Source Water Protection and Solid Waste Removal - Madison County, New York

Introduction

Source water protection is vital to protecting public health, enhancing the environment and providing an amenable location to attract business and residential development. While the purpose of the project in this case study is the protection of source water via the removal of potential contaminants, the means of achieving this result is what is reported here. It demonstrates the critical role that collaboration among organizations and stakeholders plays. These collaborations can create quality programs that can have a greater impact than that within the scope of the initial project. In this case, for example, the pilot project developed into a statewide farm hazardous waste removal program.

Community Context

Madison County, located in central New York, is one of the fastest growing counties in the state, with a population of 69,441 – 2,777 of which are minorities (U.S. Census 2000). The median household income level in 1999 was $40,184, and nearly 9.8 percent of persons live below the poverty level. This project served 6,313 low-income people.

Agriculture dominates the economy of Madison County, where nearly half of the land is dedicated to farming. There are roughly 700 active farms within the county, although the agricultural sector comprises only 4 percent of total employment. Dairy is the primary agricultural industry.

Many farmers store obsolete, hazardous chemicals that were once approved for agricultural use but are now prohibited by the New York State Department of Environmental Conservation (NYSDEC). These chemicals are often improperly stored in containers subject to degradation or fire hazards, and are potential contaminants of soil and groundwater supplies, and therefore a threat to the area’s source water. There has never been a state or even countywide system to collect and dispose of these compounds.

Madison County was selected as the host of a pilot project to remove hazardous farm-related chemicals. Disposal programs offered in other counties often resulted in low participation by farmers due to inconvenience, high costs, program inconsistencies, and sensitivity around public perception and government involvement. The pilot project aimed to address these concerns and any additional issues preventing an effective collection system.

The Organization/Agency

The need for a pilot project was identified after a meeting with the Soil and Water Conservation Committee. Madison County was selected due to location in central New York; the concentration of farms in the area; the number of established contacts within the county; and preliminary support for a pilot program. In May 2002, the RCAP technical assistance provider (TAP), Michael Pattavina, met with Jim Zecca, Director of the Madison County Department of Solid Waste, to discuss the procurement of a farm hazardous waste grant.

Mr. Pattavina conducted research on farm hazardous waste removal. He made contacts with those involved in farm hazardous waste removal programs in other areas, including Pennsylvania and Long Island. RCAP facilitated the creation of focus groups to discuss farm hazardous waste collection programs. The focus groups sought to include the variety of stakeholders interested in the project. Invitees to the focus groups included representatives from the Farm Bureau, Soil and Water Conservation Committee and local Districts, Cornell Cooperative Extension, New York Center for Agricultural Medicine and Health (NYCAMH), program organizers of past collection efforts, out-of-state organizers of pesticide collections, Senate and Assembly Agricultural Committees, and farmers and regulators.
The focus groups and other meetings with stakeholders identified several key components for implementing a program. These included:

- A cooperative and/or collaborative strategy among stakeholders in a farm pesticide collection program must be devised.
- A lead agency, with a dedicated staff person, must be designated to administer the program.
- Agency co-leadership is possible. The NYSDEC may be better suited as the lead funding agency while the NY Department of Agriculture and Markets would better serve as the implementing agency.
- Local farm-friendly organizations must participate in the program in order to build trust among farmers.
- The program must be convenient for farmers to participate, and must be free of charge.
- Local and state governments are more inclined to provide support for a state initiative.
- The program must be consistently funded and available to farmers on a long-term basis.

The focus groups discussed the most effective program for Madison County, as well as a model for use across the state. The pilot program was used as the basis of legislation for the statewide farm pesticide collection program.

RCAP promoted the development of a mobile, or milk run, collection system, in which a contractor travels from farm to farm to pick up agri-chemicals and pesticides. The Madison County program secured funding in May of 2003, and scheduled the beginning of the program for October 2003. A hazardous waste hauler was selected. Delays in funding from the NYSDEC and staffing shortages led to a postponement of the program until the spring of 2004.

RCAP TAPs assisted with the model program implementation. A brochure was created to distribute among area farmers to solicit their participation in the collection event. RCAP staff served as inspectors of pesticide storage sheds of those farmers who registered to participate in the collection program. All of the farmers who opted to participate in the program were registered, and an inventory was taken of the pesticides that needed to be collected.

In late 2002, RCAP was invited to co-draft legislation to establish a statewide infrastructure for farm hazardous waste removal. RCAP communicated with a number of organizations and individuals before and after the draft process, including the NY Legislative Commission on Solid Waste, MSE Environmental, NY DEC, NY State Association of Recyclers, NY Rural Water Association (NYRWA), NY Department of Agriculture and Markets, NYCAMH, and the Product Stewardship Institute.

Mr. Pattavina also collaborated with Dr. John May (Director of NYCAMH) and Robert Messinger (Solid Waste Management Specialist for the NYRWA) to publish a white paper on farm pesticide collection. The white paper served as a foundation for the state legislation.

Resources Used During Project Completion

- USDA served as the prime funder
- New York Soil and Water Conservation Committee Grant
  $15,000 total ($7,500 up front, the remaining $7,500 upon completion of the program)

Community Impact

The project successfully secured the removal of hazardous chemicals, benefiting individual farmers and their families, as well as the greater community. The removal of hazardous wastes prevented potential contamination of soil and ground water, thereby securing greater source water protection.
Organizational Impact

The pilot project accomplished its goals within Madison County, with much larger ramifications on the state level. The pilot project served as a model for drafting state legislation. The legislation was introduced into the NYS Senate and NYS Assembly, and would establish annual collection via a milk run system and state contracted hazardous waste hauler. Estimates reported in the Albany, NY Times Union indicate that the statewide program would generate 78 tons of unused toxic chemicals per year.

Lessons Learned

Promoting farm pesticide collection in Madison County and New York State was successful due to the strong effort to build partnerships among program stakeholders. A strong collaboration between RCAP, NYRWA, NYCAMH, and farmers themselves fueled the success of the program and resulted in the request of the organizations to draft legislation.