



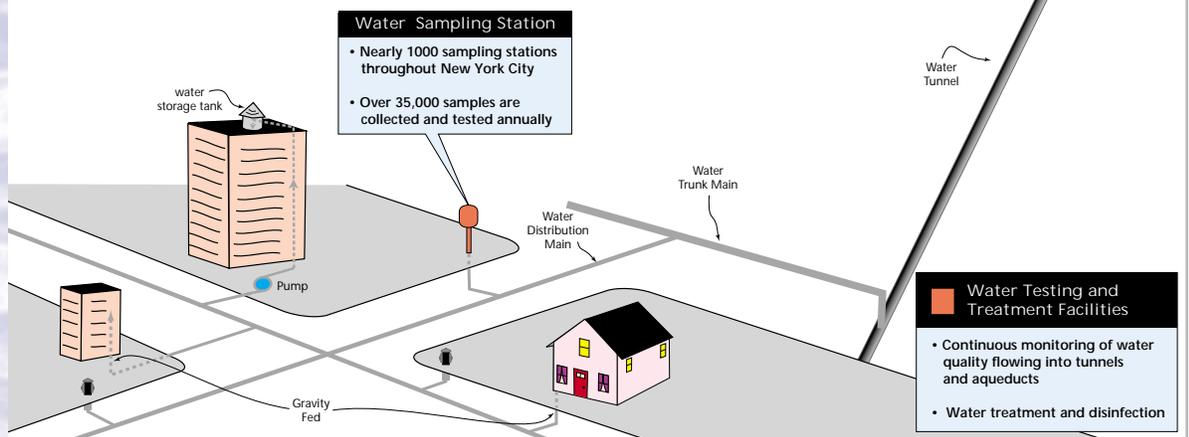
Does my drinking water contain Fluoride?

Yes, all New York City tap water contains fluoride. In accordance with Article 141.08 of the New York City Health Code, DEP, as the New York City water supplier, adds a fluoride compound which provides our water supply with a concentration of approximately 1.0 part per million (ppm) fluoride. Fluoridation commenced in 1964.

DEP's Monitoring for Pathogens

In 1992, the City added a pathogen monitoring component to its comprehensive watershed monitoring program. Since then, samples have been collected weekly from the effluents of Kensico and New Croton Reservoirs, before water is first chlorinated in the Catskill/Delaware and Croton Systems, respectively. In May 1999, DEP implemented a more sensitive analytical method which improved the Department's ability to detect both *Giardia* cysts and *Cryptosporidium* oocysts. Current test methods, however, are limited in that they do not allow us to determine if organisms identified are dead or if they are capable of causing disease.

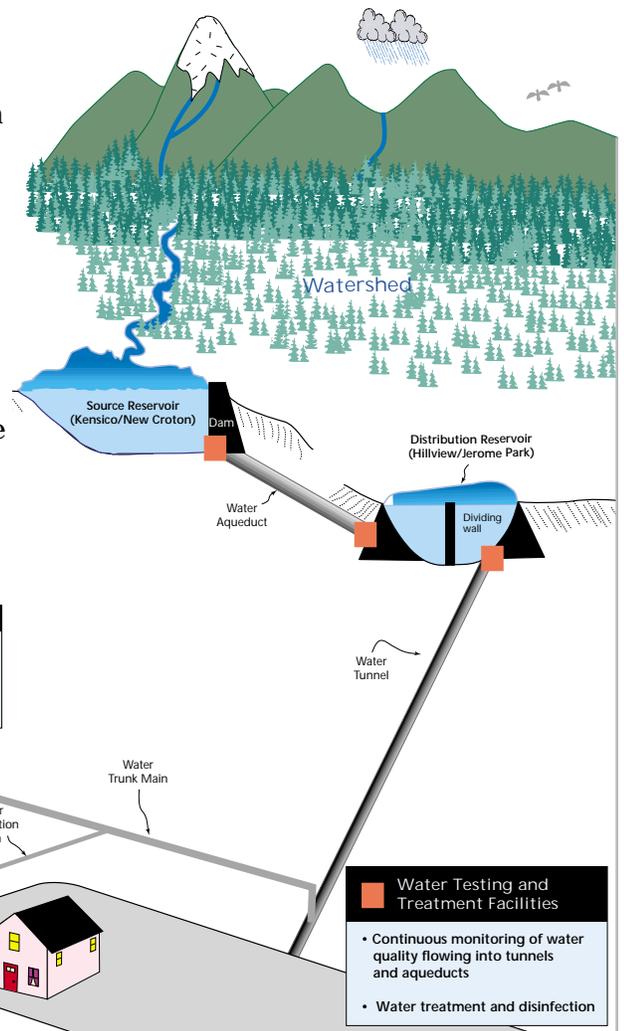
In 2000, as part of the routine sampling program, 105 samples of Kensico Reservoir effluent and 52 samples of New Croton Reservoir effluent were collected and analyzed for *Giardia* cysts and *Cryptosporidium* oocysts. Of the 105 Kensico Reservoir samples, 67 samples were presumed positive for *Giardia* and 10 samples were confirmed positive. Twelve samples were presumed positive for *Cryptosporidium* at Kensico with no samples confirmed positive. The New Croton Reservoir samples produced 24 presumed positive *Giardia* samples with two samples confirmed positive; and, of eight presumed positive *Cryptosporidium* samples, no samples confirmed positive. Weekly updates of DEP's *Giardia* and *Cryptosporidium* data from 1992 to the present can be viewed on our Web site www.nyc.gov/html/dep/html/pathogen.html.



New York City's Water Treatment

All surface water and groundwater entering New York City's distribution system is treated with chlorine, fluoride, orthophosphate, and, in some cases, sodium hydroxide. New York City uses chlorine to meet the New York State Sanitary Code and federal Safe Drinking Water Act disinfection requirements. Fluoride, at a concentration of one part per million, is added to help prevent tooth decay and has been added since 1964 in accordance with the New York City Health Code. Orthophosphate is added to create a protective film on pipes that reduces the release of metals, such as lead, from household plumbing. Sodium hydroxide is added to Catskill/Delaware water to raise the pH and reduce corrosivity.

A sequestering phosphate is applied at several wells to prevent the precipitation of naturally occurring minerals,



mostly iron and manganese, in the distribution mains and customers' household piping. Air stripper facilities operate at several wells to remove volatile organic chemicals.

Ensuring a Safe and Sufficient Supply of Water

Watershed Programs

During 2000, New York City continued implementation of the watershed protection and partnership programs set forth in the January 1997 Watershed Memorandum of Agreement (MOA). These efforts focused on three key programs: the acquisition of watershed lands; the enforcement of strengthened Watershed Regulations; and the expansion of partnership programs that target specific sources of pollution in the watershed. In addition, DEP continued work on a number of water quality studies, and continued implementing the upgrades of non-City-owned wastewater treatment plants (WWTPs).

Land Acquisition

In 2000, DEP met the goals for procuring watershed lands set forth in the 1997 Filtration Avoidance Determination (FAD) and the MOA. Specifically, DEP solicited 52,846 acres of watershed lands in designated priority areas. As of December 2000, DEP had 26,970 acres either acquired or under purchase contract for a cost of \$76.5 million.

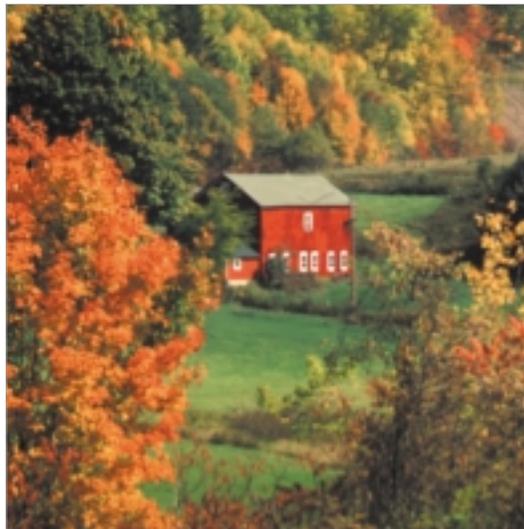
Watershed Regulations

On May 1, 1997, enhanced Watershed Regulations became effective, replacing regulations that had been in place since 1953. The Regulations are vital to water supply protection and provide a higher level of defense against modern-day threats to water quality. By vigorously enforcing the new Regulations, DEP is ensuring that the City's source waters are protected. The steps taken to ensure a high quality water supply include: aggressive

policing and inspection of the watersheds; greatly increased water quality monitoring; systematic inspections of wastewater treatment plants; investigations of other potentially polluting activities; and legal actions against polluters. Furthermore, in 2000, DEP staff reviewed more than 1,719 applications for new or remediated septic systems, 125 stormwater pollution prevention plans, and more than 200 proposals for other projects that included one or more regulated activities.

Partnership Programs

West of the Hudson River, many of the partnership programs are being administered by the Catskill Watershed Corporation (CWC), a non-profit corporation formed solely for that purpose. Together, CWC and DEP continued to implement programs that remediated 193 failing septic systems, completed construction of 29 winter road de-icing materials storage facilities, and identified a second group of best management practices to address existing stormwater runoff.



The Watershed Agricultural Program, funded by DEP and implemented by the Watershed Agricultural Council has become a national model. More than 90% of watershed farms have joined the program, which develops Best Management Practices to reduce agricultural pollution and enhance the economic viability of participating farms.



The aerators in my home are clogging with small pieces of a whitish material. What is causing this to occur?

This is a frequent complaint from consumers. The problem may be accompanied by a significant drop in water pressure at the affected faucet in addition to a decrease in your hot water supply. The culprit is the hot water heater's 'dip-tube'. This is a long internal tube which delivers cold water to the bottom of the hot water heater tank. The tube, which is composed of polypropylene, may disintegrate. The problem affects approximately 16 million water heaters manufactured between 1993 and 1996.



At times, my drinking water often looks "milky" when first taken from a faucet, but then clears up. Why?

Air becomes trapped in the water as it makes its long trip from the upstate reservoirs to the City. As a result, microbubbles of air can sometimes cause water to appear cloudy or milky. This condition is not a public health concern. The cloudiness is temporary and clears quickly after the water is drawn from the tap and the excess air is released.

The Program includes a watershed forestry component and the Conservation Reserve Enhancement Program (CREP). Under CREP, the US Department of Agriculture pays enhanced annual rental rates and other incentives to agricultural landowners to take environmentally sensitive lands out of production. The City and USDA each pay half the cost of treating those lands with conservation practices. To date, more than fifty landowners have enrolled over 600 acres of riparian buffer lands into CREP.

Wastewater Treatment Plant Upgrades

The City continues to advance the program to upgrade all of the 102 non-City-owned wastewater treatment plants (WWTP) in the watershed. All facilities have signed agreements to participate in the upgrade program and have hired engineers to complete upgrade designs. Construction is expected to begin on the first of these upgrades in 2001. The City had upgraded its own watershed WWTPs in the late 1990s.

Upstate Capital Improvements

The City continued to implement a multi-year program to upgrade and improve its upstate water supply facilities, including gatehouses, aqueducts, water testing laboratories, and other facilities which are important to ensuring a safe and reliable supply of drinking water. An ongoing dam reconstruction program has also been in effect for rehabilitation of dams. In 2000, work was done on facilities at five reservoirs and three controlled lakes. In addition,



work is expected to begin on five more reservoirs in 2001. Highlights of this year's work include the replacement of roller and sluice gates as well as the chlorination systems in Shaft 18 and the Catskill Screen Chamber, and repairs to the gate valve in Shaft 6 of the Delaware Aqueduct completed in the first week of December.

The Distribution System



City Water Tunnel No. 3

The Third Water Tunnel, begun in 1970, is being built in stages. The first stage of Tunnel No. 3, which became operational in July 1998, has already helped to improve the reliability of the City's drinking water distribution system. Stage 2 of Tunnel No. 3 includes two sections, and is scheduled to be finished in 2008. The first section of Stage 2, which is in Brooklyn and Queens, is currently under construction and upon completion will improve service to Staten Island, Brooklyn and Queens. This will be followed by the construction of the Manhattan section of Stage 2.

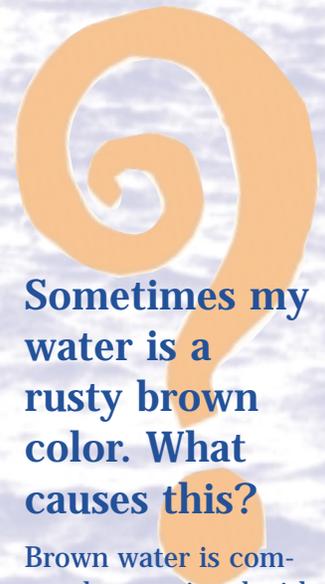
When completed, Tunnel No. 3 will create a more flexible means of supplying drinking water to the entire City and will provide delivery alternatives in the event of disruption in any of the older tunnels. It will also permit New York City to drain, examine and rehabilitate City Tunnels No. 1 and 2.



NEW YORK CITY WATER TUNNELS & DISTRIBUTION AREAS



This map of the City indicates the general areas where water can be supplied by the Croton and Groundwater Systems when they are on line. It is possible to distribute Catskill/Delaware water through both the Croton and Groundwater Systems.



Sometimes my water is a rusty brown color. What causes this?

Brown water is commonly associated with plumbing corrosion problems inside buildings and from rusting hot water heaters. If you have an ongoing problem with brown water, it is probably due to rusty pipes. It is recommended that you run your cold water for 2 - 3 minutes if it has not been used for an extended period of time. This will flush the line. You can avoid wasting water by catching your "flush" water in a container and using it to water plants or for other purposes. In addition, brown water can result from street construction or water main work being done in the area. Any disturbance to the main, including the opening of a fire hydrant, can cause pipe sediment to shift, resulting in brown water. The settling time of the main will vary, depending on the size of the water main.



Should I buy bottled water?

You do not need to buy bottled water for health reasons in New York City since our water meets all federal and State health-based drinking water standards. Also, bottled water costs up to 1,000 times more than the City's drinking water.

Operations

In our ongoing efforts to maintain the appropriate volume and high quality of water in the distribution system, there is some rotation in the water sources used by DEP. In the Groundwater System, wells are routinely removed and returned to service for maintenance or due to changes in demand. After Hurricane Floyd poured torrential rains on the watershed, the entire Croton System was shut down from September 17, 1999, through April 20, 2000, due to elevated levels of color (which is an aesthetic problem, not a public health concern) and to permit contract work in the Croton Aqueduct. On April 20, 2000, the Croton System was placed back in limited service when the Mosholu Pumping Station was activated, which pumped about 35 million gallons per day (MGD) of Croton water into Tunnel #1 of the Catskill/Delaware Supply through the end of the year. For the month of May and the first half of June the maximum pumped flow was 52.5 MGD. In addition about 14 MGD was distributed in the East Bronx from April 24 to June 13, 2000.

Croton Filtration Plant

The City is planning to build a treatment facility to filter water from the Croton System.

The federal Surface Water Treatment Rule (SWTR) requires that all water supplies be filtered by June 29, 1993, unless the system meets special criteria to receive a waiver. Even though Croton water quality is high, it experiences seasonal color problems and will be subjected to stricter standards for disinfection by-products in the near future. In November 1998, a Consent Decree, committing the City to design, construct, and operate a Croton filtration facility, was signed by the City, the United States and the State of New York. The facility is expected to reduce color levels in the Croton water supply and ensure compliance with stricter drinking water standards to be imposed in the future.

Until DEP begins to filter Croton water, we are required to make the following statement: Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites, which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

