

Water testing performed in 2004

PWS ID#: NY3503549

Continuing Our Commitment

Once again we proudly present our annual water quality report. This edition covers all testing completed from January through December 2004. We are pleased to tell you that our compliance with all state and federal drinking water laws remains exemplary. As in the past, we are committed to delivering the best quality drinking water. To that end, we remain vigilant in meeting the challenges of source water protection, water conservation, and community education while continuing to serve the needs of all of our water users.



For more information about this report, or for any questions relating to your drinking water, please call John Platt, Superintendent of Water, at (845) 565-3356. You may also contact the Orange County Department of Health at (845) 291-2331.

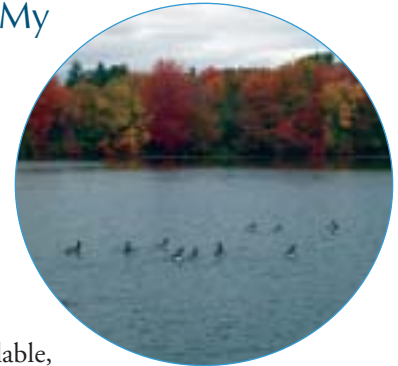


Community Participation

YOU ARE INVITED TO PARTICIPATE IN OUR PUBLIC FORUM AND VOICE YOUR CONCERNS ABOUT YOUR DRINKING WATER. THE CITY COUNCIL MEETS THE SECOND AND FOURTH MONDAY OF EACH MONTH EXCEPT JULY AND AUGUST WHEN THERE IS ONLY ONE MEETING. MEETINGS TAKE PLACE AT 7:30 P.M. IN THE COUNCIL CHAMBERS AT CITY HALL, 83 BROADWAY, NEWBURGH, NEW YORK. FOR MORE INFORMATION CONCERNING CITY COUNCIL MEETINGS, CONTACT THE EXECUTIVE OFFICE AT (845) 569-7301. THERE IS ALWAYS AN OPEN FORUM TO EXPRESS YOUR OPINIONS AND IDEAS. LOOK US UP ON THE WEB AT WWW.CITYOFNEWBURGH-NY.GOV.

Where Does My Water Come From?

Our water source originates from the Washington Lake and the Silver Stream (Brown's Pond) Reservoirs. When these two sources are not available, the tap on the NYC Catskill Aqueduct can be used as an emergency supply. The water quality of these supplies is excellent and meets all New York State Department of Health (NYS DOH) standards.



The NYS DOH has evaluated our susceptibility to contamination under the Source Water Assessment Program (SWAP) and their findings are summarized in the paragraph below. It is important to stress that these assessments were created using available information and only estimate the potential for source water contamination. Elevated susceptibility ratings do not mean that source water contamination has or will occur. We provide treatment and regular monitoring to ensure that the water delivered to customers meets all applicable standards.

The analysis of available information for this source water assessment did not find any significant sources of contamination in this watershed. Statewide and local databases of permitted facilities were used to identify discrete potential sources of contamination. No discrete sources were identified within the assessment area. Land use within the watershed was evaluated by contaminant category to rate the likely prevalence of contamination associated with the land use. The contaminant category ratings for land use types were determined to be medium for microbial contamination due to agricultural practices in the watershed. The overall susceptibility of this watershed to potential sources of contamination was found to be medium for microbial contamination.

A copy of the assessment, including a map of the assessment area, can be obtained by contacting us, as noted in the report.

Working Hard For You



The employees of the water department were extremely busy during 2004 performing a variety of maintenance tasks associated with the elements of a well-operated and properly maintained water system. These tasks would include flushing the entire water system twice each year, repairing and replacing of fire hydrants and water main valves, repairing leaks and water main breaks, repairing and replacing water meters and remote reading devices, as well as conducting a variety of water quality testing procedures to provide a safe and adequate supply of water for the residents of the City of Newburgh. All of these preventive maintenance tasks help to keep down the costs of operating the water system.

This year we are continuing the replacement of all older water meters throughout the city using new water meters and radio reading technology. These new installations in combination with our new utility billing software will help us read water meters more efficiently and accurately. To assist in these installations, we will be using an outside contractor to help install this new radio reading system. The City of Newburgh Water Department will issue press releases and notifications to our customers when this installation process starts. If you ever have a question or

concern about someone who comes to your home indicating that he/she works for the water department, please ask for an identification badge or call the water department office.

Along with the meter replacements noted above, we plan to complete installation of emergency electric generators at the Marne Avenue Tank Pumping Station and the Carter Street Pumping Station. We also plan to start the installation of a new water intake main from our upper reservoir and our NYC Aqueduct Tap. This new main will allow us to bring water directly to our water filtration plant from these secondary remote sources. This new water main installation will provide additional water supplies during emergencies and drought conditions and will further provide for the present and future needs of the City of Newburgh. Additionally, included in this second project is funding for improvements to the many processes we conduct at the water filtration plant. These improvements will help improve the water quality and cost associated with the daily production of water for the City of Newburgh.

This year (2005), beginning with the January 2005 billing period, we have started to use a new style of water bill that is more informational and easier to read and understand. Please look within the special message area of the bill for important issues regarding your account and any important city project announcements, such as water main flushing schedules, water main replacement projects, and the start of the meter installations noted above.

How Is My Water Treated and Purified?

After the water is withdrawn from the reservoir, it undergoes several chemical and physical processes to ensure that potential contaminants are removed and the water is clean and safe for your needs prior to distribution. The city's filtration plant has the ability to treat approximately nine million gallons of water each day, more than twice our average daily consumption. The plant also employs a series of mechanical and chemical treatments to remove color, odor and taste along with organic material, dirt, and particles. The water then passes through a series of sand filters; chlorine is added for disinfection; fluoride is added to promote sound dental health; and corrosion inhibitors are added to reduce the corrosive effects of water on pipes and plumbing. The water is then pumped to underground and aboveground storage towers and into your home or business.





Substances That Might Be in Drinking Water

In general, the sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and can pick up substances resulting from the presence of animals or from human activities. Contaminants that may be present in source water include microbiological contaminants; inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants. In order to ensure that tap water is safe to drink, the State of New York and the

U.S. Environmental Protection Agency (U.S. EPA) establish limits for the amounts of certain contaminants in water provided by public water systems. The New York State Health Department and the Food and Drug Administration (FDA) also establish limits for contaminants in bottled water for the protection of public health.

It should be noted that all drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791 or the Orange County Health Department at (845) 291-2331.

Facts and Figures

Our water system serves 27,000 customers through 6,675 water service connections. We have more than 75 miles of water mains ranging from 4" in diameter all the way up to 30" in diameter. The system contains approximately 800 fire hydrants and 3,500 gate valves used to turn off water mains in cases of water main breaks or other emergencies. The total amount of water produced in 2004 was 1.5 billion gallons. The daily average of water treated and pumped into the distribution system is 4,200,000 gallons per day and the highest single day was 5,100,000 gallons. The amount of water delivered to customers was 1.0 billion gallons. The difference between the water produced and delivered can be attributed to several factors, including, but not limited to water main flushing, fire fighting, leaks, unauthorized use and other nonmetered uses. For the last six years, the City of Newburgh Water Department has conducted a citywide leak detection survey. This leak survey is conducted on a yearly basis and by repairing leaks found, prevents wasted water and helps to continue our efforts in keeping costs down for our customers. Additionally, the city plans to install new water meters and radio reading remote devices citywide to help record water use more accurately and help reduce our percentage of unaccounted for water use. Since 2000, water rates have remained unchanged at \$3.97 per 1,000-gallon unit.

Non-detected Contaminants

Following is a list of regulated potential drinking water contaminants that the City of Newburgh tested for but did not detect.

Microbiological Contaminants: Total Coliform Bacteria, E. Coli, Cryptosporidium, Giardia.

Radioactive Contaminants: Beta particle and photon activity, gross alpha activity, Radium 226, Radium 228

Inorganic Contaminants: Asbestos, Antimony, Arsenic, Barium, Beryllium, Cadmium, Chloride, Chromium, Cyanide, Iron, Mercury, Nitrate, Nitrite, Selenium, Silver, Thallium.

Synthetic Organic Contaminants including Pesticides and Herbicides: Acrylamide, Alachlor, Aldicarb, Aldicarb sulfone, Aldicarb sulfoxide, Aldrin, Atrazine, Benzo(a)Pyrene (PAH), Carbaryl, Carbofuran, Chlordane, Dalapon, 2, 4-D, Di (2-ethylhexyl) adipate, Di (2-

ethylhexyl) phthalate, Dibromochloropropane, 1, 2-Dibromoethane, 1, 2-Dibromo-3-Chloropropane, Dicamba, Dieldrin, Dinoseb, Diquat, Dioxin, Endothall, Endrin, Epichlorohydrin, Ethylene dibromide, Glyphosate, Heptachlor, Heptachlor epoxide, Hexachlorobenzene, Hexachlorocyclopentadiene, 3-Hydroxycarbofuran, Lindane, Methomyl, Metalochlor, Metribuzin, Methoxychlor, Oxamyl, PCB's, Pentachlorophenol, Picloram, Propachlor, Simazine, 2,4,5-Tp (Slivex), Toxaphene.

Volatile Organic Contaminants: Benzene, Carbon Tetrachloride, Chlorobenzene, o-Dichlorobenzene, p-Dichlorobenzene, 1,2-Dichloroethane, 1,1-Dichloroethylene, trans-1, 2- Dichloroethylene, Dichloromethane, 1,2-Dichloropropane, Ethylbenzene, MTBE, Styrene, Tetrachloroethylene, 1,2,4-Trichlorobenzene, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, Trichloroethylene, Toluene, Vinyl Chlorine, total Xylene.

Water Conservation Tips

You can play a role in conserving water by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water.

Conservation tips include:

Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.

Turn off the tap when brushing your teeth.

Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year. Use water-saving devices in all faucets, toilets and appliances.

Check your toilets for leaks by putting a few drops of food coloring in the tank. Without flushing, watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from one of these otherwise invisible toilet leaks. Fix it and you save more than 30,000 gallons a year.

Use your water meter to detect hidden leaks. Simply turn off all taps and water-using appliances and then check the meter after 15 minutes. If any numbers or dials have moved or if the red triangle is moving, you have a leak.

You can conserve outdoors as well:

- Water the lawn and garden in the early morning or evening.
- Use mulch around plants and shrubs.
- Repair leaks in faucets and hoses.
- Use water-saving nozzles.
- Use water from a bucket to wash your car, and save the hose for rinsing.

Information on other ways that you can help conserve water can be found at www.epa.gov/safewater/public_outreach/index.html.

Do I Need to Take Special Precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium*, *Giardia*, and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

Sampling Results

As state regulations require, we routinely test your drinking water for numerous contaminants. Last year we conducted over 6,500 tests for more than 1,000 contaminants. This report provides an overview of last year's water quality and demonstrates how it compares to state standards. These contaminants include total coliform, turbidity, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, and synthetic organic compounds. The table below shows only those contaminants that were detected in the water. Although all of the substances listed here are under the Maximum Contaminant Level (MCL), we feel it is important that you know exactly what was detected and how much of the substance was present in the water.

REGULATED SUBSTANCES

SUBSTANCE (UNITS)	DATE SAMPLED	MCL	MCLG	AMOUNT DETECTED	RANGE LOW HIGH	VIOLATION	TYPICAL SOURCE
Fluoride (ppm)	05-03-04	2.2	NA	1.0	NA	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Sodium ¹ (ppm)	04-01-04	NA	NA	66.7	NA	No	Naturally occurring; Road salt; Water softeners; Animal waste
Sulfate ² (ppm)	05-03-04	250	NA	16.2	NA	No	Naturally occurring
Haloacetic Acids (HAAs) (ppb)	Yearly running quarterly average	60	NA	38.5	9.9-72	No	By-product of drinking water disinfection needed to kill harmful organisms
TTHMs [Total Trihalomethanes] ³ (ppb)	Yearly running quarterly average	80	NA	55.3	37-69	No	By-product of drinking water disinfection
Turbidity ⁴ (NTU)	11-14-04	TT=95% of samples < 0.3	NA	0.28	0.02-0.28	No	Soil runoff

Tap water samples were collected for lead and copper analyses from 30 homes throughout the service area

SUBSTANCE (UNITS)	DATE SAMPLED	ACTION LEVEL	MCLG	AMOUNT DETECTED (90TH% TILE)	RANGE (LOW-HIGH)	HOMES ABOVE ACTION LEVEL	VIOLATION	TYPICAL SOURCE
Copper (ppm)	07-19-04 (yearly)	1.3	1.3	0.36	0.03-0.6	0	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	07-19-04 (yearly)	15	0	3.8	1-10.5	0	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

¹ Water containing more than 20 ppm of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270 ppm of sodium should not be used for drinking by people on moderately restricted diets.

² High concentrations of sulfates in drinking water have three effects: (1) water containing appreciable amounts of sulfates tends to form hard scale in boilers; (2) sulfates cause taste effects; and (3) sulfates cause laxative effects with excessive intake. Laxative effects can be induced at sulfate levels greater than 500 ppm but typically near 750 ppm levels.

³ Some people who drink water that contains trihalomethanes in excess of the MCL over many years may experience problems with their liver or central nervous system and may have an increased risk of getting cancer.

⁴ Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. During the reporting year, 100% of all samples taken to measure turbidity met water quality standards.

Table Definitions

AL (Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

MCL (Maximum Contaminant Level): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

NA: Not applicable

ND: Not detected

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.