

Annual Report

**Protecting, Managing, and Improving
Natural Resources for all New Yorkers**



Environmental Leadership

New York's 58 Soil & Water Conservation Districts (SWCD) are the gateways to natural resource management in local communities. They provide the link between landowners, managers and a host of conservation service providers. With policy guidance and assistance to District operations, the Soil and Water Conservation Committee in the NYS Division of Land and Water Resources, support Conservation Districts to develop and implement projects and programs that will preserve, protect, and enhance the wise use of the state's soil, water, and all related resources.

Conservation Districts lead efforts to provide soil erosion control and rehabilitation of farmlands, forests, and wildlife habitats. Through environmental education programs and one-on-one contact with county residents Districts help create environmental stewards and make landowners aware of the complexity of the resources they own and the relationship they have to the land around them. If you hunt, fish, hike, garden, farm, eat, or encounter natural resources in anyway, then you benefit from the work of New York's Soil and Water Conservation Districts.

2011 District Accomplishments

Soil and Water Conservation Districts (SWCD) conducted an astonishing \$141 million in conservation projects and programs in 2011. Districts achieved this success while receiving reduced county appropriations of \$8.49 million down from the \$9 million received in 2010.

Although Districts are faced with tighter budgets their annual accomplishments are commendable. Districts assisted 2,442 counties, municipalities, farmers, homeowners, and other organizations on streamside conservation projects. Projects for streambank stabilization to control erosion, riparian buffers to filter run-off, and shoreline protection for habitat restoration were implemented on over 72 miles of waterways. In addition, 4,772 acres of wetland restoration, re-vegetation, and wildlife habitat improvements were carried out providing for reduced sediment loading in streams, minimizing risk of flooding, and protecting water quality for drinking and recreation purposes.

Sixty-one Watershed Management Plans were developed or updated by SWCD's across the state. These watershed programs represent a small portion of the many water quality monitoring and sampling activities that are performed by Districts. Districts are increasingly providing countywide water quality monitoring, currently 13 Districts provide this service. These essential programs ensure that trends in water quality are accurate and Districts are able to protect drinking water, wildlife habitats, and recreation opportunities.

2011 District Stats:

- District recycling programs diverted 6,250 tires and 100 tons of Ag plastics from community landfills.
- Districts assisted 118 counties and municipalities, and 16 private landowners to install hydrants for rural fire protection.
- 22% of Districts provide technical assistance & education to residents for the management of septic systems to protect water resources.



Lake Otsego, taken by Scottie Baker, submitted via Otsego SWCD

“Governor Cuomo has given us the framework and resources through his ACRF program to help our farmers, and it is our intention to provide some needed assistance to these businesses as they work to get back on their feet.”

- Darrel J. Aubertine,
Commissioner, NYS
Department of
Agriculture & Markets

Emergency Conservation



Hurricane Irene planted this shed in the middle of a corn field in Schoharie County.

Conservation Districts were integral in emergency management in 2011 with 95 percent of Districts working with counties to facilitate Emergency Action Plans conducting technical assistance, hazard mitigation, natural resource consultation, waterway assessments, and a host of other functions. After the extreme storms of Hurricane Irene and Tropical Storm Lee Districts’ evaluations provided the initial response on the extraordinary damage sustained by the agricultural community. To assist with the recovery efforts Governor Cuomo announced the creation of an Agriculture and Community Recovery Fund (ACRF). Conservation Districts applied for funding and helped implement ACRF grants providing \$4.5 million to 330 devastated farms. Applications for ACRF were accepted on a continuous basis and all funds were awarded within 25 working days through the NYS Department of Agriculture and Markets.

Twenty-five Districts were at the ready providing technical oversight to Cropland and Pasture Management for projects on debris removal, farm road repair, restoration of fencing and conservation practices, land smoothing, and surface drainage repair. The second most frequent restoration practice completed was Streambank Stabilization projects consisting of clearing debris including trees, rocks, and other foreign objects from streambanks along with re-vegetation of banks for erosion control. ACRF Conservation Program Accomplishments included:

- Obstruction and debris removal on 6,000 acres or the equivalent of 4,600 football fields,
- 22 miles of farm access roads repaired, replaced, or restored,
- Surface drainage ditches cleared and restored on 337 miles comparable to the length of the Erie Canal,
- 48,200 feet of stream corridors cleared of debris to regain natural stream flow,
- Vegetation re-planted on 240 acres to prevent soil erosion.

An exemplary project completed under ACRF included a \$90,000 award to Orange SWCD who worked with a local farm to relocate a dike that had been washed out by floodwaters. This complex project involved an innovative engineering solution to relocate 1,200 feet of the dike system allowing for a wider floodplain and additional protection for the agricultural corridor located near the Pochuck Creek. The farm allowed 500 feet of cropland to be converted back to floodplain. The relocated embankment will increase floodwater retention and reduce velocity. This project is commendable for its demonstration of sustainable farming in balance with riparian protection and floodplain improvement.



Flooding damaged this farm access road in Saratoga County making it impassable to farm machinery (above). Completed road repair (below).



100 ft section of this dike gave way to flood waters destroying croplands in Orange Co.



Completed 1,200 ft of the dike reconnect the Pochuck Creek to the floodplain.

Stormwater Management

Stormwater and water runoff collect pollutants carrying them directly to waterways without treatment. These diffuse sources are the largest cause of nonpoint source pollution threatening waterways, lakes, and drinking water sources across New York State. Soil and Water Conservation Districts (SWCD) provided approximately \$2.6 million in stormwater related services in 2011 through Certified Professionals in Erosion & Sediment Control employed by the Districts. Collectively Districts developed 28 Stormwater Management Plans and assisted 515 communities on stormwater management through infrastructure upgrades to control water runoff and erosion. Additionally, District's provided training for 6,600 professionals through District-led stormwater workshops.

Districts are at the forefront of Green Infrastructure efforts in New York. Green Infrastructure manages stormwater on-site utilizing natural processes that alleviate combined sewer overflow, mitigate flooding, increase wildlife habitat, improve air quality, cool and beautify urbanized areas, and can decrease energy usage. Districts implemented projects that included rain gardens, rain barrels, porous pavement demonstrations, green roofs, and educational tours. The NYC Conservation District facilitates the NYC Stormwater Infrastructure Matters Coalition dedicated to utilizing green infrastructure to protect water resources for recreation in New York City's waterways.

Trees, Shrubs, and Fish Oh My!

One mature tree can provide an economic value of approximately \$149* through reduced energy from shading, cleaning water and air, acting as carbon sinks, and increasing aesthetics. Conservation Districts help multiply this value by providing residents with nearly one million tree and shrub seedlings annually. Backyard conservation promotes environmental stewardship at home and Districts fostered this concept in 2011 through the sale of 1,800 wildlife houses to residents. To promote healthy fish populations and recreation Districts supplied 121,000 fish for private landowners. Not only is backyard conservation promoted by Districts but Open Space Planning efforts preserve scenic views, ecological features, wildlife habitat, and recreation opportunities for all New Yorkers. Districts implemented 65 projects to promote open space and assisted conservation partners with the development of 58 plans. Plant material facilities are utilized to grow conservation plant material for streambank stabilization, sediment reduction in waterways, and habitat improvement. Utilizing native and near-native plant species reduce the number of invasive weeds. Districts assisted landowners to obtain 1,450 grass carp for the control of aquatic invasive weeds.

The Environmental Stewards of Tomorrow

Environmental conservation doesn't happen with only the work of over 300 Conservation District employees across the state, it happens when all individuals take part. That's why 95 percent of New York Districts offer environmental education programs. Districts not only educate residents on conservation issues they inspire the environmental stewards of tomorrow through education programs for students. District education programs include Envirothon, Conservation Field Days, Classroom Education, County Fair displays and booths, Farm Safety Days, Conservation Tours, Pasture Walks, and Conservation Awards. In 2011 Districts educated over 500,000 individuals young and old.

Districts also utilize the media to inform the public of their conservation mission. Districts were highlighted in 833 newspapers, magazines, new releases, TV, and radio spots in 2011. Engaging in social media helps SWCD's to reach a broader audience with more conservation information than ever before. Districts utilize websites, e-newsletters, Facebook®, YouTube™, and Twitter© to get their message into the hands of those who can make a difference.

*Based on 16 inch Sugar Maple—National Tree Benefit Calculator



Green roof visited on NYC Green Infrastructure tour. Photo by Leonel Ponce.



Students competing at NYS Envirothon.



AEM Award

The Porterdale Farm in Jefferson County was awarded the 2011 Statewide AEM Award. Dedicated to community and good stewardship of the land Porterdale Farm was honored at the 2011 Empire Farm Days in Seneca Falls by Ag Commissioner, Darrel Aubertine. The Porterdale Farm was also recognized by the Jefferson County SWCD in 2009 as the County's Conservation Farm of the Year. Statewide, Districts awarded 693 AEM roadside signs in 2011 to exemplary farms in the AEM program.



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Agricultural Environmental Management

Agricultural Environmental Management (AEM) is a partnership between farmers, Soil & Water Conservation Districts (SWCD), and local, state, and federal agencies that addresses environmental issues in farming. AEM continues to be the vehicle for meeting environmental regulations while maintaining farm business goals. With the assistance of SWCD's, farms have developed Nutrient Management Plans and implemented conservation practices that control runoff, protect soils, and recycle nutrients. District driven agriculture conservation programs were valued at over \$22 million in 2011. Soil analysis was provided to 2,905 farms across the state. Districts evaluated 428,527 acres of farmland for soil type, quality, and capability. Eighty-six percent of SWCD's put into action Agricultural Best Management Practices (BMP) assisting over 2,000 landowners with 1,582 projects. The cost of these BMPs exceeded \$35 million to make agriculture more environmentally sustainable.

In addition to working with landowners on Agriculture BMP's, Agricultural Protection programs are supported by SWCD's to protect farmlands and the foods we love. A vast majority of Districts provide technical support with County Agricultural Farmland Protection Boards. In 2011 Districts identified 25 specific projects that advanced conservation easements for active agriculture.

Agricultural Best Management Practices		
BMP	No. of Landowners	No. of Projects
Chemical Mixing Facilities	54	42
Waste Storage	129	61
Barnyard Runoff Control	162	75
Conservation Tillage	195	261
Diversions	69	50
Filter Strips	48	42
Grazing Systems	601	358
Milkhouse Waste Systems	37	20
Nutrient Mgmt Planning	260	213
Silage Leachate Control	76	37
Strip Cropping	14	11
Subsurface Drainage	334	308
Terraces	7	12
Waterways	39	32
Riparian Buffers	80	60
Totals	2,105	1,582

Versatility in Conservation

Soil and Water Conservation Districts are versatile organizations that work with public and private entities on diverse conservation issues. Districts advanced conservation in the following ways in 2011:

- 34 Mined Land Reclamation Plans were developed,
- 22 projects implemented to reclaim 516 acres of open space,
- 15,000 counties, municipalities, farmers, landowners, federal, and state partners assisted with land use and forestry management.

Conservation Districts are experienced in providing permit assistance to successfully streamline the process helping save time and taxpayer dollars. Districts worked with public and private entities to apply for 1,579 permits for wetlands, stormwater, historic preservation, streams, and livestock farms. In addition to technical assistance for permitting SWCD's are well versed in servicing roads and highways. With services valued at over \$2 million, Districts implemented 438 projects including site assessments, surveying jobs, and project designs.