



Conservation at the Core of Wayne County

Conservation Cornerstones Of Wayne County

Conservation continues to grow in communities with the support of local funds. In 2021, Wayne County and the public supported the Soil & Water Conservation District between a County Appropriation and 3 contract agreements a total of \$434,000.00 without the Resiliency & Economic Development Initiative (REDI) funds. The return on the investment was 4x in State and Grant funds with a total budget of \$1,564,543.00 implemented in on the ground conservation and outreach in 2021. Results have been a stable return on investment since 2018.

Continuous local partnerships, environmental planning for infrastructure, and water quality improvements make local communities thrive through all aspects of community conservation and health.

“Wayne County has something to be proud of! The community conservation effort continues to be a priority and very active,” says Lindsey Gerstenslager, 10 year District Manager of Wayne County Soil & Water Conservation District. “These 8, full and part-time staff members are diverse in technical know-how and work with the Wayne County community on ways to improve the quality of life through conservation, and water quality.”

The many communities in Wayne County take pride and are sustainable. Landowner Associations, Garden Clubs, Ag Organizations, Rotarians, and rural landowners are seeking information to continue land management. In 2021, the District evolved the technical assistance program to allow landowners and municipalities to formally apply for technical assistance through the District’s website. This change in process allows the District to assign and support the community more efficiently, while cataloging and analyzing trends in real-time and in future adaptations.



Water Quality Milestones

www.waynecountyNYsoilandwater.org/gethelp/

- Water Quality & Land Use Plans 235
- Watershed Management Planning 3 in progress for Bear Creek, Mill Creek and Clyde River
- Water Quality Sampling and Monitoring 158 Samples
- Stormwater Site Visits 12
- On-site Waste Water Management System updates 23
- Streambank stabilization projects 2
- Stream corridor crossing projects 2
- Volunteer Wetland Restoration Projects 1
- Critical Area Seeding 6.01 acres
- Invasive Species Management Areas reviewed, managed and implemented by volunteer projects 9
- Aquatic Vegetative Control Management on 3 of the 6 Wayne County Embayments totaling 2566 tons of nutrients removed from water ways
- General Stream Management 5
- Fish Pond Stocked 32

- Waterway Outlet Management for Emergency Services in partnership with landowners 6
- Planning activities for general conservation 64
- Road Stream Culvert Assessments 80
- Tree & Shrub seedlings distributed 9,075
- Wildlife Houses distributed 18
- Pond Consultations 12
- Conservation Tillage Rental Program 19 renters
- Barley Straw Rolls for Pond Assistance 90
- Ag Assessment Worksheets 210 service 9,933 acres of land
- Certified Crop Advisors 2
- Certified Stormwater Inspectors 2
- Ag Best Management Practices implement 27 on 13 farms
- Natural Resource Training on technical management options hours 100
- Ag Drainage performed 4.4 miles
- Strategic Planning Processes with County and State Partners 4



Agricultural Environmental Management

Youngman Farms, Butler NY Alan & Shawn Youngman



Youngman Farms, a beef operation averaging 150 head of cattle is located in Butler, NY. Alan and Shawn Youngman who operate this multi generation farm, pride themselves as good stewards of the environment. The farm is sited a top Wolcott Creek, a direct tributary into Port Bay. The farm has worked with Wayne County SWCD for over ten years and has previously implemented a Livestock Heavy Use Area Protection Run-Off Management system and converted a 36 acre cash crop field to a rotational grazing system. Adjacent to this pasturing system is an out of use barn. Looking to manage their nutrient better and using the NRCS BMP standards (shown in parenthesis), the farm put in a Heavy Use Area Protection

The Youngman family has been farming for generations and as good stewards they are very involved in the communities of Wolcott and Butler

(561) connected to this barn. Included in this design is a push wall for ease of scraping the area as well as a corner for stacking manure. This will provide the farm with more time to store their manure and wait for prime spreading conditions. Also implemented were Roof Runoff Structures (558) cutting off clean water that would mix with manure. An associated Vegetative Treatment Area (VTA) (635) was also put in to treat contaminated runoff from the Heavy Use Area (HUA) located in an area that does not remove pasture / crop land from the farm.

Salute to Terry Reynolds, Sr. District Technician

In 2021, the District Team wishes to salute Terry Reynolds, Part Time Sr. District Technician and Ag Implementation Specialist, retiring for one month shy of 11 year commitment to Wayne County Agriculture. While Terry held tenure in Wayne County he helped many farms manage erosion, stormwater issues, clean water exclusion, demonstrated and researched new methods of implementation for addressing nutrient loading through new technologies, encouraged farms to look into new methods and was a mentor to several members of the District staff in design and engineering techniques and project management practices. Terry always carried a kind heart on his sleeve and a good joke when you least expected it. He left templates and notes and memories with the staff that will last for the many years to come. His presence is missed but we are glad he stays in touch!



- 2021 Board of Directors
- Mark Humbert – Chair ,Farm Bureau,
- Lynn Chatfield – Vice Chair, County Legislator
- Steve Olson – Treasurer, Member At Large
- Patricia VanLare – Grange Representative
- Jake Emmel – County Legislator

- 2021 Conservation Staff
- Lindsey Gerstenslager MSED, District Manager
- Bethany Comella, Conservation Sec./Treasurer
- Ronald Thorn, CCA Conservation Program Manager, Ag Planner
- Chris Hotto, CPESC., Senior District Technician
- Scott DeRue, NYSEPESC., Senior District Technician
- Ian Priestley, CCA, District Technician, AEM Specialist
- Drew Starkey, District Technician , Program Specialist,
- Maxine Appleby, Conservation Public Relations Specialist

Water Quality Improvements

Source Water Protection Funding for Wayne

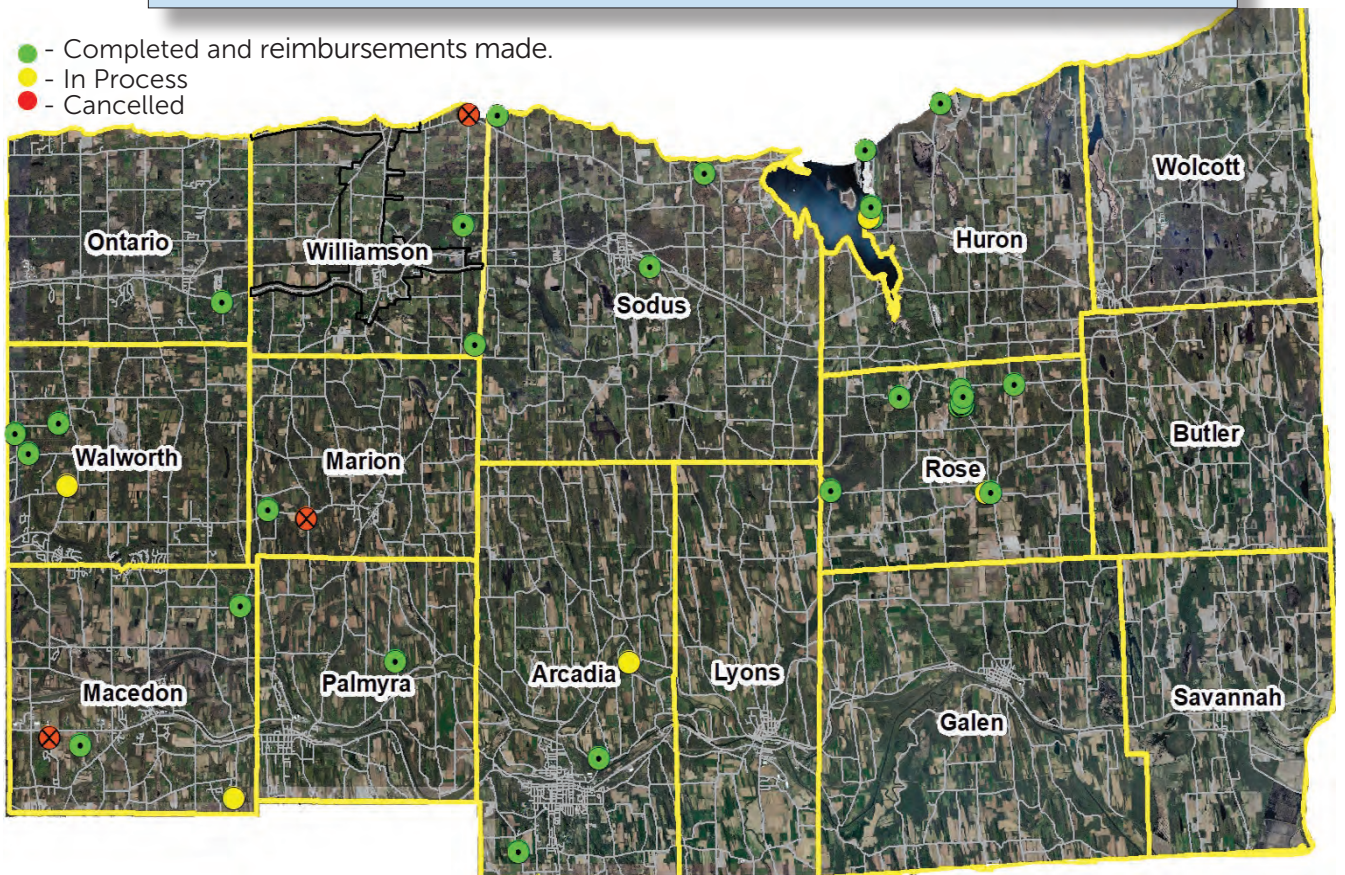
In 2017, New York State Legislature approved a \$2.2 Billion dollar funding package for Source Water Protection Funding to support communities through Water Quality improvement. It was made available to Wayne County in 2019. One of the positive programs from that funding allocation was to support local communities in septic improvement in watersheds that directly contribute to source water (drinking water.) Lake Ontario and several smaller Municipal areas in Wayne County through ground water aquifers are important areas that need regular septic review for drinking water.

While Wayne County's rural communities have a substantial sewer system, there are still individual residential systems that are standalone on-site waste water systems that need regular maintenance and review. While general maintenance of a system is between \$300-\$500 dollars for inspection and pump out; other repairs can increase quickly and be in the \$2,000-\$10,000 range depending on

\$150,000.00 was awarded to Wayne County from The Septic System Replacement Fund. The average reimbursement for 34 projects was just over \$4,400.00.

SEPTIC PROJECT REPLACEMENT PROGRAM 34 projects were funded by the program

- - Completed and reimbursements made.
- - In Process
- - Cancelled



soil types, system size and age of the system.

This was funded through New York State's Environmental Facilities Corporation with the goal of protecting water quality by installing, upgrading, or replacing failing septic systems. The County subcontracted with the District as the water quality agency to manage the program on behalf of the County. The program awarded grants to property owners project cost. Each project was eligible to as

reimbursements that covered 50% of the receive 50% up to a maximum of \$10,000.00. A total of 34 projects were funded. Reimbursements ranged from \$1,150.83 to \$8,772.69.

The District received an abundance of applications and inquiries for the program. All of the funding has been allocated to existing projects. Unfortunately, Wayne County was not approved for an additional round of funding from the State.

With such a large demand, the District requested, and received an additional \$19,000.00 from the County to support the remaining State approved projects. The funding will cover the cost of 4 additional septic projects that are within close proximity to local waterbodies and have a greater public impact if they were left unrepaired.

Environmental
Facilities
Corporation

Agricultural Drainage Program

Land Management for Water Quality along Weidrick Road

The Wayne County Agricultural Drainage Program has been implemented by the District since 1987, and had several large projects with failing infrastructure for 2021. Budget restrictions were placed on the program due to response related to the pandemic. Slated was maintenance for 2 drainage corridors more than a 1/2 mile long with several failing culverts installed in the original project (1988) for farm crossing to mitigate stream bed disturbance.



Ditches can be vegetated, which slows down the flow rate, lessening the chance of flooding



Ditches can be beneficial to crops because well drained soils promote root growth



The purpose of the Weidrick Road project was to assist in the control of floods and mitigate crop damage.

In partnership with Wayne County, NYS Department of Agriculture's Soil and Water Conservation Committee State Aid to Local SWCD's known as Part B allocation (\$6,000), contributed to the replacement of the failing pipe.

This cost share provided assistance to 15 additional landowners affiliated with minor tributaries in the Red Creek West watershed. The additional funding allowed the project to be completed and to mitigate flooding to more than 49 acres of prime vegetable muck land and 400+ field crop acres.

Decker Excavating completed the work on the project. Due to various types of crops along the drainage course, work on the project was completed over a couple months to avoid crop damage.

The project encompasses over 2.5 miles of drainage course, all of which was mowed and minor dredging where needed.

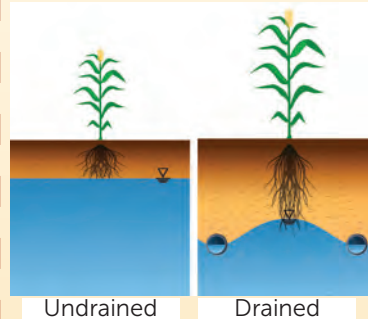
There are also two crossing on the project that need improvement work. Due to the wet weather and time of the year in 2021, the pipes were purchased and are awaiting installation.



Your Questions Answered

What are Drainage Ditches Used For?

Ditches are a very deliberate construction and an agriculture design strategy. Most of the ditches you might see along side of rural roads are meant to draw water off roadways for safety and transfer water to filter areas or corridors with capacity.



Ag drainage ditches typically divide fields and connect to a trunk with adequate vegetation for filtration and water transport off of fields for better root establishment and growth. Removing excess soil water with drainage can also help the soil warm up faster in the spring, allowing for earlier planting. (Illustration credit: The University of Minnesota Extension)

FISH SALE

Barley Straw & Triploid Grass Carp to Control Aquatic Vegetation

Sportfish for stocking
PERCH, LARGEMOUTH, CRAPPIE, BLUEGILL

Orders with payment by
FRIDAY APRIL 29TH

waynecountyNYsoilandwater.org/fish-sale
315-946-7200

Water Quality is the Beginning and End of Community Health

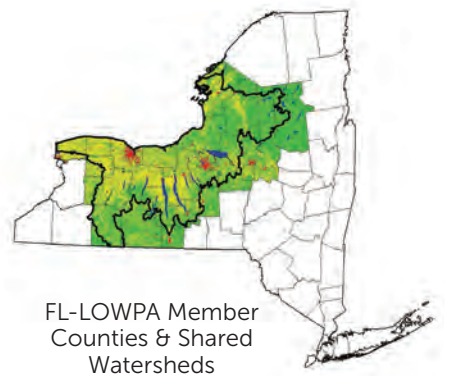
What is FLOWWPA?



The Finger Lakes-Lake Ontario Watershed Protection Alliance (FLOWWPA) has a primary mission to encourage and coordinate watershed partnerships that result in the implementation of plans to protect and enhance water quality and water resources. FLOWWPA promotes the sharing of information, data, ideas, and resources pertaining to the management of watersheds in NY's Lake Ontario Basin, and fosters dynamic and collaborative watershed management.

FLOWWPA-member counties are wholly or partially in the Lake Ontario watershed. The 25-member counties of the Alliance develop a more regional perspective that informs local programming and encourages cooperation. Water quality and resource concerns are identified and solutions are developed and implemented at the local level.

The Water Resources Board (WRB) is the governing body of FLOWWPA and is comprised of 1 voting member from each participating county. Members selected are often from multiple agencies including Soil and Water Conservation Districts, Co. Planning and Health Departments, and Water Quality Management Agencies. Through the support of a committed delegation of legislators representing the 25-county region and the Executive Office, the major source of funding for FLOWWPA is provided through the NYS Environmental Protection Fund (EPF). Each county receives an equal share of funding to carry out water quality programming. In many counties, FLOWWPA funds leverage additional monies through grants and local appropriations, which is estimated at over \$2 million for each year of FLOWWPA funding.



FLOWWPA Programming efforts in Wayne County:

1. Nonpoint source pollution management addressing stream corridors, agricultural, and erosion.
2. Watershed monitoring & water quality sampling program– Wayne County has 19 watersheds.
3. Invasive species management.
4. Public education and outreach for continued water quality connection to healthy communities.

WATER FACTOIDS



There is the same amount of water on earth as there was when the earth was formed.



The water from your faucet could contain molecules that dinosaurs drank.



A Cucumber is 95% water and watermelon 92%



The Great Lakes are 84% of North America's surface fresh water about 21% of the world's supply of fresh water



Water composes of two elements. 2 parts hydrogen and 1 part oxygen = H₂O.



A person can live about a month without food, but only about a week without water.



75% of a living tree is water.



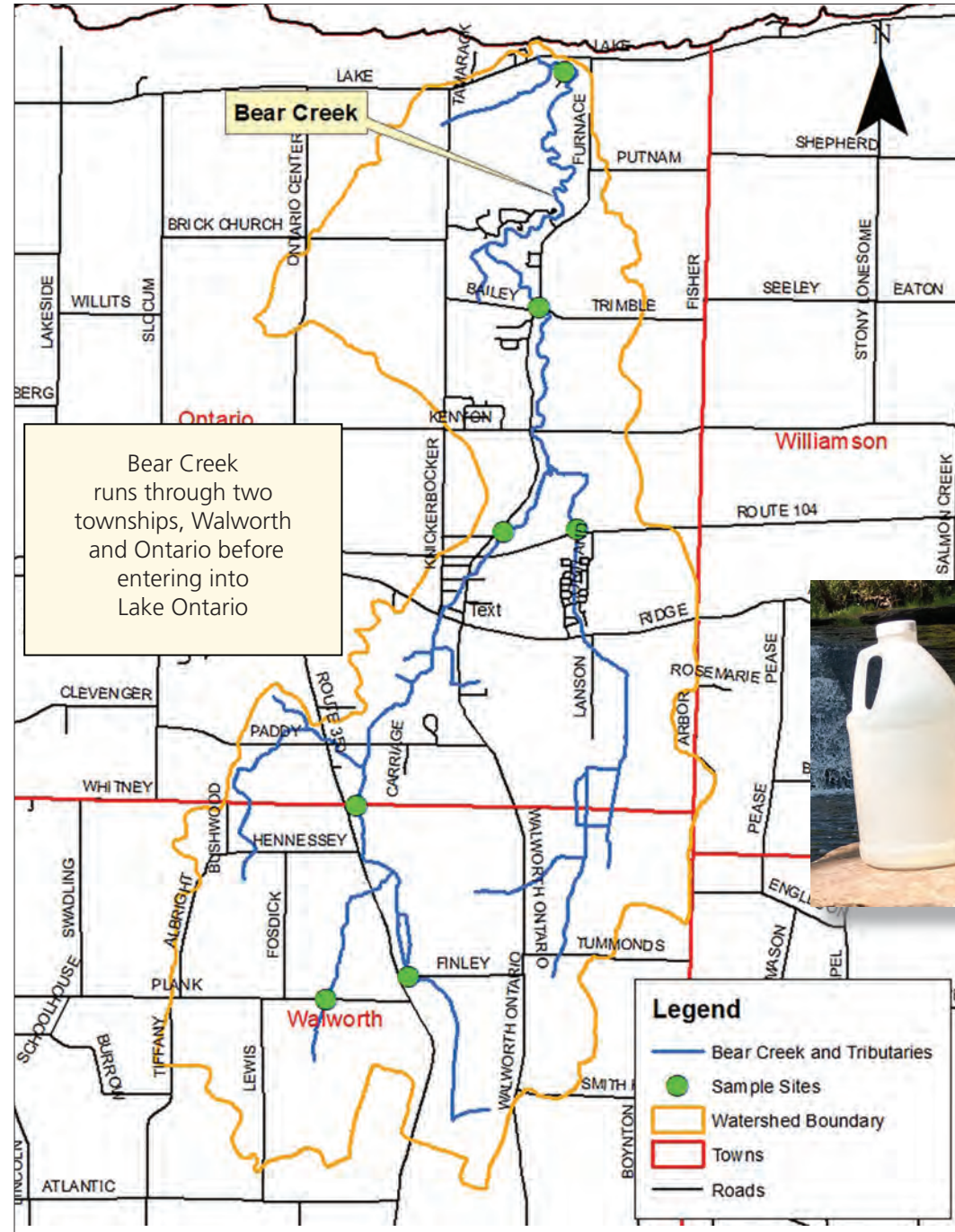
Water regulates the temperature of the human body and also earth's temperature.



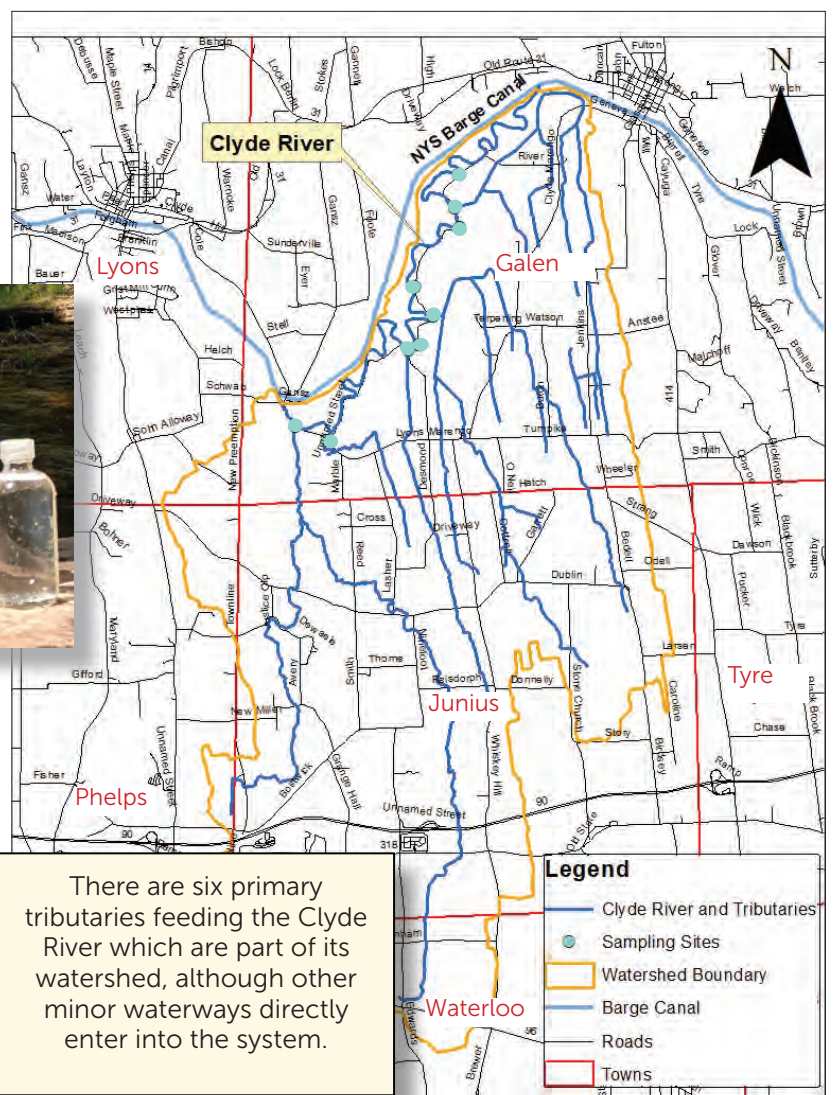
Watershed Monitoring & Sampling Bear Creek and Clyde River

Bear Creek spans the towns of Walworth and Ontario, and outlets directly into Lake Ontario. This sampling project helped to identify potential pollution sources, soil erosion concerns, and outfall mitigation projects. This was a linear assessment of the tributaries to establish a baseline of nutrient- and sediment-related concerns. There were 7 sampling sites for this project where samples were collected over a 2-year span during the spring, summer, and fall. This provides an accurate representation of the water quality of the stream.

The **Clyde River** is a main tributary to the Seneca River. It originates in the Town of Lyons and flows from west to east before emptying into the Seneca River at Montezuma National Wildlife Refuge. A majority of the original river was channelized to form part of the Erie Canal. A number of tributaries feed the Clyde River along its course. This sampling project was developed to provide key water chemistry and field data to the tributary streams of the Clyde River. Rain and snow-melt events present the best situation to evaluate the runoff contributions of the watershed. Samples were collected from 9 sites for a period from 2019-2021 to provide an accurate representative of the tributaries.



The watershed assessment process identifies and provides valuable information that town and county leadership can use to prioritize mitigation within their annual plan of work. The end product of these processes can also be used to assist the town and county in pursuing grant funding for any required work.



2021 Invasive Species Education



The Invasive Species Calendar is one tool the District and partners have used to educate the community to better understand the threats that aquatic and terrestrial invaders have on the community. The calendar showcases the top 12 threats to Wayne County each year. In 2022, three new invaders were featured: Spotted Lantern Fly, Mile –a –minute weed, & Policeman's Helmet.

Lantern Fly, Mile –a –minute weed, & Policeman's Helmet.

April 23rd, 2022 Great Lakes Watershed Cleanup



2022 Clean Up Planned
April 23, 2022
10:00 A.M. - Noon
Sodus Point Beach & Camp Beechwood

The District is joining up with Ontario-Walworth Rotary, Sodus Rotary, Neighborhood Association of Sodus Point for an Earth Day Event

Refreshments and Prizes!

Meet Up at either location - we have supplies



Conservation is Managing Economics and Environment through Land Management

Cooperative Stewardship through State Support

Each year the District works to earn funding from New York State Department of Agricultural and Markets through performance deliverable to benefit local communities. "Conservation is a priority in local communities and the State values the partnership between locally led District's and the ability to get the boots on the ground and work complete," says Lindsey Gerstenslager, District Manager. This funding is known as State Aid. In 2021, the Wayne SWCD's State Aid budget was \$133,483.40. This was combined with County funding to support over \$345,000.00 of conservation locally. Decisions on how this funding is spend is allocated by the SWCD's locally appointed Board of Directors.

Programs that are supported in the State Aid programs includes:

- Conservation Tillage Management program which includes the No-Till Drill program
- Strategic Watershed Planning with local communities and State Agencies
- Tire Recycling Program
- Forever Green Tree Sale
- Critical Area Seeding through Hydroseeding and straw mulching
- High School Conservation Education Envirothon
- Lower Ganargua Creek Stream Corridor Management Planning
- Habitat Improvement Project on Lower Ganargua Creek
- Soil Health Nutrient Sampling
- Municipal Assistance Program support for infrastructure management

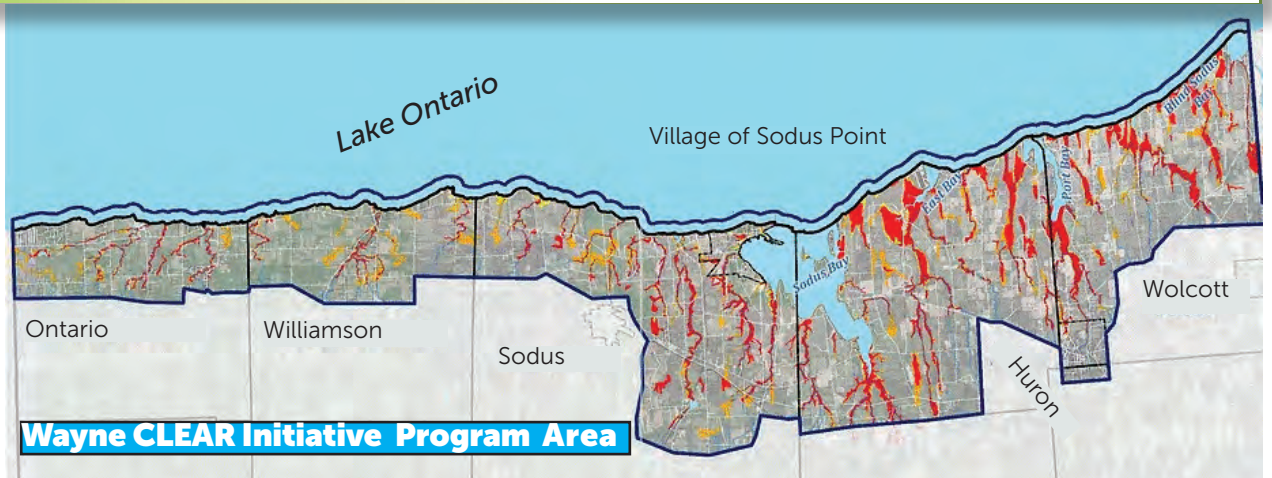


Critical Area Seeding of 6.01 acres by hydroseeding

Strategic Watershed Planning with Local Communities and State Agencies

In 2021, the District and several community leaders in Wayne County participated in a New York State Department of State strategic planning effort for Lake Ontario Shoreline long term management. The goal of the program was to address local assets that have an impact on the shoreline communities' ability to be sustainable.

The Wayne County Coastal Lakeshore Economy and Resiliency (CLEAR) initiative aims to help shoreline communities identify ways to increase their long-term resilience to variable lake conditions, including high and low water levels flooding, and erosion. The CLEAR initiative will engage local communities over the next several months to develop a long-term strategic plan for coastal resiliency. This survey will be the first of several opportunities for public input. For more information visit: <https://www.waynecountyclear.com/>



Overall, the planning process through CLEAR provided a foundation for more partnership and funding opportunities in the future. From this CLEAR Initiative, the Wayne County Shoreline Steering Committee was formed and still meets every 4-6 weeks to discuss the next steps of the CLEAR outcomes and the management of the identified community assets.

Landowner Assistance Program

This program assists Landowners with **Natural Resource** issues such as flow restriction, sediment blockage, bush/debris blockage in stream, increase water quantity, seasonal flow increase, erosion concerns.
www.waynecountyNYsoilandwater.org/gethelp/

Habitat Improvement for Flood Management



The overall project will improve habitat and reduce water quality impacts.



Red Creek East Sub Watershed to the Central Canal Corridor in Wayne County was part of a Watershed Assessment completed in 2018. This project site, funded through State Aid, was chosen due to the sensitivity of erosion and sedimentation into the stream corridor for flood plain management.

Through the Landowner Assistance Program, the District provided technical assistance to a private landowner who sought guidance on how to improve waterfowl habitat on their property. The area of interest was a small backswamp that would seasonally flood from upland runoff and make access to other areas of the property difficult. Through a site evaluation, the District and the landowner concluded that a "tree gap" could be converted into a shallow wetland. The landowner procured a contractor experienced in wetland construction and all three parties worked out the design characteristics and the appropriate spillway location. Construction occurred in the fall of 2021 and final vegetation will be established in spring of 2022.

Conservation Land Management Programs



For 2021, 14 farms participated in soil health testing, with 32 soil tests on 2200+ acres; reviewing nutrient needs for commercial vegetables, field crops and fruit.



For 2021, 16 farms participated with rental of the No-Till Drill; 236 acres installed of hay seedings, cover crops, waterway buffers & pasture.

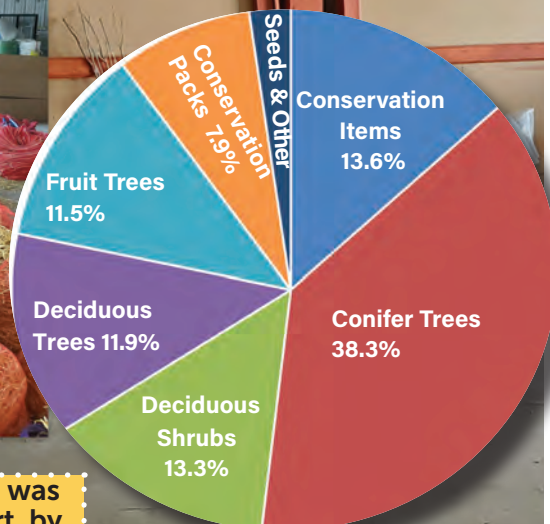
Forever Green Tree & Shrub Sale - 9000 Plants Sold

The 2021 Forever Green Tree & Shrub Sale proved to be another successful program. We sold out of most of our plant stock before the sale was scheduled to close. In 2021 the District offered new items to our catalog including erosion-control seed mix, pollinator-habitat seed mix, individual daylilies, previously only available in conservation packs. Conifers were the top grossing products and constituted nearly 40% of our total sales revenue. Norway spruce, white cedar, Colorado blue spruce, and white spruce were most popular species.

Blueberry, elderberry, and river birch were the most popular items from the fruit bushes, deciduous shrubs, and deciduous tree categories, respectively. The pie chart left, breaks down the total sales percentages by category for the 2021 tree sale.



The 2021 Tree & Shrub Sale was a GREAT conservation effort by Wayne County residents



Tire Recycling Program



In 2021, the District worked to coordinate efforts with Town Clean Up days for Tire Recycling in eight Towns around the County in partnership with Nucor Steel of Auburn NY to recycle tires to make rebar.

FARMERS
GREAT PLAINS MODEL 1000T
Seeder-Tiller Drill Rental
\$15/Acre
\$15 acre + Set-Up
Contact Ian or Chris
315-946-7200

Agriculture

Agriculture Environmental Management in Wayne County

Agricultural Environmental Management



Agriculture Environmental Management (AEM) for Wayne County is an amazing adventure each year. The program has grown from primarily livestock and field crops to include much of our fruit and vegetable farms as well. Every commodity is represented including apiculture and Christmas trees. Agriculture is the number one industry in economic revenues and jobs in Wayne County and having a technical staff

and partnerships through Cornell Cooperative Extension, United States Department of Agriculture's Natural Resources Conservation Services, Wayne County Farm Bureau, Wayne County Pomona Grange and the Wayne County Soil & Water Conservation District provides coverage for managing many of the technical issues surrounding environment, economics and ethics for farming. The New York State AEM is over 20 years old across NYS but about 12 years old at the end of 2021 in Wayne County. Ronald Thorn, Clyde, has been managing the program with two other technical staff members since 2012. "Besides COVID's response from the supply slowdowns and partnership restrictions, 2021 offered some major challenges in

the weather for all commodities," says R. Thorn, "Through planning and infrastructure improvement farms will be able to manage for good food production and adapt." Ian Priestley, Palmyra, and Christopher Hotto, Sodus specialize in planning and implementation on various types of farming in support of the overall program efforts. The program has grown from technical farm plans to implementation strategies, crop rotations, soil health improvement, critical area seeding, conservation tillage, specialty crops and addressing issues for stormwater/drainage and nutrient filtration. In 2020 & 2021, the NYS AEM program offered local County programs an additional \$100,000 to fund implementation projects at the local level through planning

prioritization and the District's Board of Directors directives. The design planning for the 4 farm projects selected were planned in 2020 in the midst of pandemic related issues and finally implemented in 2021.

**Planned acres
3234 on 9
farms, with
over 20 new
participating
farms to the
program**

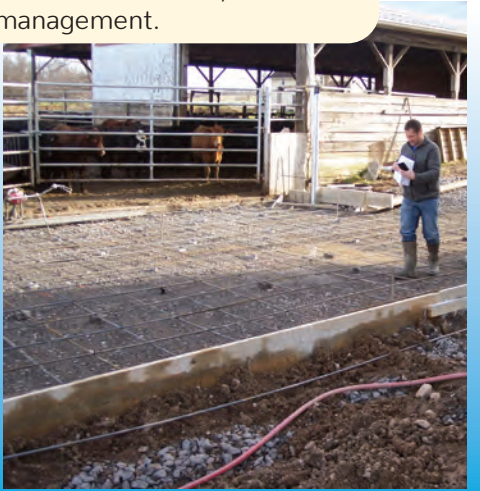
Craft Family Farm LLC, Clyde NY

Before Implementation, barnyard run-off was entering field crops.



Installed a Livestock Heavy Use Area Runoff Management System and Erosion Control System to address surface water management from entering the barnyard area and runoff into field crop fields adjacent to the facility and to the a tributary of Clyde River sub-watershed to the Seneca River Watershed.

New pad and curbs added to control run-off, and add ease in farm clean-out management.



Glad to Know Ya Farms, Marion NY

Installed an Irrigation Water Management system to address 50 acres of strawberries, apples and cut flowers within the rotation that addresses local fresh markets. In addition, they managed surface water and diversion for the crop land by installing an Erosion Control System – all addressing runoff issues around Salmon Creek East (Maxwell Bay) watershed.



The new irrigation system helps ensure the farm has a stable crop and manages its water supply more efficiently.



Three Maples Farm, Sodus NY

Installed a Livestock Waste Storage & Transfer system in partnership with USDA's Natural Resource Conservation Services to address manure application timely for green fertilizer to field crops for the farm and keep runoff nutrients from occurring in winter and times of heavy precipitation in areas of Salmon Creek East (Maxwell Bay) Watershed.

Before implementation - a denuded barnyard with resource concerns including run-off to near by headwaters of Salmon Creek East.



After implementation - new Livestock Waste Storage & Transfer system; gated for farm safety and management.

Installed Exclusion Fencing and Stream Corridor Crossing to manage a 20 acre parcel that seasonally floods and erodes into the Seneca River Watershed. This newly installed system significantly reduces impacts of runoff through water exclusion and provides better management of reusable natural resources from the farm itself while excluding the animals from streams that flow through the pasture.

Baker Farm, Savannah NY

After implementation, vegetation was established adding a layer of filtration and saving an estimation of roughly 6 tons of per acre yearly.



Before implementation of underground water transfer.

