North Central Conservation District

Newly preserved and restored agricultural field within the Gunther Farm, now owned by the Tolland County Agricultural Center

Annual Report

Fiscal Year 2018-2019

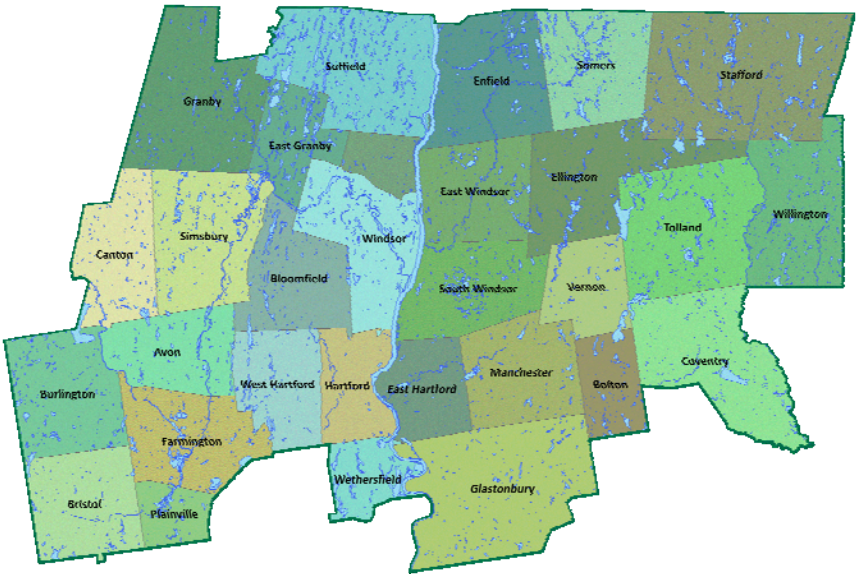
www.conservect.org/northcentral

North Central Conservation District

Introduction

This Annual Report summarizes work performed by the North Central Conservation District (NCCD, or the District) during the 2017-2018 fiscal year. NCCD is one of five Conservation Districts created by state statute to "assist the Commissioner of Environmental Protection in identifying and remedying the problems of soil and water erosion," and is a 501(c)(3) nonprofit organization. NCCD is funded through State of CT funding (Passport to Parks), municipal contributions, US EPA Clean Water Act Section 319 non-point source grants, technical assistance contracts with the Connecticut Department of Agriculture and the Natural Resources Conservation Service, an annual Plant and Seedling Sale fundraiser, and private grants and contributions.

The District is governed by a volunteer board of directors comprised of local landowners with expertise and interest in the management and protection of our natural resources. The District is an active member of the CT Envirothon Steering Committee, CT Council on Soil and Water Conservation, CT Association of Conservation Districts, and CT Resource Conservation and Development Council. Meetings are open to the public and are typically held at the Tolland County Agricultural Center, 24 Hyde Avenue, Vernon, at 7:00pm on the fourth Wednesday of each month. Visit www.conservect.org/northcentral or call (860) 875-3881 to learn more.



NCCD's service area includes 30 municipalities within north central CT, essentially comprising the area within the northern Connecticut River watershed. NCCD's office is located in Vernon.

Board of Supervisors

Jack Collins, *Chairman*	Enfield
Jeff Folger, *Vice Chairman*	Ellington
Lin Marino, *Secretary/Treasurer*	Tolland
Dan Camerota	West Hartford
Bob DePietro	Bolton
Harold Eastwood	Somers
Michael Mocko	Stafford Springs
Jane Seymour	Tolland

Staff

Joanna Shapiro	Executive Director
Barbara Kelly	Program Coordinator
Ruth Miller	Landscape Specialist
John Dudula	Natural Resource Specialist
Tina Pelletier	Bookkeeper

Year in Review

The District provided valuable *technical services* to municipalities by *reviewing development plans, verifying wetland boundaries*, and serving as the municipal *wetland agent* to inland wetland and conservation agencies in Somers, Bolton, and also in Tolland this fiscal year. Our primary services to towns included assistance to land use staff and commissions throughout the local regulatory process, and evaluating proposed *erosion control measures, stormwater management, and wetland impacts* of development projects. The District also assisted many area residents with natural resource issues; providing technical support related to *invasive plant control, native planting guidance, pond maintenance, navigating local regulations, and conservation and financial assistance programs* available for agricultural producers and landowners.

Perennials and shrubs lined up during this year's Plant Sale.

This year, we held a separate *Seedling Sale* in April, an ideal time for planting bare-root evergreens, and a *Plant Sale* in May, allowing more time for potted trees, shrubs, and perennials to come out of dormancy. These fundraisers promoted *native plants, ecological landscaping,* and open space enjoyment, and provided funds to support District programs. Both experienced Master Gardeners and interns volunteered to assemble orders and assist plant sale customers. Locations included both the Tolland County Agricultural Center in Vernon and Auerfarm 4H Education Center in Bloomfield. The District held a pollinator-focused *educational workshop* in April, entitled "Landscaping for Birds, Bees, and Butterflies Using Native Plants," presented by Jane Seymour, CT DEEP Wildlife Biologist, and Pamm Cooper, UConn Plant Technician/Educator.

NCCD coordinated the *Connecticut Envirothon program*, a natural resources competition for high school students. Hands-on workshops were held throughout the year and state, training students in the subjects of aquatics, forestry, soils, wildlife, and the current issue topic, which for 2018-2019 was Agriculture and the Environment: Knowledge & Technology to Feed the World. The field day competition was held on May 16 at Spring Meadow Farm in Tolland. This year's champions from Housatonic Valley Regional High School advanced to compete in the NCF North American Envirothon in Raleigh, North Carolina.

Beautiful CT Envirothon day at Spring Meadow Farm

Students working on the Forestry test

Winning team from Housatonic Valley Regional HS

Open for project information

Grant/Project Work

Clean Water Act Nonpoint Source Project Updates

This fiscal year, significant progress was made toward completion of several projects with funding through the EPA Clean Water Act Section 319 nonpoint source program, locally administered by the CT Department of Energy and Environmental Protection (CT DEEP). While these projects are largely in the design phase, this work represents a critical step toward implementation.

Globe Hollow Park—The District, in partnership with CT DEEP and the Town of Manchester Engineering Division, completed a fourth project from the District's previous Watershed-Based Plan/Trackdown Survey that identified potential water quality enhancement projects within the Hockanum River Watershed in Manchester. The District secured funding through a 319 grant to complete a stormwater retrofit adjacent to the Globe Hollow parking lot. The parking lot lacked stormwater management, and runoff sheet-flowed to an unpaved area before reaching Globe Hollow Brook, which drains to Hop Brook, a major tributary of the Hockanum River (*photos of existing conditions on right*). The stormwater runoff contributed pollutants to the brook and also caused erosion, resulting in sedimentation and degradation of the brook. Utilizing the expertise of the Town of Manchester Engineering Division, two stormwater quality basins were designed to provide water quality treatment to stormwater from both the parking lot and from an outfall that discharges off-site stormwater to Globe Hollow Brook. This project was constructed over the summer of 2018. Photos to the right depict prior conditions and conditions shortly after construction was completed.

Edge of parking lot and unpaved area adjacent to Globe Hollow Brook; Gully eroding toward brook

North Branch Park River—The District, in partnership with the North Branch Park River Watershed Coordinator have been working on two CWA Section 319 nonpoint source contracts, continuing the multi-phase project adjacent to parking areas serving UConn School of Law and Hartford Seminary. One of these grants will target stabilization of an eroded channel that conveys parking lot drainage directly to the Park River. Previously installed bioretention basins now convey water to the channel in a much more controlled manner. Under the second grant, we are working on repairs, maintenance, and supplemental planting in those basins.

Construction of stormwater quality basin #1 in progress

Completed stormwater quality basin #2

Broad Brook Implementation—Following completion of the Broad Brook Watershed Based Plan Phase 2, 319 funding was secured to implement the first of many potential water quality enhancement projects within the watershed. This first project will focus on removal of two unlined manure pits and converting heavy use livestock areas into no-till agricultural fields to reduce nutrient and bacteria levels within Broad Brook. Over a century of intensive agricultural usage has contributed to impairments, yet producers are now committed to improving water quality.

View of project area 1 pasture

View of project area 2 manure pit

Completed stormwater quality basin #1 just after construction.

Completed stormwater basin #2

Farmland Restoration Grant

The District has continued to assist the Connecticut Department of Agriculture (DoAG) with implementation of the popular and productive Farmland Restoration Program, which was created to increase food and fiber production state-wide, and help farmers and landowners to reclaim former production farmland or to expand existing farmland. The program can fund various practical work that will expand agricultural production, including tree removal, well development, stump removal, access improvement, and fence installation. The District's role in the program is to provide technical assistance to producers, complete initial site inspections, and prepare *Restoration Plans*. This work has allowed District staff to assist many farms throughout the state.

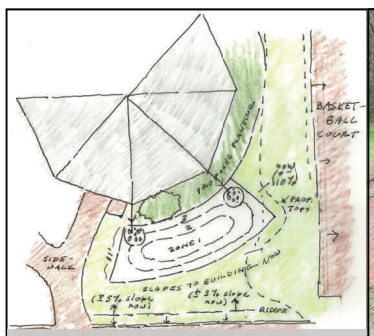
Overgrown field edges at the newly preserved Gunther farm, part of the Tolland County Agricultural Center, have been cut back 30', adding 2-3 usable acres

Hops are growing on newly restored farmland in Chaplin.

Landscape Design and Planting Projects

The District's in-house *landscape designer* provided technical assistance all year to landowners and organizations throughout the District, including *native planting instructions* as well as formalized *concept designs*, and contribute to many grant projects.

Page Park Rain Garden Project—This large rain garden project in was implemented in May of 2019. NCCD provided conceptual and planting design, as well project implementation assistance for this project. The Farmington River Watershed Association was the funding agent, and provided project management. The City of Bristol Parks and Recreation Department, together with their Board of Park Commissioners, were enthusiastic and dependable partners, who provided mulch, a rain barrel, and stone edging. They also helped plan, secure approvals, grade, mix soil, and install stone garden edging. The City will also provide ongoing maintenance for the project. Volunteers from the Park Commission, the City, Bristol High School, and from ESPN headquarters assisted as well. NRCS staff provided critical technical skills and equipment during project design and implementation to ensure that sensitive water projects function properly.



Conceptual Drawing

Site staked out and prepared for planting

Site shortly after constructing rain garden and planting (+3 photos below)

The project is intended to improve on-site drainage and capture roof runoff before it enters an adjacent parking lot, which drains to a nearby stream. This effort is part of an overall goal to improve water quality in the Pequabuck River, a tributary of the Farmington River, which has a largely wooded watershed yet significant urban/industrial development through Bristol.

This park is well used by children and their parents at the playground, and for people of all ages playing basketball, participating in team sports, and swimming. During implementation, it was wonderful to have many park users stopping to ask questions, and to express happiness that new gardens were being created. Signage will be installed to help them understand the functions of the rain gardens, on a continuous basis. Colorful flowers, shrubs, and shade trees were selected to enhance the public's experience during park visits.

CT Water/Farmington—The District continues to work with CT Water Company, the Farmington River Watershed Association, and the Town of Farmington on a multi-phase project in an aquifer area. A fourth phase of invasive plant removal and native planting, designed by the District, was completed in May 2019. Volunteers from CT Water and partners continue to remove invasive Japanese Knotweed, and replant with native shrubs and grasses. Photos to the right depict the pervasive Japanese Knotweed that was removed during a weeding day, and the planting that was installed in its place.

NORTH CENTRAL CONSERVATION DISTRICT, INC.

FINANCIAL STATEMENT*

July 2018—June 2019

Income

CWA Section 319 Grant Projects	220,885
State of CT	100,000**
Plant/Seedling Sale	60,508
Fee for Service	45,239
Town Contributions	35,758
NRCS Technical Services Contract	31,321
CT DoAG Farmland Restoration	19.775
NACD Technical Assistance Grant	11,900
Interest/Unrealized Investment	11,411
Total	**536,797****

Expenses

DEEP Grant Projects	182,699
Salaries & Benefits	158,846
Seedling/Fish	38,592
NRCS Technical Services Contract	28,474
Taxes and Insurance	13,011
Rent for Office Space	8,208
Contracted Soil Scientist/CT DoAG FLRP	6,550
Office Expenses/Postage/Equipment	4,613
Auto Expenses and Mileage	3,930
Audit	2,500
Outreach	1,500
Dues/Misc	197
Total	**449,120**

*Cash basis. Detailed financial statement available upon request.

**State funding surplus will aid in recovery from years without base state funding, which resulted in deficits and depletion of both cash reserves and staff.