

2018 Annual Report

Door County Soil & Water Conservation Department

Mission Statement and Summary of Responsibilities

The Door County Soil and Water Conservation Department is created under the authority of Chapter 92 of Wisconsin Statutes. Chapter 92 gives the SWCD the responsibility for the administration of the County soil and water conservation program and the authority to exercise the powers granted to the Land Conservation Committee. The legislative declared policy of the State in Chapter 92 is to halt and reverse the depletion of the State's soil resources and pollution of its waters. The SWCD has a responsibility, and directive under Chapter 92, to promote land uses and programs which advance conservation and the protection of Door County's natural resources. The mission of conservation and environmental advocacy is the standard by which SWCD programs are developed and implemented.

Land Conservation Committee (April 2018)

Ken Fisher, Chair
Dan Austad
Vinni Chomeau
Randy Halstead
John Neinas
Richard Virlee
Mike Vandenhouten, FSA

Soil & Water Conservation Department Staff

Erin Hanson, County Conservationist
Beth Hanson, Administrative Assistant III
Greg Coulthurst, Conservationist
Brian Forest, Conservationist
Dale Konkol, Conservationist
Krista Lutzke, Conservationist
James Salscheider, Conservationist LTE
Kevin Seng, Conservationist

Program Summary

Agricultural Performance Standards and Animal Waste Storage Ordinance

Chapter 23 of Door County Code establishes minimum nonpoint pollution standards for agricultural operations to protect ground and surface water quality. Through this program livestock operations and cropland are reviewed for compliance. SWCD issues a notification letter to landowners/operators informing them of the findings, offering technical assistance to develop a plan, identifying required and available cost share, and establishing a schedule for achieving compliance. SWCD staff assist operations with conservation planning to not only meet the minimum standards, but also for proper resource management. Chapter 23 also regulates the location, design and construction of animal waste storage facilities to reduce the impact to ground and surface water quality. Permits are issued for animal waste storage facilities that meet required design and construction standards.

In 2018 Chapter 23 was revised to add requirements for handling process wastewater and new targeted performance standards for manure applications in Silurian Bedrock areas (soil depth of 20 feet or less). SWCD issued eighty notification letters in 2018. Of these, thirteen identified that the site was in compliance with all performance standards, sixty-one were offered cost share assistance to install corrective measures to fully or partially resolve noncompliance, and six were notified that cost share was not required. SWCD followed up with noncompliant landowners/operators through formal discussions, issued four citations, and worked with Door County Corporation Counsel on three enforcement cases. One waste storage permit was issued for construction. SWCD staff conducted approximately sixty-five site reviews of previously installed cost share projects with contractual operation and maintenance periods.

Beaches

SWCD and Public Health are jointly responsible for surface water quality at Door County beaches. SWCD handles pollution source identification, beach contamination reduction efforts, and monitoring previously installed practices at beaches. In 2018 SWCD provided guidance to the Town of Egg Harbor and Town of Gibraltar for the planning of additional beach areas on recently purchased properties. SWCD continues to participate on the Wisconsin Coastal Beaches Work Group Committee and assisted with a presentation to the Board of Health.

Buffers

SWCD promotes installation of vegetated buffer strips in critical and riparian areas to protect surface and groundwater resources. The Conservation Reserve Enhancement Program (CREP) is a voluntary program that provides incentive payments to landowners who install filter strips along streams and wetlands in southern Door County. In 2018 SWCD worked cooperatively with the USDA Farm Service Agency to promote CREP in the Sugar, Renard, and Silver Creek watersheds. In 2018 five expiring contracts were renewed for 24 acres of continued protection. Nine new contracts were developed for an additional 53 acres of protection. In 2018 SWCD renewed four expiring "CREP-equivalent" agreements for 9 acres of continued protection using funding from the Department of Agriculture, Trade and Consumer Protection.

Dunes Lake

SWCD has worked with a wide range of partners to identify the cause, extent, and actions needed to address accelerated eutrophication in the ecologically significant Dunes Lake and adjoining wetlands. Future restoration activities will include removal of legacy phosphorus accumulated in organic sediments, control of invasive cattails and non-native phragmites, and reestablishment of fish connectivity from Lake Michigan through Dunes Lake to Geisel Creek. In 2018 SWCD partnered with others on grant applications to secure additional funding with a goal of completing approximately 18 more acres of hydraulic dredging and continued treatments of invasive plants. Related educational/outreach efforts include an article in the 2018 Wisconsin Great Lakes Chronical of the Wisconsin Coastal Management Program and a guided trip for the combined WLWCA Great Lakes and Lake Michigan Area Association 2018 summer tour.

Forestville Millpond

Door County owns and operates the Forestville Dam which creates a man-made impoundment of the Ahnapee River, the Forestville Millpond. In 2016 renewed public concern about Millpond conditions prompted SWCD to collect updated data about water chemistry, sediment cores, aquatic plants, bathymetric survey, and public opinions about conditions and management actions. Results were incorporated into a final report in June 2018. In 2018 SWCD further evaluated management options with a stakeholder group and advanced a recommendation to draw down the millpond for a period of two years after November 1, 2019. SWCD reviewed the information and process with the Facilities and Parks Committee, responsible for management of the Forestville Dam, and the Land Conservation Committee at three joint meetings between June and December 2018. One of these included an interactive public question and answer session at the Forestville Town Hall. Following a fourth joint meeting of the two committees, in January 2019 the Door County Board passed a resolution to draw down the millpond.

Invasive Species

SWCD maintains a lead role in the Door County Invasive Species Team (DCIST), a collaboration of natural resource professionals, community leaders and interested citizens who seek to halt the invasion of exotic non-native plants. SWCD serves as the fiscal manager for DCIST by actively seeking and administering grants, contracting with a coordinator for DCIST, and hiring seasonal LTEs for invasive species work each

year. As funding for invasive species control has tightened, SWCD has promoted adoption of municipal noxious weed ordinances to maintain current levels of invasive species control. SWCD provides technical assistance for ordinance development and implementation. With the adoption of an ordinance containing, at a minimum, *Phragmites australis*, DCIST and SWCD offer cost share to ease the financial burden on the municipality for treatments of priority invasive species.

In 2018 SWCD and DCIST finalized an “Invasive Species Strategic Plan” that outlines initiatives, strategies, and actions to achieve the mission of DCIST over the next five years. DCIST has an updated website, now located at www.doorinvasives.org, and maintained a [Facebook presence](#) in 2018. A wide range of DCIST educational opportunities and control activities were funded by grants from the Wisconsin Department of Natural Resources, the Wisconsin Coastal Management Program, and the United States Forest Service that SWCD managed on behalf of DCIST. SWCD hired two seasonal LTEs to complete Clean Boats Clean Water educational efforts, inventory and control Phragmites and wild parsnip on county road right-of-ways, and conduct one-one site visits with landowners. SWCD’s municipal cost share program received applications from six municipalities for a limited amount of funding in 2018.

Land & Water Resource Management Plan

SWCD programs and priorities are outlined in the “Door County Land & Water Resource Management Plan, 2011-2020” as required by the state. Each year the Wisconsin Department of Agriculture, Trade & Consumer Protection (DATCP) allocates funds to SWCD to address conservation issues identified in the approved plan. In 2018, as in years past, DATCP provided SWCD with a grant that only funded a portion of the statutory goal for staff support. In 2018, DATCP cost share funds were encumbered for a roofed manure storage project (\$29,480) and CREP-equivalent buffers (\$26,271).

Nonmetallic Mine Reclamation

SWCD administers Door County Code Chapter 36 to ensure local nonmetallic mining sites will be properly reclaimed in accordance with State Administrative Code and Statutes. Each site is inspected annually for compliance and the required financial assurance monitored annually to ensure adequacy. Fifty permitted mine sites representing 1,684 potential mine acres and approximately 840 actively mined or un-reclaimed acres were inspected in 2018. The nonmetallic mine reclamation program is a self-sustaining fee driven effort. Operator annual fees in 2018 were reduced by 45 percent to reflect actual anticipated SWCD workload. Annual fees collected for program year 2018 totaled \$29,580.65.

Nutrient Management

Nutrient management’s purpose is to minimize nonpoint pollution of ground and surface waters by avoiding the over-application of nutrients to crop fields through the proper placement, timing and crediting of nutrients such as animal manure, legumes, and commercial fertilizers. SWCD provides one-one technical assistance to landowners/operators to assist them with nutrient management and the SnapPlus software. SWCD also audits plans and manure applications to ensure all applicable requirements are being followed and works with the landowner, farm owner and crop consultant to resolve identified problems.

In 2018, 215 nutrient management plans were submitted to SWCD, covering approximately 77,505 acres or 90% of all cropland acres in the county. DATCP provided \$28,000 to cost share new nutrient management plans in 2018. SWCD signed nineteen cost share agreements with landowners/operators to enroll 700 new acres in nutrient management plans and prepared agreements for an additional 202 acres where cost share was offered, but not accepted by the landowner/operator.

Targeted Runoff Management Program

This competitive program through the Wisconsin Department of Natural Resources provides grants to SWCD by which cost share can be offered to landowners to install practices to address water quality issues. In 2018 SWCD initiated discussions with landowners to begin planning for practices to be installed in 2019 at two locations in the Fabry Creek and Silver Creek Headwaters. In 2018 SWCD successfully applied for a large scale project in the Sugar Creek Watershed, which will provide \$409,000 of cost share for landowners/operators and \$40,860 in SWCD staff support in 2019-2021.

Technical Assistance

SWCD provides technical reviews and onsite inspections of proposed plans for stormwater, erosion control, rockhole alternative protection, nonmetallic mining operations, and land disturbance projects for the Land Use Services Department. This review process is included in an inter-departmental agreement for permitted land uses under County Ordinances. In 2018 SWCD reviewed 13 land disturbance projects, 8 new or existing projects for storm water and 4 impervious surface ratio applications. SWCD also conducted compliance inspections for storm water runoff construction projects and construction site erosion practices. In 2018 SWCD staff assisted the Land Use Services Department with updates to floodplain maps for Kangaroo, Clark and Europe Lake by improving on existing floodplain studies and maps. SWCD staff collected survey data of dam structures, road crossings, stream cross-sections and existing benchmarks at key locations identified by FEMA and the Wisconsin DNR. Staff processed the data and supporting documentation in collaboration with FEMA and the Wisconsin DNR to tie the updated data to historic documentation.

SWCD also provides technical assistance to the public by maintaining staff with diverse expertise in natural resources and a network of other resource professionals for referrals. Providing technical assistance to the public will continue as resources are available and when it provides an environmental or conservation benefit. In 2018 SWCD assisted with numerous Phase 1 or potential historic property impairments for environmental companies, identified sites with lead and arsenic pesticide residue in soils, and provided groundwater information and technical assistance to landowners, potential buyers, real estate agencies, and land developers. SWCD also participated with spring monitoring sites for a groundwater study by the Nature Conservancy.

Watershed Projects

In 2018 SWCD drafted a "9 Element Watershed Plan" for the Door County portion of the Ahnapee Watershed. It was submitted to the Wisconsin Department of Natural Resources in October 2018 and will be revised in 2019 to address any required edits for approval by the US Environmental Protection Agency. In 2018 SWCD continued to emphasize conservation efforts in the Sugar, Renard, and Silver Creek Watersheds using funds from the National Fish and Wildlife Foundation Conservation Partners Program. This grant provides funding for staff to provide technical assistance to landowners/operators and water quality and benthic macroinvertebrate sampling from six sites within the three watersheds. SWCD submitted a successful application to the same program for the Kayes and Larson Creek Watersheds, providing \$87,100 for work to be completed in 2019-2021.

Well Abandonment

This program financially assists landowners with the cost of properly abandoning unused private wells to prevent ground water pollution. In 2018 two letters were mailed to landowners with possible improperly abandoned wells informing them of the cost share program, and of those one approved abandonment was completed. A total of four wells were abandoned, the remaining landowners were informed about the program by a well driller.

Wildlife Damage Abatement & Claims

SWCD provides technical assistance to landowners who experience damage to any commercial or agricultural crops from deer, geese, turkey and/or bear. Enrolled landowners choose one of two public hunting options and follow their abatement plan to be eligible for assistance, claim payments, and/or abatement reimbursements. A shooting permit option with mandatory harvest objectives is available to a landowner who does not want their land open to the public, in return enrollees forfeit eligibility for any claim payments or abatement reimbursements.

Twelve landowners completed enrollment for deer and/or turkey crop damage abatement. No damage appraisals were conducted in 2018. Sandhill crane complaints were minimal, however Sandhill cranes are currently regulated by the federal government and are ineligible for any WDACP assistance. Seven shooting permits were issued to control excessive deer damage and one permit was issued for excessive turkey damage. A preliminary count indicates that 35 deer were shot by the permitted landowners. The Deer Donation Program for Door County received 59 deer donated to local food pantries, which is consistent with average numbers over the past nine years but substantially less than the 253 deer donated in 2008 which was the last earn-a-buck season.

Wisconsin Working Lands Initiative/Farmland Preservation Program

Through this program eligible landowners receive income tax credits for maintaining land in farming activities and meeting required conservation standards. SWCD ensures participants meet state conservation standards to remain eligible for tax credits and inspects operations once every four years. Self-certification forms were sent to all participants under contract or under Exclusive Agriculture zoning and in 2018 SWCD inspected 7 operations, issued 22 Certificates of Compliance, and 1 Notice of Noncompliance.

Budget Status

Approved 2018 Budget	\$1,158,831	Actual 2018 Budget	\$768,651.94
2018 Budgeted revenue	\$704,659	2018 Actual Revenue	\$357,206.48
2017 Levy appropriation	\$417,401	2018 Levy appropriation	\$454,172.00
2017 Actual Levy appropriation	\$339,825	2018 Actual Levy appropriation	\$411,445.46

Grant Totals Utilized In 2018:

DNR Aquatic Invasive Species Grant	\$55,759.73
DATCP Soil & Water Resource Management Grant	\$143,164.00
DATCP Land & Water Resource Management Grant	\$13,338.55
DNR Wildlife Damage Claims Program	\$19,964.90
WI Coastal Management (Invasive Species)	\$1,584.48
US Forest Service (Invasive Species)	\$22,857.53
NFWF Phosphorus Reduction	\$15,307.69
DNR Lake Planning Grant (Forestville Millpond)	\$16,382.02
DNR 9 Key Element	\$20,000.00

Revenue from Self-funding Accounts:

Shoreland Zoning	\$2,000.00
Soil & Water Fund	\$11,124.00
Nonmetallic Mine Program	\$27,959.60

Donations Utilized in 2018:

Invasive Species Donations \$622.58

Other Revenue

RRSB Interest \$6,979.35

Copies & Postage \$162.05

Issues, Concerns and Restraints

Maintaining existing SWCD staff is critical to program success as continual engagement with landowners/operators is necessary to educate them about changing regulations, make progress at installing practices or changing habits, and ultimately address water quality problems. SWCD has successfully pursued grants that provide cost share to landowners and fund staff. However the short term nature of these programs (2-3 years) requires a continual time investment to apply for and manage multiple grant programs, each with a unique set of requirements and reporting expectations. Sustained funding that is commensurate with the duties of a county conservation department is necessary.

2018 Goals and Objectives Achieved

- SWCD advocated for groundwater quality protection by supporting the development of targeted performance standards for Silurian bedrock areas in ch. NR 151, Wisconsin Administrative Code, and adopted these standards into Chapter 23, Door County Code.
- Additional grant funds were applied for and secured to provide cost share to install agricultural best management practices, support staff efforts within targeted watersheds, and maintain DCIST/SWCD invasive species efforts.
- SWCD assisted partners with grant applications for funding to restore Dunes Lake and conducted educational tours to illustrate the effects of nutrient loading to a unique and sensitive coastal wetland complex.
- SWCD worked with resource professionals, stakeholders, and the Joint Facilities and Parks and LCC committees to make a recommendation for management of the Forestville Dam that was approved by the Door County Board of Supervisors.
- SWCD maintained emphasis on reducing nonpoint pollution to protect water quality by promoting sound nutrient management on agricultural fields, taking action to achieve compliance with minimum statewide agricultural standards, providing technical assistance to landowners to install best management practices and technical assistance for a wide range of other water quality issues.

2019 Goals and Objectives

- Maintain and build upon existing natural resource protection programs during a time of diminishing fiscal resources. Continue to identify new revenue streams for multiple SWCD programs.
- Initiate process to rewrite the Door County 2020 Land and Water Resource Management Plan.
- Continue implementation of agricultural nonpoint water quality performance standards. Focus staff effort and cost share on sites susceptible to groundwater contamination and in targeted watersheds for surface water quality improvement. Provide technical assistance and cost share to landowners/operators to increase the number of agricultural best management practices installed in 2019. Continue training to advance skill sets of all staff.
- Work with the Facilities & Parks on implementation timeline and provide support for draw down of Forestville Millpond.