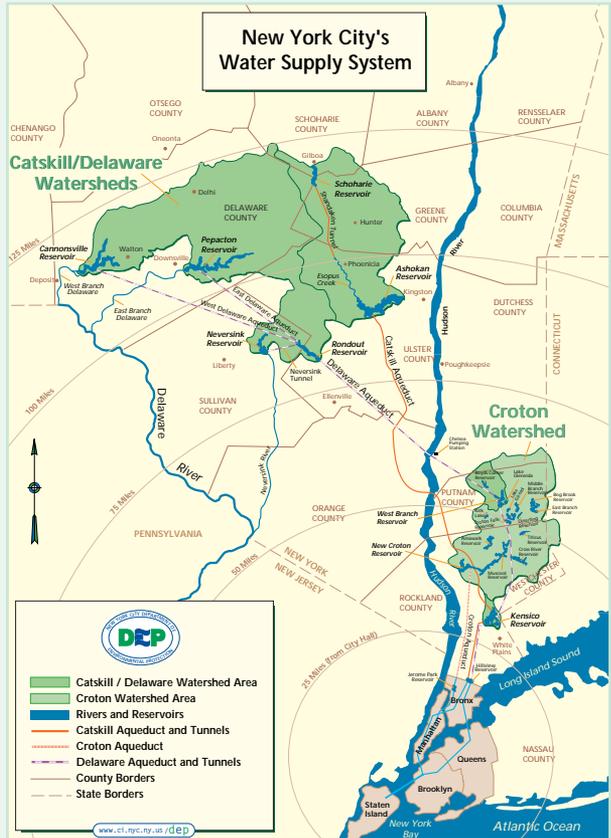


Mid-term Report Card

A Progress Report on The New York City Department of Environmental Protection's Implementation of the Watershed Memorandum of Agreement

This report describes the progress of New York City's implementation of the landmark Watershed Memorandum of Agreement (MOA), signed on January 21, 1997, by New York City and State, the 73 towns and villages and 8 counties in the watershed, environmentalists, the State Departments of Health and Environmental Conservation, and the USEPA. The MOA, most of which is funded by New York City, incorporates both the City's long-range watershed protection and water quality improvement programs and the USEPA's 5-year Filtration Avoidance Determination for the Catskill/Delaware watersheds. The MOA also formalizes innovative partnerships among the City, watershed residents, farmers, businesspeople, government officials, environmentalists, State and federal agencies. The impact of the MOA on water quality protection will be assessed by State Health and USEPA in 2002.



Background

The City's water supply system, managed by the Department of Environmental Protection (DEP), provides 1.3 billion gallons of high quality drinking water to almost nine million New Yorkers every day — eight million City residents and a million more people in Westchester, Putnam, Orange and Ulster Counties. The source of this superior water supply is a network of 19 reservoirs in 1,969-square-miles of watershed that extends 125 miles north and west of New York City. The Croton system, east of the Hudson River, provides about 10% of the daily consumption; the other 90% comes from the Catskill and Delaware watersheds in the Catskill Mountains, west of the Hudson.

To ensure high quality water well into the 21st century, the City developed a long-range watershed protection program. Started in 1989, the program enabled New York City to receive a series of waivers from USEPA of the federal requirement to filter water from its Catskill/Delaware supplies. The current 5-year Filtration Avoidance Determination (FAD) is effective through 2002.

In addition to a series of activities under the MOA, the City's watershed protection program includes: upgrading the nine City-owned upstate sewage treatment plants (\$232 million); rehabilitating and upgrading City-owned dams and water supply facilities (\$240 million); and implementing the Watershed Agricultural Program (\$40 million). The agricultural program was the first upstate/downstate collaboration to link water quality protection goals with an economic objective — preservation of the watershed's farming economy. Another vital element of the City's program is a greatly-expanded water quality monitoring program, including added sampling from all 110 wastewater treatment plants in the watersheds, as well

as increased sampling in reservoirs and other waterways. In conjunction with the City's Department of Health, DEP also implemented an active waterborne disease surveillance program.

MOA IMPLEMENTATION

The following information describes DEP's performance under the MOA in four primary program areas:

- Watershed Regulatory Enforcement
- Land Acquisition & Stewardship
- Watershed Partnerships
- Education & Outreach

Stronger Watershed Regulations

Greater Authority, Enhanced Enforcement and Surveillance

The MOA included the first revision of the City's watershed regulations since 1953. The regulations serve as the first defense against pollution, and dramatically strengthen the City's legal ability to protect water quality. The regulations establish standards for the design, construction and operation of wastewater treatment plants; set design standards and setback requirements for septic systems; and require stormwater control measures for commercial, residential, institutional and industrial projects. They also provide for City review and approval of certain activities that could harm water quality, with strict time frames for review and decision-making, expedited procedures in emergencies and rights of appeal.

Even before the regulations took effect on May 1, 1997, DEP began to reorganize and expand its regulatory enforcement program, which includes: attending local planning board meetings; development project reviews; regular inspections of wastewater treatment plants; systematic inspections of water supply lands;

24-hour DEP Police watershed patrols; and the aggressive pursuit of polluters by the Environmental Enforcement Division (EED) of the DEP Police and by DEP watershed inspectors. DEP works closely with the City's Law Department and local, State and federal law enforcement agencies to prosecute offenders.

The **SCORE** on Regulatory Enforcement

- ✔ 11 new Police officers hired; another 25 in the pipeline.
- ✔ 1,281 notices of violation and notices of failure issued.
- ✔ Over 950 comprehensive technical inspections of wastewater treatment plants completed.
- ✔ 57 compliance conferences held.
- ✔ 775 State Environmental Conservation Law (ECL) summons issued.
- ✔ 162 penal law summons issued.
- ✔ 1.6 million watershed miles patrolled.
- ✔ 3,076 projects reviewed; 2,195 approved, including 1,970 septic systems, 43 stormwater pollution prevention plans and 182 other projects.

Land Acquisition & Stewardship

MOA's Yearly Goals Met or Surpassed

Under the MOA, the City is acquiring, through outright purchase or conservation easements, interests in undeveloped land near reservoirs, wetlands and watercourses, or land with other natural features that are water-quality sensitive. The City is committed to spending \$250 million on acquisitions in the Catskill/Delaware watersheds (potentially increasing to \$300 million) and \$10 million in the Croton. The State will invest an additional \$7.5 million in Croton land acquisition. The City will not acquire land under this program through condemnation.

The MOA creates a local consultation process to ensure that the City considers the interests of watershed towns and villages when it acquires property. In addition, towns and villages may exclude certain parcels from acquisition by the City through outright purchase (but not through conservation easements).

The **SCORE** on Land Acquisition

- ✔ Owners of more than 100,000 acres reached to date (of 350,000 total acres to be solicited over 10 years).
- ✔ 6780 acres in 83 parcels purchased for \$21.3 million.
- ✔ 8600 acres in 145 additional parcels under contract for \$19 million.
- ✔ 1394 acres of newly-acquired properties opened for fishing this year.
- ✔ 1374 acres of newly-acquired parcels opened for hiking, cross-country skiing and snow shoeing, including a 247-acre property in Putnam County that would have been a major sub-division.

Partnership Programs

Upgrading Water Quality Infrastructure Watershed-wide

The MOA established several locally-based watershed protection initiatives, funded by the City, to build and support a strong working relationship between the City and its upstate neighbors — the day-to-day stewards of water quality. The City's total financial commitment to these programs is about \$310 million. Of that amount, \$240 million is being administered primarily through the west-of-Hudson Catskill Watershed Corporation (CWC), created by the MOA, and \$70 million by Westchester and Putnam Counties. The MOA also created a City-funded Watershed Protection and Partnership Council, which serves as a regional forum for the discussion of watershed issues.

Some of these partnership programs and the City's total financial commitment to each are: private septic system inspection and rehabilitation (\$13.6 million); construction of new, centralized sewage systems to correct existing water quality problems (\$75 million); upgrading existing non-City-owned treatment plants to meet State standards (\$75 million); stormwater management measures (\$31.7 million); environmental education (\$2 million); improved storage of sand, salt and de-icing materials (\$10.3 million); and stream corridor protection projects (\$3 million). The MOA also created the City-funded Catskill Fund for the Future, a \$60-million economic development "bank" that will issue loans and grants to support environmentally responsible development projects in the west-of-Hudson watershed.

The **score** on Partnership Programs:

- ✔ To date, 99 of 102 treatment plants submitted engineering proposals for required upgrades (DEP has rebuilt the 6 City-owned Catskill/Delaware plants).
- ✔ 820 septic systems repaired or replaced in CWC-run program.
- ✔ 7 communities, designated in MOA as top priorities for new wastewater treatment systems, conducting studies to define appropriate projects.
- ✔ \$4 million paid to CWC to date for new salt and sand storage facilities in towns across watershed.
- ✔ \$10 million earmarked for sewer extension projects in 5 communities served by City-owned treatment plants.
- ✔ \$500,000 invested in the Watershed Agricultural Council's new Forestry Program.
- ✔ 26 contracts signed with homeowners under a program in Delaware County to acquire and demolish flood-damaged properties in water quality sensitive areas.
- ✔ 6 projects launched in stream corridor protection program.

Education & Outreach

Serving Watershed Communities

Although not required by the MOA, DEP's Education & Outreach programs serve a range of constituencies, including watershed residents and other interested citizens, technical professionals in stormwater, wetlands and stream corridor management, and local college students.

The **score** on Education & Outreach:

- ✔ Watershed Conservation Corps, using students from SUNY Delhi and Ulster County Community College, began its third season in June 1999.
- ✔ Wetlands walks and workshops conducted, reaching several hundred people.
- ✔ Day-long Stormwater Management Symposium held in April 1999, attracting over 150 developers, planners and local officials.
- ✔ Guidance documents on aspects of watershed regulations issued to help the public understand and comply with new regulations.
- ✔ Internship program with the Biology Department of Ulster County Community College launched in 1999, serving 20 students each year.
- ✔ Watershed Office of Public Affairs established to provide speakers, educational materials, and community assistance related to watershed protection goals.

For more information contact:

Geoffrey Ryan in DEP's Watershed Office of Public Affairs at (914) 340-7524;

or visit DEP's Web site at: www.ci.nyc.ny.us/dep