



# ANNUAL WATER QUALITY REPORT

*Water testing performed in 2003*



*Proudly Presented by*  
FIRST TAXING DISTRICT  
WATER DEPARTMENT

PWS ID#: CT1030011



## Continuing Our Commitment

The First Taxing District Water Department is proud to present our annual water quality report. This edition covers all testing completed from January through December 2003. We are pleased to inform you that our compliance with all state and federal drinking water laws remains outstanding. As in the past, we are dedicated to our goal of delivering the best quality drinking water. We remain committed to meeting the challenges of source water protection, water conservation, and treatment process upgrades 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 Tracey Pierson, Water Quality Supervisor, or Robert S. Mercurio, Production Superintendent, at (203) 966-1473.

## Important Health Information

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 (U.S. Environmental Protection Agency)/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

## Source Water Protection

A watershed is comprised of the land from which water drains (across or under) on its way to a stream, river, or lake. Water which will eventually become someone's drinking water is important and should be protected. Our principal water supply is developed in four reservoirs along the main stem of the Silvermine River. The watershed extends ten square miles through parts of New Canaan, Ridgefield, and Wilton, CT, and Lewisboro, NY. It is mostly residential with no significant potential sources of contamination.

Each year in the spring and summer our water treatment operators conduct a watershed survey. At this time, each home is visited and we try to speak with each homeowner regarding their property and the water they border. We try to emphasize the importance of maintaining septic systems, pool and water softener discharge, pesticide and herbicide use, animal wastes and any oil, gas or chemical discharges or spills. This year we have put together a new pamphlet to hand out to the homeowners. It discusses the unique responsibility a watershed resident has to help us protect our valuable resource.

As part of our normal operations, we monitor the water quality in the streams leading to our reservoirs, we actively oppose unsuitable development, and we inspect and monitor any new development sites. The watershed is patrolled seven days per week. We have an emergency plan in place involving mutual contact with local fire and police departments, as well as our state and U.S. EPA representatives, should an incident occur that might affect the water supply.

The State of Connecticut Department of Public Health has performed an assessment of our drinking water sources. According to this report, our reservoir system has no point source pollution discharge in the watershed area. The Overall Susceptibility Rating (which indicates susceptibility to potential sources of contamination) is moderate. The completed assessment report is available for access on the Drinking Water Division's Web site at [www.dph.state.ct.us/BRS/Water/DWD.htm](http://www.dph.state.ct.us/BRS/Water/DWD.htm).

## Consumer Frequently Asked Questions

### What causes the pink stain on my bathroom fixtures?

The pinkish color frequently noted in bathrooms on tubs, tile, toilets and sinks is most likely caused by the growth of the bacterium *Serratia marcesens*. *Serratia* is commonly isolated from soil, water, plants, insects, and vertebrates (including man). The bacteria can be introduced airborne into the house through any of the above-mentioned sources. The bathroom provides a perfect environment (moist and warm) for bacteria to thrive.

The best solution to this problem is to continually clean and dry the involved surfaces to keep them free from bacteria. Chlorine-based compounds work best, but keep in mind that abrasive cleaners may scratch fixtures, making them more susceptible to bacterial growth. Keeping bathtubs and sinks wiped down using a solution that contains chlorine will also help to minimize its occurrence. *Serratia* does not survive in chlorinated drinking water.

### My water looks discolored—What should I do?

The main causes of discolored water are:

1) a water main break, 2) water department workers flushing a hydrant, and 3) vibrations caused by construction. Flushing of water mains will occur in the spring and summer months and the flushing schedule will be posted in the local newspaper. If the cause of your dirty water is not obvious, call the water department. Once the reason has been identified and the disruption of the water main ceases, run your cold water tap until it clears.

### Why is my water cloudy in cold weather?

If your water appears cloudy in the winter and early spring it is most likely trapped air. Cold water has a much greater capacity to hold gas than warm water and if this tendency is combined with a faucet aerator, your water may appear cloudy due to bubbles. If the water is allowed to sit a short while, the bubbles will rise to the surface and dissipate.

### Where Does My Water Come From?

First Taxing District customers enjoy water that is supplied from both surface and groundwater sources. The Water Treatment Plant in New Canaan draws water from four reservoirs (Scotts, Browns, John Milne and Grupes). They hold approximately 1 billion gallons of water when full. An additional water source is the Kellogg-Deering Wellfield located in Norwalk which blends with and supplements the surface water when needed.

## Water Conservation Tips

Water conservation measures are an important first step in protecting our water supply. Such measures not only save the supply of our source water, but can also save you money by reducing the cost of water treatment and your water bill. Here are a few suggestions:

### Conservation measures you can use inside your home include:

- Fix leaking faucets, pipes, toilets, etc.
- Replace old fixtures; install water-saving devices in faucets, toilets and appliances.
- Wash only full loads of laundry.
- Do not use the toilet for trash disposal.
- Take shorter showers.
- Do not let the water run while shaving or brushing teeth.
- Run the dishwasher only when full.

### 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/publicoutreach/index.html](http://www.epa.gov/safewater/publicoutreach/index.html).

## Substances Added to My Water for Protection

After we treat and filter the raw water to make it clear and potable, substances must be added to the water so that it stays clean and healthy. Chlorine is added as a precaution to inactivate any bacteria that may still be present. We carefully monitor the amount of chlorine, adding the lowest quantity necessary to protect the safety of your water without compromising taste. Sodium hydroxide, to adjust pH and alkalinity, is added along with a corrosion inhibitor to protect distribution system and customer piping. Finally, fluoride (to prevent tooth decay) is added before the water is pumped into the system for home and business use.



## Community Participation

You are invited to voice your concerns about your drinking water and learn more about your water utility at our monthly meetings. The Board of Commissioners meets each month in our main office on 12 New Canaan Avenue, Norwalk. Please call (203) 847-7387 for the time and date of the next scheduled meeting.

## Substances That Might Be Found in Drinking Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

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 can acquire naturally occurring minerals, in some cases, radioactive material; and can pick up substances resulting from the presence of animals or from human activity. Substances that may be present in source water include:

**Microbial Contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife;

**Inorganic Contaminants**, such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

**Pesticides and Herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;

**Organic Chemical Contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff, and septic systems;

**Radioactive Contaminants**, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

## Sampling Results

The First Taxing District water is monitored daily as it leaves the treatment plant. On a weekly basis we go to each section of the distribution system and collect samples to analyze. During the past year, we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic or synthetic organic contaminants. The table below shows only those regulated contaminants that were detected in the water during 2003. 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. The state requires us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

### REGULATED SUBSTANCES

SUBSTANCE (UNITS)	YEAR SAMPLED	MCL	MCLG	SURFACE WATER		WELL WATER		VIOLATION	TYPICAL SOURCE
				HIGHEST AMOUNT DETECTED	RANGE (LOW-HIGH)	HIGHEST AMOUNT DETECTED	RANGE (LOW-HIGH)		
Alpha Emitters (pCi/L)	1999	15	0	0.62	NA	NA	NA	No	Erosion of natural deposits
Barium (ppm)	2003	2	2	0.015	NA	NA	NA	No	Erosion of natural deposits; Discharge of drilling wastes; Discharge from metal refineries
Chlorine (ppm)	2003	MRDL =4	MRDLG =4	1.60	0.8-1.6	1.18	0.2-1.18	No	Water additive used to control microbes
Fluoride (ppm)	2003	4	4	1.16	0.73-1.16	1.15	0.77-1.15	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Nitrate (ppm)	2003	10	10	0.44	NA	3.1	NA	No	Erosion of natural deposits; Runoff from fertilizer use; Leaching from septic tanks, sewage
Total Organic Carbon (% of required removal) <sup>1</sup>	2003	TT	NA	100.8%	NA	NA	NA	No	Naturally present in the environment
Turbidity (NTU) <sup>2</sup>	2003	TT	NA	0.28 <sup>3</sup>	0.05-0.28 <sup>3</sup>	NA	NA	No	Soil runoff

### Distribution System

SUBSTANCE (UNITS)	YEAR SAMPLED	MCL	MCLG	HIGHEST FOUR QUARTER RUNNING ANNUAL AVERAGE	RANGE OF INDIVIDUAL SITES	VIOLATION	TYPICAL SOURCE
Haloacetic Acids [HAAs] (ppb)	2003	60	NA	20.4	5-38	No	By-product of drinking water disinfection
TTHMs [Total Trihalomethanes] (ppb)	2003	80	NA	30.0	8.6-53.5	No	By-product of drinking water disinfection

Lead and Copper-Tap water samples were collected from 37 homes in the service area (Lead was not detected at the 90th percentile)<sup>4</sup>

SUBSTANCE (UNITS)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90 <sup>TH</sup> %TILE)	HOMES ABOVE AL	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2002	1.3	1.3	0.122	0	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

### UNREGULATED SUBSTANCES

SUBSTANCE (UNITS)	YEAR SAMPLED	AMOUNT DETECTED	RANGE (LOW-HIGH)	TYPICAL SOURCE
Sodium (ppm) <sup>5</sup>	2003	29.8	23.2-29.8	Erosion of natural deposits; Road salt; Residual of drinking water process; Saltwater intrusion

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<sup>1</sup> Amount Detected represents the running annual average of the percent removed.

<sup>2</sup> Turbidity is a measure of the clarity 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.

<sup>3</sup> High was a one-time, two-hour occurrence.

<sup>4</sup> Copper is an essential nutrient, but some people who drink water containing copper in excess of the Action Level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the Action Level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor. Infants and children who drink water containing lead in excess of the Action Level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink water containing lead in excess of the Action Level over many years could develop kidney problems or high blood pressure.

<sup>5</sup> There is no MCL for sodium but Connecticut has a notification level of 28 ppm (mg/L) in order to inform customers on sodium-restricted diets. Values slightly over this level have been found in the well water source which is blended with lower sodium surface water. No customer receives well water alone. For a person who is not on a sodium-restricted diet, the level is relatively low. Foods and drinks consumed regularly have much higher sodium levels. For instance, milk has over 100 mg of sodium in one cup.



## 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.

**MRDL (Maximum Residual Disinfectant Level):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**MRDLG (Maximum Residual Disinfectant Level Goal):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

**NA:** Not applicable

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

**pCi/L (picocuries per liter):**

A measure of radioactivity.

**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.