

Dear Customer:

We are pleased to present you with this year's Water Quality Report. The First Taxing District Water Department has again achieved the goal of meeting the very stringent water quality standards set by federal and state regulatory agencies. This report covers water testing performed throughout 2023.

Our top priority is to provide a safe and reliable supply of drinking water to all of our customers. Each year the water department's laboratory processes thousands of water quality analyses for compliance purposes. This testing includes the source water, the treated water as it leaves the filtration plant and well field, and the water as it travels through the distribution system pipes and into your homes and businesses.

Water quality and water usage have continued to be topics of interest in Norwalk and throughout our region. This report contains important information on water quality issues like lead, PFAS, and other contaminants. The droughts experienced in 2020 and 2022 have brought renewed attention to water usage. As a result, the District enacted Mandatory Sprinkler Landscape Irrigation Conservation Measures to ensure the long-term sustainability of our water resources.

You are welcome to attend our monthly Board of Commissioners meetings in person at our main office, 12 New Canaan Avenue, Norwalk 06851, or remotely through Zoom. The times and dates of meetings are posted on our website at www.firstdistrictwater.org/2024-public-meetings. Please also feel free to call or write to us and to visit our website at www.firstdistrictwater.org for additional information.

Sincerely,
Commissioners, First Taxing District

Elsa Peterson Obuchowski
Chairman

Commissioners: Thomas Cullen, Esq.; Elsa Peterson Obuchowski; Jalin T. Sead, Sr.

District Treasurer: Rosa M. Murray

General Manager: Eleanor Militana

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First Taxing District Water Department
12 New Canaan Avenue
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2023 ANNUAL WATER QUALITY REPORT



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Health Information

This statement is prescribed by the US Environmental Protection Agency for your information.

Sources of lead in drinking water include corrosion of household plumbing system and erosion of natural deposits. 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 such water over many years could develop kidney problems or high blood pressure.

Sources of copper in drinking water include corrosion of household plumbing system, erosion of natural deposits and leaching from wood preservatives. 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.

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 and other microbial contaminants are available from the Safe Drinking Water Hotline at 800-426-4791.

Water Sources and How We Protect Them

Protecting the water supply at its source is the first step in achieving the water department's goal of providing safe drinking water to its customers. The District's reservoirs, located in Lewisboro, NY and New Canaan, CT, hold approximately one billion gallons of water. The source of the water is the watershed land covering 10 square miles in New Canaan, Ridgefield and Wilton, CT and Lewisboro, NY. Rainfall and snowmelt from this land are channeled into soils, groundwater, creeks and streams and then into our reservoirs. Disturbance or pollution on watershed land can directly affect the drinking water reservoirs.

Measures to protect the watershed land and reservoirs include frequent patrolling of the area. Open communications with both the local police and fire departments in our watershed towns is essential. We also work closely with local governments focusing attention on new land development in our watershed. When necessary we actively oppose unsuitable development and, where appropriate, work to get modifications to reduce the impacts of development. Each year our water treatment operators visit the properties on the watershed as part of our sanitary survey requirement.

Procedures to protect our groundwater sources in the Kellogg-Deering Well Field continue through the Aquifer Protection Area Regulations. The Norwalk Zoning Commission has used its authority to register and regulate businesses that pose a potential risk to our drinking water. The commission continues to provide updates to the registrants and work closely with the water department to protect our well field.

How FTDWD Water Is Treated

The reservoir water is filtered at our treatment plant in New Canaan. The filtered water is then disinfected with chlorine to protect against any bacteria. We carefully monitor the amount of chlorine, adding the lowest quantity necessary to ensure the safety of your water without compromising the taste. Finally, chemicals are added to adjust the acidity, reduce the corrosivity and coat the pipes. This protects the pipes and keeps leaching of minerals such as lead and iron to a minimum. Fluoride is also added to prevent tooth decay. At the well field, the groundwater is filtered naturally by sand and gravel. The water is then treated in a similar manner as the surface water with the addition of aeration which removes contaminants and raises the pH.

Conserve Water and Save Money

Fix leaks. This one step alone could cut your water usage by almost 20 percent.

Indoors:

- Trim a minute off the length of your showers. You'll save on your water-heating bills, too.
- Turn off the water while lathering up, shaving, or brushing teeth.
- Wash full loads only in your dishwasher and your washing machine.

Outdoors:

- Water outdoors only when and where needed.
- Water on cloudy days, at night, or in the evening.
- Follow the mandatory twice-weekly schedule for automatic irrigation systems, effective 4/1/24-10/31/24:
 - If last digit of your address number is an even number, the letters A – M or you have no address number: Water only on Sunday & Wednesday, 12:01 AM – 10 AM, or 6 PM – Midnight
 - If last digit of your address number is an odd number or the letters N – Z: Water only on Saturday and Tuesday, 12:01 AM – 10 AM, or 6 PM – Midnight
 - For more information visit firstdistrictwater.org/irrigation

For more ways to conserve visit
firstdistrictwater.org/easy-ways-to-conserve-water



firstdistrictwater.org

2023 Water Sampling

During 2023 the FTDWD staff has taken thousands of water samples in order to determine the presence of biological, inorganic, volatile organic and synthetic organic contaminants. These samples were taken at the reservoirs, the treatment plant, and the well field, and also at representative sample sites around the distribution system. The table below shows only those regulated substances that were detected in the treated water. All of the substances found meet all state and federal standards. The most recent year sampled is noted in the table.

							In Compliance	Test Date	Highest Levels Allowed	
	Treated Surface Water		Treated Well Water		Distribution System					
Substance (units)	Average	Range	Average	Range	Average	Range			MCL	MCLG
Inorganic Compounds										
Chlorine (ppm)	1.18	0.91-1.58	0.84	0.52-1.15	0.65	ND-1.58	YES	2023	4	4
Barium (ppm)	0.014	NA	0.018	NA	NA	NA	YES	2023	2	2
Chloride (ppm)	53.6	NA	94.3	NA	NA	NA	YES	2023	250	NA
Fluoride ¹ (ppm)	0.62	0.56-0.68	0.60	0.55-0.65	NA	NA	YES	2023	4	4
Nitrate (ppm)	0.45	NA	2.27	NA	NA	NA	YES	2023	10	10
Sodium ² (ppm)	32.7	28-40.2	46	22.8-53	NA	NA	NA	2023	CNL=28	NA
Turbidity										
Turbidity ³ (NTU)	0.15	0.09-0.44	NA	NA	NA	NA	YES	2023	NA	NA
Turbidity ³ (NTU)			100% ³				YES	2023	TT	NA
Organic Compounds										
Total Organic Carbon ⁴			100% ⁴				YES	2023	TT	NA
Total Trihalomethanes ⁵ (ppb)	NA	NA	NA	NA	51.0	25-99	YES	2023	80	NA
Total Haloacetic Acids ⁵ (ppb)	NA	NA	NA	NA	30.0	21-46	YES	2023	60	NA
Tap Water Samples										
Copper ⁶ (ppm), 90 th percentile	NA	NA	NA	NA	0.14	NA	YES	2023	1.3	1.3
Lead ⁶ (ppb), 90 th percentile	NA	NA	NA	NA	ND (<1)	NA	YES	2023	15	0
Unregulated Compounds										
Manganese (ppb) ⁷	0.01	ND - 0.03	0.19	0.03-0.25	NA	NA	NA	2023	NA	NA
Hardness ⁸ (ppm)	58.7	50-70	114.3	61-126	NA	NA	NA	2023	NA	NA
Hardness ⁸ (gpg)	3.4	2.9-4.1	6.7	3.6-7.4	NA	NA	NA	2023	NA	NA

Per- and Polyfluoroalkyl Substances (PFAS)

<i>Units in this table are ppt HI = Hazard Index</i>		Treated Surface Water		Treated Well Water		US EPA	CT DPH
PFAS ⁹ tested in 2023		Average	Range	Average	Range	Proposed MCL/MCLG	Action Level
PFOS	Perfluorooctanesulfonic Acid	2.1	ND-4.2	10.5	6.3-17	4/0	10
PFOA	Perfluorooctanoic Acid	3.4	2-5.5	6.5	4.7-10	4/0	16
PFNA	Perfluorononanoic Acid	ND	ND	2.6	ND-5.5	10	12
PFHxS	Perfluorohexanesulfonic Acid	ND	ND	4.0	2.4-7.4	10	49
PFBS	Perfluorobutanesulfonic Acid	0.83	ND-2.2	4.4	2.9-6.2	NA	760
HFPO-DA	Gen-X	ND	ND	ND	ND	10	19
Hazard Index*		NA		0.7		1	NA
9CI-PF3ONS		ND	ND	ND	ND	NA	2
11CI-Pf3OudS		ND	ND	ND	ND	NA	5
PFBA		ND	NA	NA	NA	NA	1800
PFHxA		1.8	ND-3.4	3.1	2.1-6	NA	240
PFOA		4.3	NA	NA	NA	UCMR 5 Detections ⁹	

*Hazard Index for Mixtures of 2 or more of PFHxS, PFNA, HFPO-DA, and PFBS

2029 to implement solutions that reduce these PFAS if monitoring shows that drinking water levels exceed the MCLs. The Connecticut Department of Public Health (CT DPH) also recently updated their guidance on PFAS in drinking water and developed Action Levels for ten PFAS chemicals. Consuming water with PFAS concentrations greater than the CT DPH Action Levels over a long period of time may increase your risk of developing a variety of health effects. The CT DPH Action Levels are non-regulatory and not enforceable, rather they are guidelines that may be used to prompt protective measures.

The FTDWD has adopted operational measures to minimize PFAS levels in the finished water and has implemented an extensive monitoring program of our water. The majority of FTDWD water comes from surface water sources with low PFAS levels, with groundwater sources being used to supplement in times of high demand and dry weather, making up just 8.6% of our total water production in 2023. The FTDWD has plans to build a treatment system to remove PFAS from groundwater sources and is currently waiting for approval from CT DPH, along with securing grant funding before beginning this project.

More Information on PFAS

For more information on PFAS, including possible health outcomes, you may visit these websites:

Connecticut Department of Public Health Frequently Asked Questions about PFAS: <https://portal.ct.gov/DPH/Environmental-Health/PFAS/PFAS>

The Agency for Toxic Substances and Disease Registry’s website: <https://www.atsdr.cdc.gov/pfas/health-effects/index.html>

Basic information and links to informational resources: <https://www.epa.gov/pfas/pfas-explained>

Fact Sheet: Reducing PFAS in Your Drinking Water with a Home Filter: <https://www.epa.gov/system/files/documents/2024-04/water-filter-fact-sheet.pdf>

Source Water Assessment

A source water assessment performed by the State of Connecticut Department of Public Health indicated that the surface water source has a moderate susceptibility and the groundwater source a high susceptibility to potential sources of contamination. This does not imply poor water quality but does indicate the need for protection. The completed assessment report can be found on the Department of Public Health website:

<http://www.dir.ct.gov/dph/Water/SWAP/Community/CT1030011.pdf>

Additional source water assessment information can be found at the Environmental Protection Agency website at: www.epa.gov/sourcewaterprotection

Substances That Might Be 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. Drinking 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 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, in some cases, radioactive material; and 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 Safe Drinking Water Hotline at 800-426-4791.

More Information
For more information, please contact the Manager of Water Quality at waterquality@firstdistrictwater.org or 203-229-7273.

Acronyms and Definitions

- AL** (Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- CNL**: State of CT Customer Notification level.
- gpg** (grains per gallon): unit of measure for hardness in water.
- HAL (Health Advisory Level)**: An estimate of acceptable drinking water levels for a chemical substance based on health effects information. This is not a legally enforceable Federal standard, but serves as technical guidance.
- 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** (Non Detect): Results below the method detection limit.
- NTU** (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- ppm** (parts per million): One part substance per million parts water (or milligrams per liter).
- ppb** (parts per billion): One part substance per billion parts water (or micrograms per liter).
- ppt** (parts per trillion): One part substance per trillion parts water (or nanograms per liter).
- TT** (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.

Compound Sources

- Barium**: Erosion of natural deposits
- Chlorine**: Water additive used to control microbes
- Copper**: Corrosion of household plumbing systems
- Fluoride**: Additive for strong teeth; erosion of natural deposits
- Lead**: Corrosion of household plumbing systems
- Nitrate**: Fertilizer runoff; leaching from septic tanks and sewage; erosion of natural deposits
- Sodium and Chloride**: Water treatment processes; road salt runoff; erosion of natural deposits
- Turbidity**: Sediment particles; naturally occurring iron and manganese; soil runoff

Footnotes

- 1 - Amount detected; ranges are monthly averages.
- 2 - There is no federal MCL for sodium but Connecticut has established a notification level of 28 mg/L. If you have been placed on a sodium-restricted diet please inform your physician of the sodium content in our water. For people on a regular diet this level of sodium is very low.
- 3 - Turbidity is a measure of the clarity of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system. 95% of the samples need to be less than 0.3 NTU. The District met the regulation requirements 100% of the time. Amount is an average of the highest monthly readings.
- 4 - The District’s water met the required removal rate 100% of the time.
- 5 - By-product of chlorinating drinking water. Amount is the running annual average of quarterly measurements in the distribution system. The range represents the results of the individual monitoring sites.
- 6 - Tap water samples were collected for lead and copper analyses from 50 homes throughout the service area. The lead and copper results at the 90th percentile did not exceed the AL. No samples exceeded the AL.
- 7 - Manganese is a naturally occurring mineral that can cause a black/brown residue on plumbing fixtures. There is no enforceable standard for manganese, but EPA has established a Secondary Maximum Contaminant Level of 0.05 mg/L for aesthetic concerns and CT DPH has established an Action Level of 0.3 mg/L for health concerns.
- 8 - Hardness in water is a measurement of the calcium and magnesium (both nontoxic minerals) content in the water. Hardness is not a regulated substance but many customers ask about the hardness level of our water because dishwasher and hot water heater manuals may ask for this information, usually in gpg.
- 9 - Unregulated Contaminant Monitoring Rule (UCMR) 5 sampling began in November 2023 and will continue into 2024 and will monitor for 29 PFAS Chemicals and Lithium. EPA uses the UCMR data for contaminants that are suspected to be present in drinking water and do not have health-based standards set under the Safe Drinking Water Act (SDWA).

Lead and Drinking Water

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Although the majority of lead poisoning in children results from eating lead-based paint chips, lead in drinking water should also be considered. Lead in water primarily comes from the materials and components associated with service lines and home plumbing. Here are the common sources of lead in household water:

Lead service pipe: The pipe that connects the water main in the street to your household plumbing. A portion of this pipe is in public space (First District Water’s responsibility) and a portion is on private property (your responsibility). A "partial" lead service pipe is where a portion of the pipe is replaced, but a portion remains in public or private property.

Lead solder: Connects pipes in home plumbing.

Brass faucets, valves or fittings: Can contain up to eight percent lead.

Galvanized iron pipes: A type of household plumbing that can be a source of lead in homes that have, or had, a lead service pipe.

The Water Department is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components of each home. If you are concerned about lead in your water, you may wish to have your water tested. For assistance with lead sampling please contact the Manager of Water Quality at waterquality@firstdistrictwater.org or 203-229-7273.

When your water has been sitting unused for several hours, you can minimize the potential for lead exposure by flushing your tap for two minutes before using water for drinking or cooking. More information on lead in drinking water can be found at www.epa.gov/safewater/lead or by calling the Safe Drinking Water Hotline at 800-426-4791.