber industries would also be negatively impacted by the spread of Spotted Lantern Fly.

The public can help the NYS Department of Ag and Markets by reporting Spotted Lantern Fly immediately after it is found.

Follow these steps!

- Take a photo
- Collect a sample and place it in a freezer or a jar with rubbing alcohol or hand sanitizer
- E-mail: spottedlanternfly@agriculture.ny.gov

Tire Recycling Success

Wayne County Soil and Water Conservation District and Ontario – Wayne Stormwater Coalition partnered for a community tire recycling event in 2019.

The District collected 822 tires in four hours and considered this a huge success. Each person was able to drop off a total of 4 tires per household,

According to the US Federal Highway Administration, approximately 280 million tires are discarded each year by American motorists, approximately one tire for every person in the United States. Besides the need to manage these scrap tires, it has been estimated that there may be as many as 2 to 3 billion tires that have accumulated over the years and are contained in numerous stockpiles. Improper tire disposal creates various health and safety concerns.

Illegal tire dumping can pollute streams, woods, roadsides, and other public land and fires can start if tire pile up that can potentially release chemicals into the air and ground. In addition, tire dumps also become breeding grounds for vermin and mosquitoes. The District is planning another event in 2020.



Held at Wayne County Public Works site in Macedon. Special Thank You to Dave DeRoos (pictured above) and the individual highway departments of Town of Macedon, Town of Walworth and Town of Ontario for assisting with transport of the recycled tires for disposal at NUCOR Steel in Auburn NY. Event possible because of partnership with Ontario Wayne Stormwater Coalition.

WAYNE COUNTY
SOIL & WATER CONSERVATION DISTRICT

Forever Green Tree & Shrub Sale
315-946-7200 or
[Order Online!](#)

Over 50 tree and shrub transplants at affordable prices, along with other conservation items

Why Plant a Tree?

Trees provide benefits for your home and your community. A properly-planted, mature shade tree on the south or west side of your house or business can save you up to 25% on your summer air conditioning bills and increase your property value by up to 20% with its beauty. That same tree will also help soak up stormwater in the neighborhood, and contribute habitat for local wildlife.



Envirothon is an annual environmentally themed academic competition for high school aged students

Wayne County Envirothon



April 23, 2019 – Wayne County Envirothon marked its 6 year. In previous history the Envirothon program was a regional program that included working with several other Soil & Water Conservation Districts across Central and Western New York. With scheduling and student participation changes, schools encouraged the District to move to a local program and connect Envirothon with local opportunities and educate students about local issues. In 2014, Wayne County Envirothon was born being hosted annually in partnership with Montezuma Audubon in Savannah N.Y. and held in April around Earth Day.

Students competed from four high schools across the Wayne County with seven teams that included: Wayne Central High School, North Rose-Wolcott HS, Red Creek High School and Wayne Technical and Career Center. Second place was awarded Red Creek led by their teacher Mr. Terry Elmer, Third Place was awarded to the Red Creek Rams, led by their teacher Mr. Joseph Bonanno with a brand new team for 2019.

The teams participated in a series of field station tests that focus on five topic areas of conservation— soils and land use, aquatic ecology, forestry, wildlife, a current environmental issue -Agriculture and the Environment: Knowledge and Technology to Feed the World.

In addition to the five field stations, each team must present their solution to a problem related to the current issue to a board of judges. The population of the Earth is estimated to be approximately 9 billion by the year 2050. One of the primary concerns for the agricultural industry is how will farmers be able to grow enough food to feed this growing population, while also protecting natural resources such as soil, water, air, wildlife, and forestry resources. Students gave presentations on the concepts of how agriculture and all natural resource areas are interrelated, and how the use of new technologies are key to increase food production. Key topics included:

- Understand the importance of moving toward sustainable farming systems to conserve natural resources, mitigate climate change, reduce erosion and protect water quality and quantity, and promote pollination;
- Comprehension of farming

practices that build soil organic matter such as composting, crop rotations, cover crops, conservation tillage, and management intensive grazing systems to improve soil health;

Understand integrated pest management and biological pest control techniques used to prevent insect pest, disease, and weed problems;

Understand the role of new technology: agricultural biotechnology; precision agriculture; and using UAV (drones, GIS, etc.) to increase farm efficiency for food production.

Envirothon is designed to give students the opportunity to learn about environmental issues and natural resources by conducting tests in the field.

Often times this experience becomes a lifestyle for students and goes beyond competitions—it encourages students to be actively engaged in the environment around them at all times. Many students move onto careers in the conservation, environmental and sustainable agriculture fields which are all local in the Wayne County communities.

The District couldn't put on a successful youth conservation program without our many sponsors. Special thanks goes to the area businesses that made donations. Their support assisted in the purchase of Envirothon T-shirts, educational prizes and awards. Area sponsors included Wayne Pomona Grange, Lyons National Bank, Lyons Veterinary Clinic, Galens Pharmacy, RoadTek LLC, Wayne County Farm Bureau, Wegmans Newark, ThorpeVineyard and Clingerman Taxidermy. In addition, recognition goes to Montezuma Audubon



Center, Director Chris Lajewski, Patrica VanLare, Pomona Grange, Steve Olson, Hidden Canyon Farms, Anthony Verno, Town Supervisor of Williamson, Lynn Chatfield Town Supervisor of Wolcott, Roy Widrick, NY Sea Grant, Joshua Bacon, NYSDEC & Don McDougal, CCE of Wayne Master Gardener & Master Forester. The North Rose Wolcott team moved on to compete at the N.Y. State competition held at the Hobart & William Smith Colleges where they represented Wayne County.



North Rose Wolcott High School team was named the 2019 Wayne County Envirothon Champions being awarded with the rotating championship trophy, Dr. Who. The team was led by teacher and environmental enthusiast Mr... Nick Wojciek. The team members included: Bella DeFeo, Lucy Zhang, Shea Shattuck, Kennedy Jones, Phil Ufholz, and Jacob Smith. This was the third year North-Rose Wolcott had competed.

Youth Fishing Derby



Photo Credit: Chis Kenyon

Wayne County Soil and Water Conservation District and the Wayne County Federation of Sportsmen's Clubs awarded trophies and prizes to over 30 youth anglers at the Wayne County Youth Fishing Derby.

The fishing derby had over 55 youth angler participants from ages 4-16. Anglers could register fish at bait and tackle shops and marinas around Wayne County. The Derby had three separate contests in one. Trophies and plaques were sponsored by McDonalds of Wayne County and presented by owner, Nancy Wilkes.

The prizes awarded to anglers ages 7-16 are for 1st thru 6th place in the Species Challenge; Largemouth and Smallmouth Bass, Northern Pike, Walleye and Perch. Noah Wazinski won the Merchant's Challenge. Noah had to land one of each species for a grand slam; in speaking to Noah's Dad and the weigh-in stations, he (Noah) fished just about every day!

In the Al Shultz Memorial Challenge, Jillian Thomas and Login Smith were winners. Both under the age 7. They both registered Blue Gill, Rock Bass, Sunfish and Perch to take home trophies.

New was the "Captain' Larry Award" given to the youngest angler Alexander De George of Williamson, age 4. *Larry LaForce, a dedicated member of Wayne Co. Federation of Sportsmen, passed away unexpectedly in 2018. Larry loved everything fishing and was an active volunteer every year at the awards event.* In addition, the "Most Dedicated Angler" award went to Jaelyn Knapp.

Special thank you to all of the sponsors and donors who put big smiles on the faces of the youth anglers in Wayne County. McDonald's of Wayne County supplies the trophy awards every year. The Rotary of Sodus sponsored 18 youth from the Village of Sodus Point summer recreation program. Most of the program participants had never fished before the event and learned how to put bait on a hook and the practice of catch and release. Walt Crum thrilled the crowd with his imaginative balloon creations. Paton's Marketplace supplied everything on the grill and the Sodus Point Fire Department for the venue. B&E Tackle, Chill and Grill, Davenport's Tackle, Finger Lakes Prism, Lake County Taxidermy, Lyons National Bank and Wayne County Tourism donated baskets for the raffle.

Thank you Sponsors

Without the support of the following generous sponsors, this annual event would not have taken place. They include: McDonald's Arney's Marina, Bay Bridge Sport's Shop, B&E Tackle, Captain Jack's, Davenport and Sons Livery and Marina, Zip N Zim Sportfishing, Fishin Magician Sport fishing, Port Bay RV Park and Campground, Hughes Marina, Krenzer Marine, Clingerman Taxidermy, Dynalac Corporation, Stegar Haus Restaurant, Joey's Northside Grocery and Ely & Leene Insurance Agency.



Noah Wazinski accepting his "GRAND SLAM" award from Nancy Wilkes of McDonald's



Watershed Conservation

Building water quality pathways through local partnerships

Planning Perspectives

Every watershed assessment requires a live view of the tributary corridor and water quality monitoring and sampling program to assess annual flow patterns, nutrient contributions and capacity of the stream corridors. This information is all kept and housed through New York State Department of Environmental Conservation's Waterbody Inventory - Priority Waterbody List (PWL). <https://www.dec.ny.gov/chemical/36730.html>.

In 2008, the District Board of Directors prioritized an update for all watersheds in Wayne County and proceeded with hiring trained staff to provide this service. At that time, out of fifteen complete watersheds in the County, six were actually assessed and had specific data to support need. In 2015, all watershed PWL's in Wayne County were reviewed and an update was submitted to NYSDEC, Division of Water. To date, we are still waiting for updates to be retained and published.

These updates are completed every three years by NYSDEC. By updating the PWLs within Wayne County, this service provides other partners with the data to apply for implementation grants to improve areas of concern. Whether it is municipal, business or private landowners, these watershed assessments provide information that will justify the needs of water quality improvements.

The District's watershed assessment program is being sponsored in partnership between the Finger Lakes Lake Ontario Watershed Protection Alliance (FOLLOWPA) a 25 year standing watershed alliance of 25 local counties that make up the Lake Ontario Watershed Basin and Wayne County. Each year the County proposed an annual plan of work for the FOLLOWPA funding, provided through NYSDEC allocated by the State of New York's Environmental Protection Fund.



Carrying Out Watershed Management Improving waters of Sodus Bay through Sodus Creek Management

The scope of this project was to promote streambank stabilization, in stream habitat, and improve natural drainage on the main channel of Sodus Creek from Wayne Center Rose Rd. to NYS Route 104. Planning for this project began in the early 2000's between the District, the impacted Townships – Rose, Huron and Sodus, and Save Our Sodus Inc. In 2011, the Sodus Bay working group, applied for funding to complete an assessment and linear study of this tributary due to the size and impact of the waters that flow through it. More than 80% of the water to Sodus Bay come from this tributary. From that assessment, it was determined the nutrient contribution in phosphorus (k) was mainly due to the amount of suspended solids, i.e. erosion occurring within the corridor. Additionally, the District authored a grant to conduct this project and was awarded in the spring of 2013 by New York State Department of Conservation's Water Quality Improvement Program (WQIP).

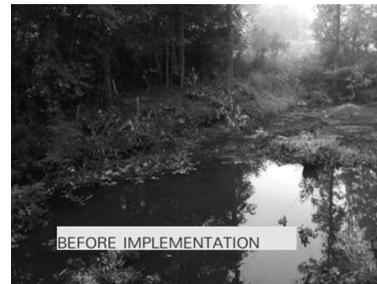
Throughout the last two decades, the project was built through needs and implemented through watershed planning.

A majority of the project required the removal of woody debris blockages obstructing natural flow and fish movement. Before implementation, there were approximately 80 potential sites along the main channel identified as blockages or streambank erosion. The identified blockages may have migrated seasonally as flow regimes changed.

Using guidelines from US Fish and Wildlife Service (USFWS) and United States Department of Agriculture, Natural Resource Conservation Service Engineered Field Guide Specification of Best Management Practices (BMPs), the District designed and engineered an implementation plan for the blockages and stabilization sites.

The project will conclude with two remaining sites in 2020.

The end result of the project restored and preserved the balance of the ecosystem while reducing sediment loading and specific nutrient contributions; preserving and encouraging fish/aquatic habitat within the stream; and reducing nutrient contribution to Sodus Bay



Central Canal Corridor Latest Assessment of Upper Ganargua Creek Watershed

In 2018, after the completion of three other large tributary corridors along the Central Canal Corridor, the District began sampling of the Upper Ganargua Creek watershed. Upper Ganargua Creek (UGC) has an expansive watershed that extends to South Bristol, Ontario County. The area of interest for this assessment is from Allen Padgham Rd. to the creeks outlet at Aqueduct Park in Palmyra. Samples collected at Allen Padgham Rd. bridge were used to establish contributions from upstream and to compare and evaluate contributions to the stream section within Wayne County. This section of UGC has a 19,634 acre watershed composed of predominantly agricultural and rural residential land. Water quality samples were collected from the main stem and outlets of tributaries from March 2018 to August 2018 and May 2019 to July 2019. Analytical results illustrated that the main channel experiences elevated

nutrients (BOTH phosphorus and nitrogen) and sediment concentrations, while the tributaries showed elevated forms of nitrogen. Possible sources of nutrient and sediment loading include waste water treatment plant effluent; cropland and livestock operation runoff from impermeable surfaces and construction sites; septic system failures; and streambank erosion. This assessment will serve as the basis for prioritizing corrective measures and finding appropriate funding opportunities to address sources of pollution within the watershed.

This assessment was funded through local funding as part of the District's state annual requirements through New York State Department of Agriculture and Markets.

In 2008, the District expanded water quality assessment and planning opportunities with additional staff. Since that time, the District has completed a water sampling characterization study in 12 watershed to gain a baseline assessment of the water quality and nonpoint source pollution.

Following those studies and additional research and assessments, the technical staff and Board of Director's decided to begin working toward whole watershed planning as part of the District's strategic plan. To date six watersheds have had complete assessments characterized and can be found on the District Website

FACT:
Six of
Wayne County's
watersheds have
been assessed
since 2008

www.waynecountyNYsoilandwater.org

North Atlantic Aquatic Connectivity Collaborative-NAACC

In 2016, the District adopted a protocol to aid municipalities in infrastructure assessment with conservation partnership. The North Atlantic Aquatic Connectivity Collaborative (NAACC) was developed to assess and score culvert and bridge crossings for fish and wildlife passability, as well as culvert condition and other useful data. Data collected during the assessment includes the crossing type, material, dimensions and condition among other things. The data that is collected during these assessments will help determine where a stream corridor may have a barrier preventing fish and aquatic organisms from moving up stream. Our assessment efforts over this past year focused on the watersheds along Lake Ontario, including Mill creek, Fourmile creek and Port Bay watersheds. We assessed 32 crossings in these watersheds in 2019, three of which are rated as a moderate barrier and one that is a severe barrier. The crossing evaluated as a severe barrier is due to the outlet of the pipe being perched above the stream, making it almost impossible for most fish and aquatic organisms to migrate up stream past this crossing. We hope to use these assessments to pinpoint where we can implement culvert/crossing improvement projects that would have the greatest benefit to aquatic passability in the county. We plan to complete most of the assessments in the Lake Ontario watersheds in 2020 and begin assessing culverts in the watersheds along the Canal Corridor in 2021.



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facebook

Are You On Facebook?
Like our page at Wayne County Soil & Water Conservation District for continued updates and notifications about local opportunities

Soil Health Conservation

Nature • Science • Technology

“While the farmer holds the title to the land, actually it belongs to all the people because civilization itself rests upon the soil.” - Thomas Jefferson



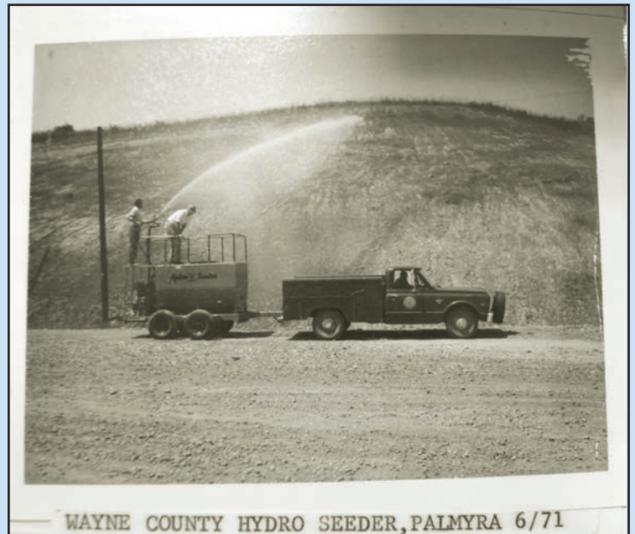
One of two mainstay goals of the Wayne County SWCD is to support county farms by assisting with environmental stewardship while helping them remain economically sustainable.

As part of the soil health grant obtained in 2014, the District has taken over 680 soil samples on 70 farms, across all townships within the County. These samples equate to over 5900 acres of soil sampled. Every acre sampled represents a farm’s eagerness to limit unnecessary fertilizer and chemical spray application. Reducing the amount of chemicals within the soils in turn reduces the risk of runoff to nearby waterbodies. Understanding the nutrient analysis of the soils that are being worked is the foundation to seeing quality yields, improved soil tilth, reduced fertilizer costs and fuel bills. Following completion of sampling, the district can work with farms to implement a crop rotation beneficial for soil nutrition, erosion control and yield increase.

The District also supports soil health through the No-Till drill rental program. In 2014 the District, through a grant in partnership with NYSDEC and NYSDAM, purchased a No-Till drill and now rents it out to local farms with a minimal cost for setup and maintenance. These farms are generally looking to experiment with minimum tillage or have a small enough area to use the drill on that purchasing a machine doesn’t make financial sense. Multiple farms have purchased their own drill after using ours and experiencing the numerous benefits of this method. The drill has been used on orchards, pastures, crop fields and for rejuvenating hay lots. The drill has also been popular with farms participating in USDA NRCS programs that require special seeding rates and application methods.

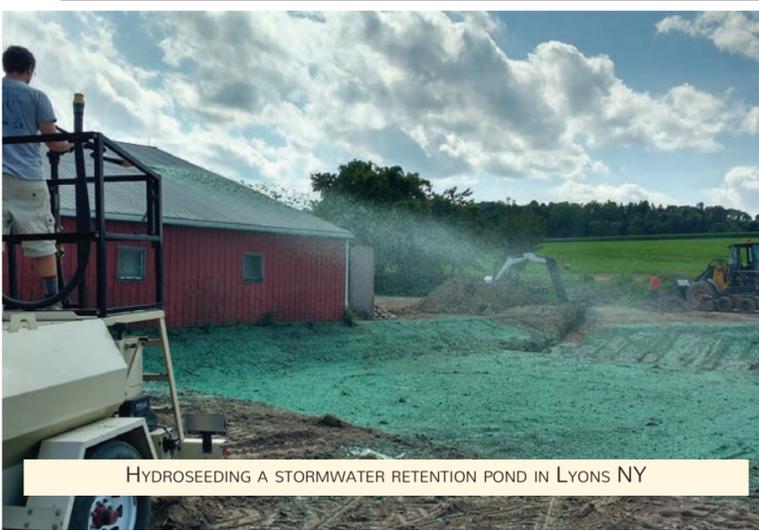
Then and Now

Common threads of conservation



Historical photo: Hydroseeding for conservation cover in Wayne County was originally demonstrated by King’s Landscaping on the bridge side walls of the Route 89 and 104 over pass in July 1970. This was a high demand new technology of its time. In 1971, in partnership with the District, Wayne County purchased a hydroseeder and the District managed the program to provide roadside cover maintenance to all the County, State and Town road projects.

Conservation Cover continues to be a common thread for conservation of local resources. Since the early 70’s to now, soil health through cover is managed through various applications and provides erosion control and thus water quality by keeping nutrients in the soil. The District provides a landowner and municipal cost share program for conservation cover through hydroseeding to continue to improve erosion management. The District was able to secure the equipment through a New York State Department of Environmental Conservation Water Quality Improvement Program (WQIP) grant in 2014 and has been running the program with local funding since. In the last 6 years of implementation the program has cost –shared conservation cover on more than 35 acres of exposed soils along stream corridors, drainage tributaries, roadside ditches and agricultural project areas.



In 2019, The District implemented over 32 systems on 12 farms through the various conservation programs. Here are the highlights on some of the more regular systems that provide management benefits for nutrient use and also blend in with the landscape and could be easily dismissed by a passerby. The goal is simple: to conserve the land through stewardship and implement practices that naturally address, mitigate and prevent water quality and now quantity concerns without changing the local ecosystem.

FACT
More than 350 farms in Wayne County participate in AEM

Agriculture Soil Health Improvements for Water Quality



Youngman Farms is a third generation father and son partnership supplying beef locally in the Town of Butler, Wayne County. They raise 150 head on 380 tillable acre farm. The main operation facility is on the corner of State Route 89 and Smith Rd. less than a half-mile from the proposed project and approximately seven miles from the shores of Lake Ontario. Much of the farms property borders Wolcott Creek which flows north through the Village of Wolcott into Port Bay, which is included on the NYSDEC 2006 Section 303(d) List of Impaired Waters, from Port Bay the water flows into Lake Ontario.

The goal of the of the project was to take a 36 acres parcel of that was traditionally conventional tilled with a grain corn-silage corn-oat rotation and convert it into permanent pasture with a Prescribed Rotational Grazing Plan where the majority of the cow/calf pairs will reside during the grazing season. This provides erosion management opportunities for soil health on the system along the Wolcott Creek stream corridor. The project included exterior and interior fencing, forage & biomass planting, a water well, pumping plant, pipeline, watering facilities and a prescribed rotational grazing plan.



Hughes Farms is located in the East Bay watershed. Feed production during the growing season, requires to have an area for the harvested crop to ferment, cure and to feed for the winter. One of the leading concerns with farmsteads is heavy impact to areas which cause erosion, leading to suspended solids and other binding nutrients available to enter drainage tributaries and stream corridors. This farm initiated a plan to begin addressing this area of concern as it is part of the East Bay Watershed. By improving this feed-stocking area and mitigating the amount of soil



disturbance, the farm is reducing the potential of loss of soil throughout the year while completing general farming operations, such as feeding his beef herd.

What's your NPK?
Start your Soil Health Plan Today contact Ian Priestley 315-946-7200

Aquatic Conservation

Building strength on Invasive Species awareness through partnership support

Combating local nutrient influence

If you have ever driven across the Sodus Bay Bridge in Huron during the summer time, there are a few things you have probably noticed. People fishing from the bridge and launching boats at the marina can be seen along the north side, and a few swans in a vast green mat of seaweed along the south side. For the past 3 years, The Wayne County Soil and Water Conservation District has worked to manage the water chestnut (*Trapa natans*) population made up over more than 24 acres of this wetland complex making up that “green mat.” This floating rosette of triangular leaves that forms incredibly dense mats and drops large spiked seeds during the late summer. The annual plants grow from seed each season, and a single rosette can produce over 12 seed pods and each pod can contain 20 seeds; leading to a potential of 240 plants in the next season. The seeds have the ability to survive for up to 10 years before germinating, making monitoring and control long term ongoing efforts.

This stand has been a source of water chestnut spread when it was first found and recorded by NYSDEC, Wetland Management Unit in 1987. In the early 90’s, control efforts were completed through hand-pulling. At the rate of reproduction, healthy sediment types and warm drought temperatures the stand exploded and took over the complex, making hand-pulling for control an ineffective method. At the time, there was not a chemical application or enough knowledge of the plant to manage the stand in other ways. Discussions continued but the problem of this invasive wasn’t truly noted until key species of fish and birds that used to spawn and nest there began disappearing.

When the plants grow thick enough, native submerged species cannot receive enough sunlight to survive. In turn, this changes the resources available for native insects, fishes, and birds. The black tern for example depends on shallow eelgrass beds to feed. The area south of the bay bridge could be great habitat for this endangered shorebird, but the dense floating vegetation is preventing that from occurring.

Since this southern portion of the bay and the Sodus Creek outlet are part of NYSDEC’s Lake Shore Marshes Wildlife Management Area, the District joined forces in 2014 to begin an agreement to begin removing generations of this plant annually, while also working toward planning and adoption of new methods of control to better manage the spread that is now working up the shallow shoreline areas of Sodus Bay and creating other habitat and water quality issues.

Work is being funded through the Environmental Protection Agency’s Great Lakes Restoration Initiative (GLRI), through U.S. Fish and Wildlife and NYSDEC called Aquatic Nuisance Species funding (ANS). In 2015, the Aquatic Vegetative Control Program Crew, aka. Weed Harvesting, began working to develop eligible access points during various times of the season to better launch equipment and unload equipment. The time spent in this area amounts to 7 working days a season. The benefit to the entire bay is in water quality. If you recall, earlier in the article, it was noted that the Water Chestnut displaces oxygen in the water column. It is a key host for fish kills and other animal deaths in a rather large wetland complex as well as a dense nutrient contribution area because of the 3 seasons of plants that grow each year. What does that mean, it means the nutrients that are the plant, die and create an incubation mat for a stronger plant. Michael Walker, Crew Leader of 18 years with the District in 2020, calls it “the mother’s milk of the plant cycle.” M. Walker has witnessed the strength of the developing plants and the resiliency over the season cycle. When they get ready to die, that is when you see them breaking off and floating to another area of the bay and a new stand is born.



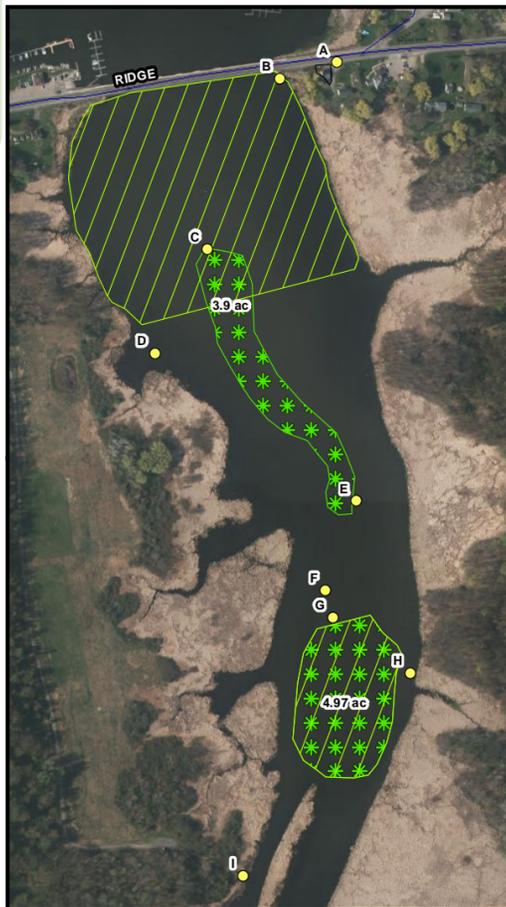
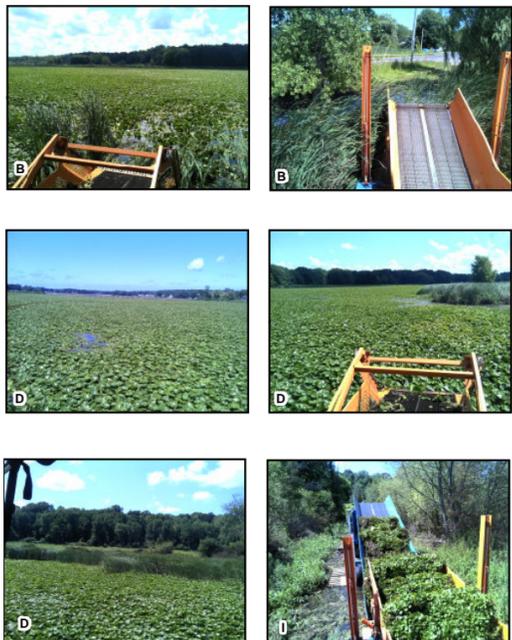
Water chestnuts threaten the ecology of our bays and streams by completely colonizing the area. This decreases the oxygen in the water and excludes the local plant community that our native fauna depends upon. It also decreases fish population.

The District has been managing weeds for over 30 years!

Water Chestnut partnership is important. Boy Scott from North Rose and Wolcott participate annually to support the effort. Photos to the right at Maxwell Creek Inlet at Camp Beechwood from 2004



South of Sodus Bay Bridge first year impacts in 2017. (photos below)



Building strength on Invasive Species awareness through partnership support

For the past 30 years the District has taken an active approach to managing invasive species throughout Wayne County. An invasive species is a non-native organism that poses a threat to the ecosystem, economy, or human health. Much of our invasive species work has built upon to the District’s existing Aquatic Vegetative Control (AVC) program (Aquatic weed harvester boats). This past year we have continued expanding our programs to include alternative management approaches, increased public outreach, and as well as fostering new relationships with some of our local state agencies. In 2019, the District partnered with four different local agencies to actively scout out and manage water chestnut populations on Maxwell, Sodus and Port bays in correspondence with the AVC Program. At our largest event, we had nearly two dozen boat stewards from the Finger Lakes - Partnership for Regional Invasive Species Management (FL-PRISM) pull 2000 lbs of plants in a few hours from Maxwell Bay within tough to reach places. At another event, summer employees from the NYS Parks, Recreation, and Historic Preservation spent a morning pulling over 500 lbs of chestnuts from a newly located infestation on Port Bay.

Aquatic Vegetative Control (AVC) Annual Report

Mechanical harvesting has proven to be a short-term, effective and environmentally safe means by which to control excessive aquatic plant growth. Harvesting operations for the 2019 season were carried out for 60 days between mid-June and late-September. The final removal amounts for each bay are as follows;

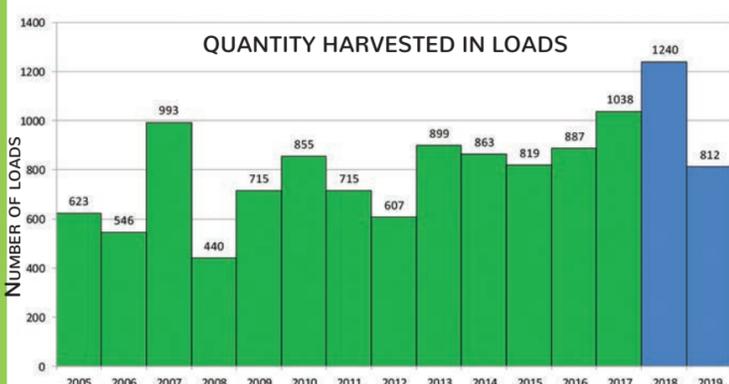
**Sodus Bay – 696 loads,
Port Bay – 62 loads,
East Bay – 36 loads, and
Maxwell Bay – 18 loads.**

The total amount removed from the four (4) embayments was 812 loads. This season, a significant majority of the loads recorded for Sodus Bay came from the wetland area south of the Ridge Rd. bay bridge. This was the third consecutive year to control invasive water chestnut (*Trapa natans*) in the Sodus Bay Lake Shore Marsh complex. 89 loads of plant material were removed from south of the bay bridge.



Total operating time of the AVC Program is calculated by each harvester operating a 10-hour shift each day. Towards the end of the season, the shifts change to five 8-hour days per week. Generally, 3 harvesters would produce 30 operating hours in one day. Comparing 2018 and 2019, total operating time slightly decreased from 1650 hours in 2018 to 1481 hours in 2019.

The most important factors that influenced plant density in 2019, as with most years, was the seasonal Lake Ontario water level fluctuations. High Water levels reduce sub water soil temperature, reducing seed bed germination. This can determine the extent of plant growth and the ability to use different off loading sites.



Acknowledgment

The success of this program depends greatly on numerous groups and individuals: Wayne County Board of Supervisors, Town of Sodus, Town of Huron, Town of Wolcott, Wayne County SWCD Board of Directors, FLOWPA, U.S. Fish & Wildlife Service, FL PRISM, NYSDEC and the numerous private landowners who provided access for equipment.

Continued Conservation



You do the math: If a farmer has 500 acres of crop land and Soil Health in a 10 acre field takes about 25 actual core samples representatively spread across the field and takes a farmer about 3 hours to complete the collection process for one actual submission sample. How much time in hours will the farmer need to collect all the samples of farm fields? PS: most farms do this work every 3-5 years to know their soil health.

Answers: 50 samples x 3 hours = 150 hours

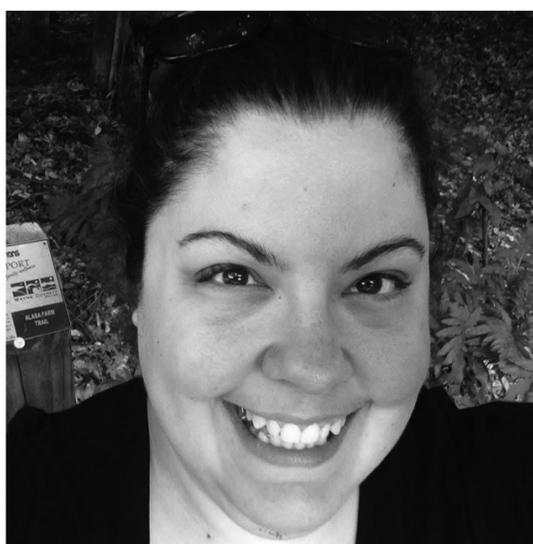
Full of Farm Planning

The Wayne SWCD's NYSAEM program is a County wide program that addresses whole farm planning and implementation for all farms with a systematic approach for care of clean water and environment. This project focuses on soil health impacts to include stabilization and nutrient control. Since Wayne County has a wide variety of commodities with direct correlations to water sources such as Lake Ontario and the Seneca River watershed. We try to find projects that are flexible enough to be considered for adoption by any commodity from field crops to forage and fruit to vegetables.

Wayne County has over 50+ miles of the Lake Ontario South Shore being a main part of the natural resource gems for water sourcing and tourism. It is a main focus of the NYSAEM program strategic plan on a whole watershed perspective which includes the six embayments and many direct contributory watersheds to Lake Ontario. Because of the unique nature of the hydrologic soil, lake wind erosion and heavy storm systems that come off Lake Ontario in Wayne County, therefore it is critical to have farmers use cover crops, forage planting, in orchards between tree planting and immediate cover following new construction. The three components of this grant application will be part of AEM participation and will assist in the planning process for volunteer farmers that wish to better their strategic process for environmental stewardship.

Contact Ron Thorn or Ian Priestley for a consult today.

District Welcomes New Conservation Secretary/Treasurer



Bethany Comella – As the Secretary/Treasurer, Bethany's role is to serve as Secretary to the Board of Directors, manage the District's finances, and deal with office needs as they arise. If you've mailed us a check she's probably seen it, if you've receive a check from us she's probably written it, and If you call us, you will most likely reach her! Her favorite parts of the job, besides the great people, are working with the board, the opportunities for

training and further education, and when the checking account reconciles on the first try.

Bethany joined the Soil & Water staff in June of 2019. Previously, she worked for five years at Park Presbyterian Church in Newark, and for Hochstein School of Music in their Canandaigua location. Bethany's educational background includes a bachelor's in History from the College of Wooster in Wooster, Ohio, and a master's in International Studies from St. John Fisher College in Rochester. She is the founder of a children's clothing closet in Newark called "Common Threads," and has served on the Wayne County Trail Works board of directors for nearly five years, as both Treasurer and Vice-President. In her spare time, she enjoys cooking, traveling when possible, playing with her cat Oreo, and tackling never-ending house projects.

Wayne County has over 50+ miles of the Lake Ontario South Shore

In 2019, the New York State Executive Branch unveiled an initiative that would build the shoreline resiliency and economic development helping Lake Ontario communities for future storm events. The NYS REDI.

The District is working with the County of Wayne to manage two of the shoreline projects that address barrier protection for the communities of Port Bay, Town of Huron and Town of Wolcott and Blind Sodus Bay, Town of Wolcott. These two projects will be in project review with various NY State agencies due to their ownership. In partnership the local and state level will improve the habitats and mitigate erosion through a systematic land management approach.

Agricultural Funding Opportunities

Agricultural Non-point Source Abatement and Control (Ag NPS) program is designed to assist farms with addressing concerns for potential pollution and providing water quality protection.

The Climate Resiliency Farming (CRF) program was developed to address farming resiliency opportunities to the increased fluctuations of the weather. This program not only address water quality protection, mitigation and improvement but also quantity.

Finger Lakes Lake Ontario Watershed Protection Alliance (FLLOWPA) program address all water quality related needs around Wayne County. The fund includes an annual farming Best Management Practice (BMP) System with a direct relation to water quality.

New York State Grown & Certified: Specialty Crop Program addresses farm operation related issues regarding economic development and environmental stewardship for farms that are eligible for NYS Grown and Certified. The list for New York Grown and Certified eligible commodities can be found by viewing: <https://certified.ny.gov/>

NO-Till Seeder Drill Rental

Seeder Till Drill for rental. The drill has a planting width of 10' with 7" row spacing. Great Plains Model 1006NT. \$50 delivery/set-up fee + \$15/acre

Contact Chris Hotto

315-946-7200

\$15/Acre

Field Craft Farms, Town of Ontario & Williamson, NY Program: Agricultural Non-Point Source Abatement & Control and USDA EQIP

In 2019, this growing farm operation took steps through two different programs to address the needs of managing nutrient distribution (manure) during times that were appropriate for planting needs. This manure storage system includes an above ground concrete reinforced tank, vegetative filter system, cover and containment for pump-out and a loading pad. This system will allow the farm to store the nutrient wastes from the farm and use them when weather, time and crop season is available. See, manure has a huge value to a farm and since the animals produce much of it each day as a waste stream, the farms have a resource for crop production that they now do not have to buy. Fertilizer prices continue to inflate. By using on farm nutrient sources, this is a less cost to production of feed and other crops and is recycling a waste stream. A win-win for the farm and the environment.



BEFORE

DURING:

AFTER:

Agriculture

Agricultural Environmental Management

Is the #1 industry in Wayne County



Agriculture is the number #1 industry in Wayne County. 18% of the County's acreage, totaling 159,093 acres, helps support local jobs, economic development, food sourcing and environmental stewardship (2017 Census of Agriculture). 14 of 16 commodity products recognized by the Census are produced by the 829 farms in Wayne County. It is a huge opportunity for the region.

One of the largest wins for Wayne County is the land stewardship that goes hand in hand with this industry. Many of these farms support the notion of addressing water quality through conservation and land management. They look to be on the forefront of managing technology, input costs and providing a balance of different operation techniques to manage their businesses. Overall, the farms in Wayne County work through the process to create goals and ultimately develop a plan to address areas of concern within their land stewardship.

In 2006, a group of farmers in the Sodus Bay watershed across three towns, joined forces with many of the local municipalities to address the needs of the water quality. The District was called upon to work with these farms to begin addressing Certified Nutrient Management Plans (CNMPs) to manage potential Non-point Source pollution. At the time, there was an option to begin this planning through a New York State Department of Agriculture and Markets program. This initial grant program was the beginning of what now is a long running program here in the County called

the NYS Agricultural Environmental Management (NYS AEM) program.

2019 marking the 75th year for the Conservation in the Community, the District has worked with over 740+ farms since 2006, providing planning throughout all 15 towns in the County. 364 farms are currently participating in the AEM program at various stages of planning and through five different programing opportunities that have developed due to changes in NYS's local economy and regulation. While farming is a tough industry to maintain because of constant changes in supply and demand, there are farm business transitions every year. Wayne County remains on the forefront of water quality and land stewardship and while farm businesses do change, the amount of acreage within Wayne County's Ag Industry has remained constant with little margin of change in the total acres in the last 25 years.

The need for farm support for technical planning continues to grow and be asked for. The County has prioritized this need and the team at the District has grown from one planner to a team of three planners, two field design technicians with a total of five staff members to support the four different program areas within the NYS AEM program.

These programs continue to address the local needs for water quality by planning and implementing farming systems that address areas of concern for prevention and mitigation of pollution. Wayne County Soil & Water Conservation District, USDA Natural Resources Conservation Service, USDA Farm Service Agency, Wayne County Agricultural Economic Development Board, Cornell Cooperative Extension of Wayne County and Wayne County Farm Bureau host a network of opportunities to preform support based on the needs of the Ag Industry of Wayne County which continues to address the Core of Opportunities that are yet to come.

Conservation Farm of the Year



2019 Wayne County Soil and Water Conservation District's Conservation Farm of the Year has been awarded to Humbert Farms because of their dedication and commitment to protect and conserve the natural resources within our community through the New York State Agricultural Environmental Management Program.

The family run farm is located in the Town of Rose on Lakes Corners -Rose Valley consisting of 3400 acres of owned/rented property with the majority of the commodity in field crops.

The Humbert family, Mark, and son Ethan, have participated and

even volunteered to demonstrate implementation of several farm management projects to keep their farm on the forefront of conservation; working with neighboring farms to carry out crop rotation, crop cover, manure sharing, natural resource sharing, irrigation and best management practices implementation. The farm utilizes minimal tillage conservation systems, green fertilization techniques, conservation crop cover for year round protection of soil erosion and are consistently working to minimize their impact on central Erie Canal system and Greater Sodus Bay. These BMPs limit damage to the aquatic life and protect recreational uses of streams and waterways they flows into, providing community sustainability and protection for the future.

FARM SUPPORT PROGRAMS

- Non-Point Source Abatement and Control
- Climate Resiliency Farming
- New York State Grown & Certified: Specialty Crop
- Conservation Cover & Soil Health Management

Conservation Farm of the Year Photo above: (Left to right) Mark Humbert, Ethan Humbert & Jacob Flowers.

Environmental Steward Award

In 2019, the Ag Technical Committee in Wayne County took a hard look at many of the nominees for this years' award and decided it was time to honor constant community contributors. Who better to receive the award but the people provide guidance to Conservation programming every day! Both recipients of the Agricultural Awards in 2019, are Board of Directors of the District.

Patricia (Pat) VanLare of Sodus N.Y, has been awarded the 2019 Wayne County Agricultural Environmental Steward award. The award was created in 2011 as a grassroots recognition of individuals that strengthen the Wayne County agriculture community while looking out for environmental sustainability. An agricultural steward is someone who is dedicated to being agriculturally minded, environmental and conversationally sound and having the balance for them both economically.

Pat VanLare has supported agriculture through her personal work, serving as a community advocate for local and sustainable family traditions and local environmental related issues in Wayne County. She supports local programs that educate people where what and how food reaches farm to table, NYS Envirothon and Sodus Central Schools as a home economics instructor. She has been an active participant in the Wayne County Pomona Grange, serving at the State and Regional Grange levels and a Board Member of the NYS Grange Museum for many years. Pat serves on the Wayne County Soil and Water Conservation District's Board of Directors as Vice-President and sits on the Wayne County's County Fair Advisory Board as a volunteer coordinator.



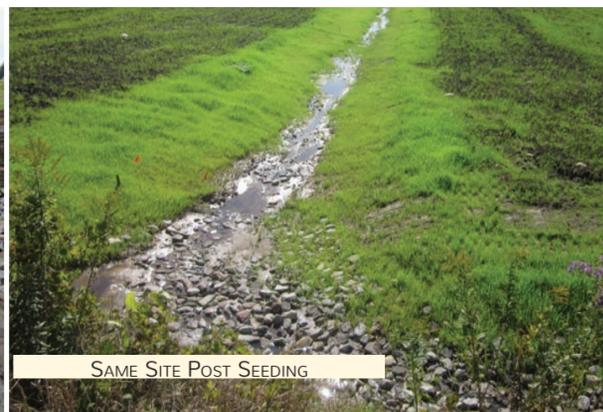
Humbert Farms, North Rose

Building agricultural resiliency through watershed sustainability

Water Management for farming fields can be some of the greatest challenges. Through the Climate Resiliency Farming (CRF) Program, Humbert Farms took steps in 2015 and converted most of their farm acreage from conventional tillage practices to Strip-tillage which only affects the direct planting zone for the crop and leaves a moisture barrier, provides weed mitigation and reduces annual erosion to top soil, a valuable crop need for the best crop production. Although the farmers continue to regard the acreage with constant planning, this specific 100 acre field because of its unique topography were still experiencing gully erosion across several portions of this field. The farm installed a Water Management System using Water and Sediment Control Basins (WASCOBs), Subsurface drainage, outlet management filter strips, diversions and swales.



WATERWAY SWALE OUTLETS BEFORE SEEDING



SAME SITE POST SEEDING



Cost Shared through the NYS Environmental Protection Fund

Denitrifying Bioreactor

A Denitrifying Bioreactor (DNBR) is an underground bladder that received storm flow through a bed of wood chips with provide biding opportunity for nutrient filtration before reintroducing the water back into the watershed system. Humbert Farms maintains many acres around an area of drumlins within the Sodus Creek Watershed to the great Sodus Bay. With interest from the farm and District's Ag Implementer, Terry Reynolds, the design for this Denitrifying Bioreactor will address over 12 acres of potential nutrient runoff for the next 10 years.



STEP 1: INSTALLING BLADDER



STEP 2: ADD 1x1 WOOD CHIPS



STEP 3: SEAL BLADDER AND COVER



STEP 4: CONSERVATION COVER

WAYNE COUNTY

SOIL & WATER CONSERVATION DISTRICT
 7312 RT 31 Lyons, NY 14489
 315-946-7200

Conservation Concerns?

Contact the AEM Planning Team at Wayne County Soil & Water CD