

Executive Summary

Comprehensive agricultural stewardship requires the responsible planning and management of natural resources including water, plants, soils and wildlife on Suffolk County farmland. The agriculture industry in Suffolk County sees an opportunity to decrease nitrogen and pesticide levels found in Suffolk County ground and surface waters further by strengthening existing Agricultural Stewardship programs, supporting new research and pilot projects, and expanding on-going monitoring efforts.

The purpose of the Suffolk County Agricultural Stewardship Plan is to provide a framework, series of recommendations, and an associated budget to promote the long-term responsible management of farmland in Suffolk County, consistent with Suffolk County's Comprehensive Water Resources Management Plan and the County Executive's Reclaim Our Water initiative.

Development and Successes of the Agricultural Stewardship Program

In 2003 a task force of stakeholders was convened to develop an Agricultural Stewardship Program for Suffolk County and recommendations and a report were issued in 2004. The current Agricultural Stewardship program at Cooperative Extension of Suffolk County (CCE) is a result of that Task Force. This program has already shown meaningful decreases in nitrogen and pesticide inputs as it relates to agricultural practices. Approximately half of Suffolk County farmers are involved at some level with the New York State AEM program developed by the Suffolk County Soil and Water Conservation District (SCSWCD) and CCE. However, despite the great strides that have already been made through the efforts of this program, the lack of funding to complete the original vision of the Task Force has left the industry short of its goal.

Environmental Concerns

The agricultural industry in Suffolk County is dependent on the use of nitrogen fertilizers and pesticides. Nitrogen management is a major concern for the estuaries as excess nitrogen can contribute to adverse environmental effects including low oxygen areas (hypoxia), harmful algal blooms and loss of coastal vegetation. Pesticides and high nitrate concentrations in groundwater also present a public health concern where private drinking water wells are in use and increase treatment costs for public water suppliers.

Goals

The mission of the Agricultural Stewardship Program is to cooperatively develop a strategy to lower nutrient and pesticide loading associated with farming to the groundwater and surface waters of Suffolk County while maintaining a strong, viable agricultural industry.

Challenges

Challenges that limit the adoption of agricultural stewardship practices in Suffolk County include crop diversity, lack of funding, resource limitations, lack of trained and certified professionals and need for additional monitoring and evaluation techniques. The variety of crops grown by Long Island farmers drives up the expense of conservation actions. There is a lack of funding dedicated to local agencies that coordinate implementing stewardship initiatives and educate farmers as to their benefits. Adopting conservation practices can be both costly and risky to the individual farmer and funding is often necessary to alleviate these challenges. Access to trained and certified Technical Service Providers is extremely limited. There is a lack of an advisory body for coordinating evaluation efforts and programmatic effectiveness.

Recommendations

This report outlines a series of recommendations to improve the effectiveness of agricultural stewardship programs and initiatives.

Advisory Committee - To oversee these efforts the Task Force recommends that an Agricultural Stewardship Advisory Committee (ASAC) be created and appointed by the Suffolk County Legislature. The committee will evaluate the progress and effectiveness of stewardship efforts and review an annual budget and work plan to meet the goals of the stewardship plan.

Research and on Farm Demonstration Initiatives - There have been significant developments of best management practices for nutrient and pest management over the past 30 years. To continue development of new technology, local research is imperative in addressing the stewardship issue due to the diversity of crops in Suffolk County. It is not uncommon for a single farmer to grow twenty or more fruits and vegetables in their operation. Each crop requires different levels of pesticide applications and, different levels of fertilizer applications, therefore every nutrient management plan will need to be customized to fit each farm operation.

Education Outreach to Farmers - Research and on-farm trials are the first step in evaluating BMP effectiveness however it is crucial that these suggestions are successfully communicated to farmers. This includes workshops, newsletters and communication between farmers to increase participation in stewardship programs. This step is essential as education and outreach to the farm community is vital to success of the plan. Additionally to connect with next generation farmers nontraditional communications such as social media can be beneficial.

Funding for Staffing and the Implementation of Best Management Practices - Cost-share dollars for implementation of agricultural best management practices is fundamental in generating stewardship practices. Suffolk County Soil and Water Conservation District is recognized as the public agency authorized to draft and certify Nutrient Management Plans and associated practices. To accomplish this, Soil and Water technicians need specialized training and course work, accreditation as Certified Crop Advisors and demonstrated competency as well as continuing education training for technicians.

Increased Monitoring - The use of test wells to monitor groundwater is the best method to evaluate the impact of agricultural practices on groundwater quality. Cornell Cooperative Extension, New York Department of Environmental Conservation, Suffolk County Health Department and farmers have collaborated to establish a network of test wells at main crop commodities grown on Long Island. This network can be expanded and utilized to evaluate the effectiveness of best management practices and determine their effectiveness in reducing impacts to groundwater.

Public Outreach - Since the 2004 Agricultural Stewardship recommendations there has been clear and obvious progress. However, there is a need for an organized and comprehensive strategy to communicate the progress of agricultural stewardship efforts to the public-at large, local stakeholders and public policymakers.

Budget

In order to increase involvement in local agricultural stewardship efforts, additional funding from County, State, Federal and other sources will be required. The following budget recommendations are suggested over the next ten years:

- \$4.1 million to provide on-site expertise and to write nutrient and pest management plans and to enhance existing monitoring and oversight;
- \$16.8 million to offset farmer expenses associated with implementing best management practices;
- \$5.7 million to fund research/pilot projects, educational outreach, and on-farm demonstration trials to develop Suffolk-specific best management practices including, but not limited to, the use of controlled release fertilizers, cover crops and bio-fumigants, pesticide-use minimization, integrated pest management strategies. It is expected that funding priorities within these pilot projects will change as new technologies and better management strategies are identified through the years.