Agricultural Community Recovery Fund (ACRF) Conservation Program Report
Division of Land and Water Resources
NYS Department of Agriculture and Markets
NYS Soil and Water Conservation Committee

Background

In September 2011 Governor Andrew Cuomo announced the creation of an Agricultural and Community Recovery Fund (ACRF) to help rebuild communities and farming areas impacted by Hurricane Irene and Tropical Storm Lee.

The Conservation Component of this Funding was provided to the NYS Department of Agriculture and Markets as emergency funding for Soil and Water Conservation Districts (Conservation Districts) to assist in rehabilitating farmland damaged by natural disasters and prevent further degradation of natural resources through the implementation or repair of emergency Conservation Best Management Practices.

The ACRF Conservation Program was administered by the NYS Department of Agriculture and Markets (NYSDAM) in consultation with the NYS Soil and Water Conservation Committee (NYSSWCC). Under this fund, local Conservation Districts served as project sponsors and were authorized to apply for and implement ACRF, subject to the availability of funds.

Eligible counties evolved over the course of the two disasters and encompassed 29 in total including **Albany, Broome, Chemung, Chenango, Clinton, Columbia, Delaware, Dutchess, Essex, Greene, Herkimer, Lewis, Montgomery, Oneida, Orange, Otsego, Putnam, Rensselaer, Saratoga, Schenectady, Schoharie, Suffolk, Sullivan, Tioga, Ulster, Warren, Washington, and Westchester counties.**

Funding Eligibility

County Conservation Districts determined land eligibility based on site inspections of damage, taking into account the type and extent of damage. Documented conservation problems and/or regulatory obligations existing prior to the applicable disaster were ineligible for ACRF financial assistance. For land to be eligible, the natural disaster must have created new conservation problems that, if untreated, would:

- Continue to degrade the State's natural resources
- Impact public drinking water supplies or other public health concerns
- Present ongoing pollution risks to surface and groundwater
- Pose real short or long-term threats to production facilities
- Impair farm safety
- Materially affect the land's productive capacity
- Present challenges to on-farm production that are economically unsustainable or too costly to implement without State assistance

Eligible Practices

Eligible practices included those identified in the NYS "Agricultural Management Practices Catalogue" and such practices needed to rehabilitate farmland, such as:

- Debris removal
- Restore fences and conservation structures
- Crop removal or incorporation
- Land shaping and grading
- Installation of vegetative practice including cover crops

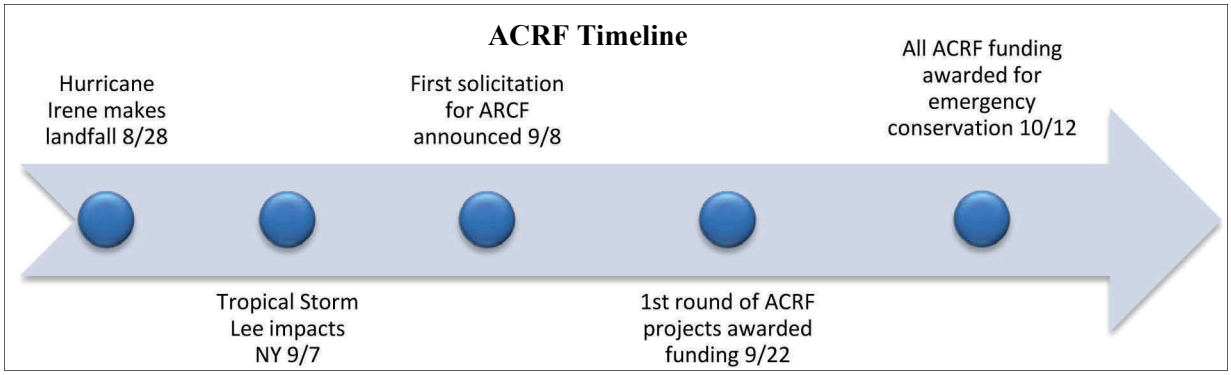
Other conservation measures were also authorized by County SWCDs, with approval from NYSDAM on a case by case basis.

Stream blockage after storm was cleared and replanted with vegetation (below).

Project Selection

Project Selection was based on identified need, degree of loss, resumption or retention of active agricultural production, ability to implement and complete project in the near-term and in consideration of the available funding for eligible counties.

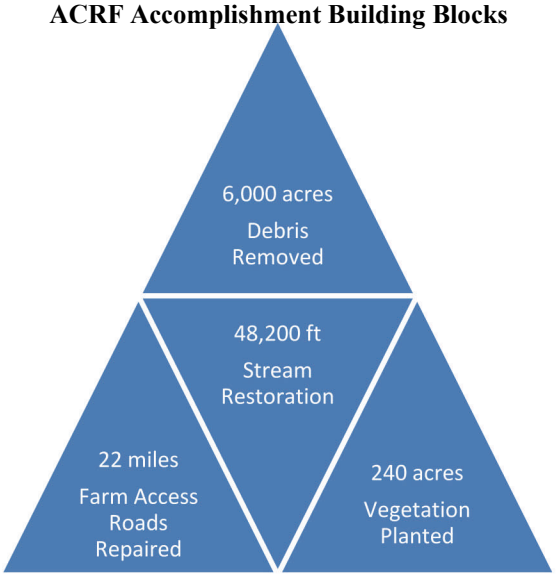
Applications were received on a weekly basis until funds were exhausted. Due to the progression of the disaster resulting from multiple events and the difficulty of assessing all needs simultaneously applications were accepted continuously over a four week period. Accepting the applications on an ongoing basis allowed for Conservation Districts who had trouble accessing damaged areas for assessment still apply for ACRF and complete emergency conservation projects. Immediately following the submission of each week's applications, Division of Land and Water Resources staff, led by the Division Director, convened to review each application and make priority recommendations for funding based on project selection criteria. New and existing requests for funding were then subsequently evaluated each proceeding week. All ACRF recovery funds requested were approved by the Commissioner of the Department of Agriculture and Markets and awarded in three public announcements throughout the months of September and early October. **All funds were awarded within twenty-five working days.**



ACRF Conservation Program Accomplishments

The emergency response completed by Conservation Districts was truly an accomplishment of unprecedented scope. Thanks to County Conservation Districts, starting just hours after the first and second floods, the damage was expertly evaluated and communicated to the Governor's office through an emergency response team at the Department of Agriculture and Markets. It was Conservation Districts' first response that made it possible to swiftly realize the extraordinary damage sustained by the agricultural community.

ACRF Accomplishment Building Blocks



Conservation Districts' boots on the ground in the days following the flood provided Governor Cuomo and his cabinet the information necessary to launch the Agricultural and Community Recovery Fund Conservation Program (ACRF). As a result of this assistance to farmers and strong partnership with the State of New York, the Conservation Districts' assessments became requests for help to begin to make agricultural lands whole again. The Districts' commitment to community and willingness to take on the responsibility of implementing emergency conservation practices allowed the State to efficiently and effectively carry-out the mission of the ACRF Conservation Program. The following are major accomplishments of the ACRF program:

- Total funds awarded were approximately $4.5 million. **Funds spent on emergency conservation totaled $4.2 million or almost 95% of awarded funds.**

- Conservation Districts requested emergency conservation funding through ACRF for over 400 farms, approximately 86% of those farms received a portion or all of the funding they requested.

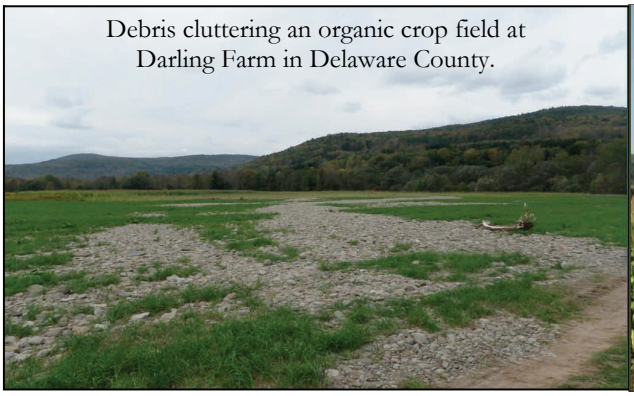
- **The project completion rate was 95% of farms receiving awards.** Funds were awarded on 348 farms, addressing emergency conservation needs in 25 of the 28 eligible counties.

- Awards ranged from $250 to $113,000 per farm**. The average dollars received across all farms was $13,157.** Funds awarded for Hurricane Irene damage was slightly higher per farm than for projects addressing damage from Tropical Storm Lee.

Flood water created a gully where it exited a riding rink on this Orange County horse farm.

- Schoharie and Orange County Conservation Districts worked with farms on repairing the most costly damage and the highest number of impacted farms respectively. The farms impacted in Orange County were primarily in the high valued Black Dirt Agricultural Region.

- **The dominate practice type completed under ACRF was Cropland and Pasture Management** consisting primarily of obstruction and debris removal, shaping and grading, farm road repair, and fencing reconstruction. **Across the impacted area, obstruction and debris was removed on nearly 6,000 acres or the equivalent of over 4,600 football fields.** Removing this debris, together with shaping, grading, and erosion control was imperative to preparing fields and pastures for the 2012 growing season.



Debris cluttering an organic crop field at Darling Farm in Delaware County.

ACRF funds made it possible to clear this crop field in time for the 2012 season.

- **Through the ACRF Program, over 117,170 feet or 22 miles of farm roads were repaired or replaced, restoring farm access to fields, barns, and pastures.**

- Surface drainage was the primary practice completed in the Black Dirt region of Orange County. Surface drainage consisting of restoring and clearing field side ditches totaled 1,778,661 linear feet or 337 miles roughly the length of the Erie Canal. **Improving farm field drainage is critical to the farmer's bottom line.**

- The second most frequent practice type completed was Streambank Stabilization consisting primarily of clearing and snagging debris including downed trees, rock, and other foreign materials from streambanks and the actual stem of the stream.

- **Through the ACRF Program debris was removed in over 48,200 feet or nine miles of stream corridors.** Removing this debris was critical to restore natural water flow helping to restore aquatic habitat and alleviate future flooding. Critical area planting to help stabilize the banks was also completed. Bare and unstable soil has a high potential to erode. Nearly 240 acres of vegetation was planted in these critical areas to increase soil stability and decrease the possibility of future erosion.

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

Flooded stream overflows onto crop field at LaTourette Farm in Delaware County (left). Delaware Conservation District restored proper stream width and depth, installed a floodplain bench to alleviate pressure, and planted vegetation using willows recovered from the site to stabilize streambanks and protect farmland (right).

Success Stories

The following Success Stories were selected from an extraordinary list of projects that assisted farms to restore and rebuild their livelihoods from the devastation that both Hurricane Irene and Tropical Storm Lee left behind. The Success Stories on the proceeding pages are just a snapshot of the critical work supported by the ACRF Conservation Program.

Schoharie County

Schoharie County was one of the worst hit areas of flooding from Hurricane Irene and Tropical Storm Lee in late August to early September 2011. The county is still working to rebuild communities that dot the landscape through the Schoharie Creek, Little Schoharie Creek, Cobleskill Creek, and their tributaries. The Schoharie Valley, known as the "Breadbasket of the American Revolution" maintains tremendous agricultural resources due to its prime soils, and proximity to markets in the capital region and beyond. This valley saw some of the worst flooding in the impacted areas of the State and many who farm the valley experienced extreme devastation to their crops, facilities, and livestock.

Flattened corn field with debris including equipment shed in Schoharie County.

The Schoharie County Soil and Water Conservation District was one of the first governmental entities to provide assistance to farms within the county assessing and communicating the damage to the Department of Agriculture and Markets, and ultimately Governor Cuomo's office. The Conservation District submitted an application to the State's unprecedented Agriculture and Community Recovery Fund Conservation Program just one week after the storm to begin repairing the damage to the flooded fields, farm roads, and fencing.

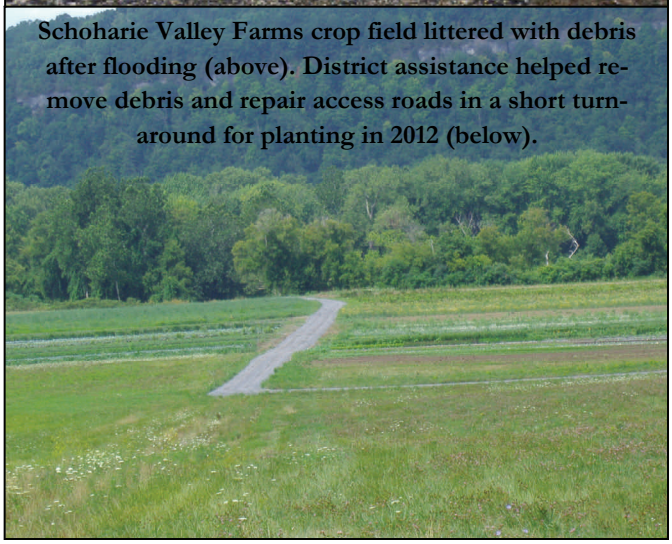
Crop field with debris removed and cover cropped to prevent erosion. ACRF made it possible to ready the field for 2012 planting.

Maple Downs Farm owned and operated by David and Denise Lloyd is located in the Little Schoharie Creek Watershed approximately one mile from the creek itself. The creek overshot its banks and fully inundated the farm forcing the barn, farmhouse, and fields under approximately 10 feet of water. As a result, the farm's milkhouse equipment, bulk tank, stored feed, and approximately 47 dairy calves were lost from surging flood waters. In addition, Lloyd's crop fields were completely consumed by water, fencing was destroyed, and farm roads were left washed out and impassible. When the floodwaters receded, debris including pieces of buildings, agricultural feed bags, trees, and rock littered the fields.

The Schoharie Conservation District received over $70,000 from the ACRF Conservation Program for the restoration of the emergency conservation practices on Maple Downs Farm. Funding was immediately put to work removing debris on 181 acres of farmland, constructing 1,550 feet of fence, and reestablishing 2,225 feet of farm roads used on a daily basis. As a result of the Conservation District's expert technical assistance and Governor Cuomo's ACRF Conservation Program, the Lloyd's Farm was able to once again plant their fields for the 2012 growing season, and provide pasture to their livestock in order to continue to farm the land into the future.

The **Schoharie Valley Farms** owned and operated by Richard Ball is located in the Schoharie Creek Watershed. The picturesque Schoharie Valley Farms grows and sells fruits, vegetables, cut and potted flowers, pies, and other baked goods. Schoharie Valley was completely inundated by flood waters, forcing Mr. Ball's fields under several feet of water. When the floodwaters receded, debris including pieces of buildings, home goods, trees, rock and sediments littered the fields.

Schoharie Valley Farms crop field littered with debris after flooding (above). District assistance helped remove debris and repair access roads in a short turnaround for planting in 2012 (below).



The Schoharie Conservation District received over $73,000 from the ACRF Conservation Program to complete the emergency conservation practices on Schoharie Valley Farms. Funding was immediately utilized to remove debris on 100 acres of farmland for future cultivation, grading and restoring 400 feet of streambank to alleviate future flooding, planting cover crops on the most critical acres for enhanced erosion control, and reestablished 4,000 feet of farm roads used on a daily basis. Thanks in great part to the Conservation District's expert technical assistance and Gover-

nor Cuomo's ACRF Conservation Program, the Schoharie Valley Farm was able to once again prepare and plant their fields for the 2012 growing season and reopen their doors to supply residents of the County and beyond with local, farm fresh produce and other goods.

Orange County

Orange County reported some of the most wide spread damage to agricultural and natural resources on account of the flooding from Hurricane Irene and Tropical Storm Lee in late August to early September 2011. The Wallkill River Watershed is home to some of the most productive farmland in the state, known as the "Black Dirt" region; this fertile low-lying soil provides high valued crops to close markets in New York City and other metropolitan centers. Farmers in the region have diversified their crops to include onions, lettuce, radishes, potatoes, tomatoes, carrots, and increasingly sod.

The **DeBuck Sod Farm** owned and operated by Leonard DeBuck grows soybeans as well as sod on approximately 460 acres. Leonard DeBuck experienced loss to farm facilities, equipment, and un-harvested crops including 110 acres of soybeans. During the height of Hurricane Irene, the dike that holds back waters from the Pochuck Creek, a major tributary of the Wallkill River blew out a 100 foot section causing the creek to flood 45 acres of cropland. The dike breach also impacted the drainage and flood protection for an estimated additional 200 acres further upstream in the river basin.

The Orange County Soil and Water Conservation District rapidly assessed the damage on this farm just days after the storm and began to work with the farmer to propose a plan to repair the dike in a way that would afford greater floodplain management and protection for future storm events. Rather than patching the 100 foot breach at the current location, the District and Mr. DeBuck developed an alternative engineering solution to relocate approximately 1,200 feet of the dike system. Mr. DeBuck allowed 500 feet of his cropland to be converted back to floodplain, widening the creek floodplain to provide additional protection and benefit to the whole agricultural corridor drained by the Pochuck Creek. In relocating the embankment the farm has improved conditions should flood waters once again rise. Widening of the floodplain has a positive impact providing increased retention and reduced velocity.

The Orange County Conservation District was awarded $90,000 from the ACRF Conservation Program for the DeBuck's dike relocation project. The project was completed in the spring of

Hurricane Irene blew through this 100 foot section of dike along the Pochuck Creek.

Completed 1,200 foot dike now reconnects the Pochuck Creek to its floodplain.

2012 ahead of the June 30th deadline and stands as one of the most complex and beneficial projects completed through the ACRF Conservation Program. The approach taken at the DeBuck Farm was innovative in solving the emergency issues caused by the extreme storms and subsequent floods while fitting perfectly into the concept for the type of long-term measures to allow for continued sustainable farming in balance with riparian protection and floodplain improvement.

Tioga County

Tioga County was spared much of the damage brought by Hurricane Irene but unfortunately was right in the path of Tropical Storm Lee just two weeks later. Tropical Storm Lee caused major flood damage to the Southern Tier totaling $478 million worth of destruction in Tioga County alone. Farms in the Upper Susquehanna River Watershed were particularly hard hit by Tropical Storm Lee, exceeding the damage from the 2006 flood that is still fresh in the residents' memories. The small town of Nichols is home to the Engelbert Farm, owned and operated by Kevin, Lisa, John, and Joe Engelbert.

Debris and mud left behind in pasture and what was left of livestock fencing.

The **Engelbert Family Farm** is an organic dairy that operates on about 750 cropland acres, and 550 grazed land acres in the Susquehanna River Watershed. The Engelbert Farm was inundated with between 8 to 12 feet of flood water in and around all of the farm buildings, cropland acres, and pastures. When the water receded, ankle deep mud covered the entire farmstead and the fields next to the Wappasening Creek, a tributary to the Susquehanna River. In addition to the extreme amount of river sediment and debris that littered the farm, vital facilities including a concrete tank designed to provide manure storage presented itself as unusable and an engineering evaluation was necessary to rule out surface or groundwater pollution risks. The extreme amount of debris that littered the pastures and cropland, approaching one foot of mud, wood, garbage, and other foreign materials needed to be removed without impacting the topsoil underneath. Approximately, 20,000 feet of fence for the pasture needed repair or replacement from the consuming and erosive flood waters.

Fence was replaced and debris removed in the pasture in time for planting and stocking for the 2012 season.

With expert assistance provided by the Tioga County Soil and Water Conservation District and financial support of $60,000 provided by Governor Cuomo's ACRF Conservation Program the restoration process on this family dairy farm could be completed. The manure storage was evaluated and deemed structurally sound and cleared for continued use. Debris and obstructions were removed on approximately 61 acres of pasture and cropland, and over 12,000 feet of fence was replaced to allow the livestock to regain access to grass pastures and other feedstock.