

NEW YORK CITY'S WATERSHED MANAGEMENT PROGRAM:

A cooperative effort to protect safe drinking water supplies, while allowing sustainable growth in a key watershed.

DESCRIPTION OF INITIATIVE: The federal Safe Drinking Water Act requires filtration of drinking water coming from surface water sources (i.e., lakes, streams, reservoirs). This requirement, which is meant to protect against waterborne disease, can be waived if a water system provides safe water, and if its watershed is actively protected to ensure that safety in the future.

New York City's drinking water system serves nine million people daily. It is the largest unfiltered water supply in the United States. Filtration of the Catskill/Delaware system would cost NYC upwards of \$4 - \$6 billion. To avoid that expenditure, the city was willing to invest approximately \$1 billion on an integrated water resources management approach to protecting the Catskill/Delaware watershed. Stakeholders involved in the development and eventual implementation of the program included foresters, landowners, farmers, government official, technical agencies and business. With their input, this integrated water resources management program successfully produced a Watershed Development Program that remains in effect. NYC's Watershed Management Program managed to balance economic growth in the Catskills with drinking water protection for NYC.

Briefly, this watershed protection program consists of the following elements:

- Land Acquisition and Stewardship Programs: NYC plans to spend between \$240 and \$310 million over the next ten years to purchase water quality sensitive, undeveloped lands, especially near reservoirs, wetlands and watercourses. In order to enhance the recreational value of the watershed and to promote sustainable use, many of the parcels will remain open for hiking, cross-country skiing and snowshoeing. Since 1997 the city has acquired or has under easement approximately 50,000 acres.

- Partnership Programs: With support from NYC, foresters, landowners, environmentalists, loggers, farmers, government officials, technical agencies, and businesses have partnered together to provide local leadership to two innovative programs: The Watershed Agricultural Program and the Watershed Forestry Program. These participatory programs help ensure that the needs of stakeholder are met, while simultaneously meeting applicable drinking water standards. To date, 95% of watershed farms are voluntarily participating, translating into over 2,000 best management practices, 275 miles of protected stream buffers and 307 site-specific forest management plans on private lands.

- Wastewater Management: The New York City Department of Environmental Protection is working and sharing costs with entities outside the City limits, to construct centralized sewage systems, and to inspect and rehabilitate septic systems. Over 90% of wastewater discharged in the watershed is now addressed through advanced treatment. In addition, to date, over 1,500 septic systems have been replaced or re-furbished.

- Stormwater management measures: Funding from NYC is also available for implementing

measures to prevent contamination of stormwater. Projects include such things as stream corridor protection projects and improved storage of sand, salt, and other de-icing materials.

MAINSTREAMING/SUSTAINABILITY: In 1997, the Watershed Memorandum of Agreement established a partnership between EPA, New York State, New York City, the many counties, towns and villages located throughout the watershed, and non-governmental environmental organizations. This agreement ended an impasse that had for years blocked the city from promulgating updated watershed regulations; secured a necessary state license allowing the City to acquire land in the watershed; and it moved forward a number of crucial watershed protection programs. Most importantly, the agreement 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.

With the MOA in place, EPA issued a five-year waiver in 1997. The waiver was renewed in November 2002, and EPA expects to revise and renew the filtration determination in April 2007.

LESSONS LEARNED: The NYC watershed protection initiative demonstrates that it is possible to meet both downstream water quality goals as well as upstream economic objectives through voluntary partnerships of upstream and downstream users, and implementation of 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.

Key to the success of this initiative were to:

- 1) Have the stakeholder involvement in a participatory process guided by local leadership.
- 2) Get early buy-in from farmers and other stakeholders who traditionally mistrust regulators,
- 3) Make sure that economic development policies are connected to sustainable management policies.

For more information visit: <http://www.epa.gov/r02earth/water/nycshed/filtad.htm>