

# Solving Environmental Problems Through Collaboration A Case Study

For EPA personnel and partners who wish to implement collaborative problem solving projects effectively.

## New York City Watershed Partnership

The goal of the New York City Watershed Partnership is to work in close cooperation with both government and non-governmental partners to protect the unfiltered drinking water supply of nine million people while promoting economic viability and preserving the social character of the communities located in the upstate watershed.

#### Background

New York City's drinking water system, the largest unfiltered system in the nation, serves eight million City residents, one million residents in Westchester, Putnam, Orange, and Ulster counties, and millions of commuters and tourists each year. Ninety percent of the water comes from a 1600 sq. mile area in the Catskill Mountains known as the Catskill/ Delaware (Cat/Del) watershed.

Agriculture is one of the major land uses in the source water protection areas, upstate from New York City. Dairy and livestock farming present one of the greatest non-point source pollution challenges to the comprehensive source water protection program. Other pollution sources being addressed are sewage treatment plants, septic systems and storm water runoff. Land conservation is a critical issue as well. Two challenges requiring reconciliation were: 1) the public health and environmental resource protection interests of a large and distant city with the farming community's desire to maintain an agricultural way of life in the watershed and 2) New York City's interest in protecting water quality with those of upstate communities, including upstate New York's interest in maintaining economic viability.

### How Filtration Avoidance Determination Helped All Parties to Move Forward

In 1997, multiple partners entered into the Watershed Memorandum of Agreement (MOA) and ended an impasse that blocked the City from promulgating updated watershed regulations and securing a necessary state license allowing it to acquire land in the watershed. The resolution of these and other issues was a prerequisite to EPA's reissuance of a Filtration Avoidance Determination (FAD).

The FAD, reissued in 2002, allows the Cat/Del watersheds to remain unfiltered because of the very high quality of the water supplies. To ensure that those supplies remain high quality in the future, the FAD requires NYC to implement a wide range of watershed protection programs, at an investment of approximately \$1.4 billion. Filtration of the Cat/Del system would have cost the City \$6 - \$8 billion. Successful implementation requires close cooperation with different levels of government as well as numerous non-governmental stakeholders.

#### Why the New York City Watershed Partnership Worked

The New York State Governor's office and EPA played a key role in getting the negotiations moving by bringing together all watershed stakeholders, including several environmental groups and a coalition of watershed towns. The seven source water counties of the Cat/Del watershed, watershed municipalities and a number of environmental groups signed the Watershed MOA in 1997. The partnership also includes the agricultural community and the federal government.



The MOA recognized the varied and often divergent interests of the partners and created a framework for compromise and accommodation on many of the most contentious issues. It created a Watershed Protection and Partnership Council with senior level participation from the various partners. The Council meets regularly to assess progress and resolve disputes, and provides a mechanism for addressing controversial issues in a constructive way.

For farmers concerned about the potential economic impact, New York put aside its purely regulatory approach and entered into a partnership to carry out a locally developed and administered voluntary Watershed Agricultural Program which promotes and supports environmentally-protective farming practices. The farmer-led Watershed Agricultural Council has been very successful in recruiting farmers to participate in the program. Because it was in place prior to MOA negotiations, this is the one partnership program that is not in the MOA.

It has been of great value over the years to have an entity such as the [Watershed Protection and Partnership] Council. In the eyes of many watershed stakeholders, the legitimacy of the partnership is measured against the ideal of a participatory democracy. No one with something to offer this endeavor is left out of the process.

William C. Harding, Executive Director
 Watershed Protection and Partnership Council
 New York Department of State

## What Made the New York City Watershed Partnership Unique?

The Safe Drinking Water Act requires that all drinking water taken from surface water sources be filtered to remove microbial contaminants. The law allows EPA to waive this requirement for water suppliers if they demonstrate that they have an effective watershed control program and that their water meets strict quality standards.

EPA provided the major impetus for serious negotiations on a viable program to safeguard the city's water supply by stating the clear intention to require the city to filter its Catskill/ Delaware water supply system (at a cost of several billion dollars) unless it substantially strengthened the existing watershed protection program. By offering substantial financial and technical support for local projects and programs, New York City successfully negotiated with multiple stakeholders, and collectively, the partners developed creative solutions to numerous contentious issues.

#### Lessons Learned

This watershed program demonstrates the economic advantages of innovative partnerships. It is possible to meet downstream water quality goals as well as upstream economic objectives through voluntary partnerships, and implementing community-based watershed protection. The initiative also showed that by protecting reservoirs and areas surrounding source waters it is possible to supply water for a massive urban population without the need for expensive filtration or chemical treatment. The key to this program's success is stakeholder involvement in a participatory process guided by local leadership. Other lessons that can be drawn from this case and applied to similar situations:

- A clear vision of goals is crucial to a program's success.
- Local leadership is central to successful participatory programs.
- Finding creative methods for technical/financial assistance enables key cooperators to participate.
- Early buy-in from stakeholders with unsettled perceptions of regulators is essential.
- What happens upstream in a watershed can have a profound effect on conditions downstream.
   Economic development policies must be connected to sustainable management policies.
- Watershed protection need not focus on control of specific pollutants, but might promote environmentally healthy landscapes. Healthy landscapes that include agriculture not only result in cleaner water, but provide food and promote economically sound rural communities.

#### Results

- Congressional appropriations of \$39 million to date.
- New York City has purchased, or protected by easement, 63,000 acres of upstate land to safeguard the drinking water supply as well as to preserve rural community character.
- The program resulted in a portfolio of non-regulatory, integrated alternatives that focused on local leader ship, environmental monitoring and education, and voluntary participation in pollution prevention and control.
- Interdependence of long-term watershed protection and enhanced profitability of privately owned agricultural and forestry land was maintained and enhanced.

## Keys to Collaboration Exemplified

Agency experience and academic

research suggest there are seven keys to successful collaborative problem-solving (http://www.epa.gov/epainnov/collaboration/seven keys.htm) Five of the seven keys are apparent and exemplified through the New York City Watershed Partnership.

A shared problem between New York City and upper New York State: reconcile the public health and environmental resource protection interests of NYC with upstate interests to maintain economic viability, particularly through farming.

As the **committed leader**, New York City had the most at stake: Financing an \$8 billion dollar filtration system for drinking water.

As the **conveners of stature**, The New York State Governor's Office and EPA brought together all watershed stakeholders.

The representatives of substance—seven source water counties, watershed municipalities, a number of environmental groups, the agricultural community, and the federal government—all signed a Watershed MOA.

The Watershed MOA succeeded in outlining a clearly defined purpose: maintaining the quality of the Cat/Del watershed's drinking water through voluntary implementation of a widerange of watershed protection programs.

#### For More Information

New York City Watershed Protection Team (212) 637-3554 http://www.epa.gov/innovation/ collaboration