2024 drinking water quality report

FRANKLIN SQUARE WATER DISTRICT

PUBLIC WATER SUPPLY IDENTIFICATION NO. 2902822

ANNUAL WATER SUPPLY REPORT

MAY 2025

To keep our customers up-to-date on the quality of our drinking water the Franklin Square Water District is pleased to present this year's Water Quality Report. New York State and the EPA set regulations for drinking water quality and indicate the levels of various substances that are acceptable in public drinking water. This report explains how our water supply compares to the standards that the State and the EPA have developed.

Our constant goal is to provide you with a safe and dependable supply of drinking water every single day. The Board of Water Commissioners and the District employees are committed to ensuring that you and your family receive the highest quality water.

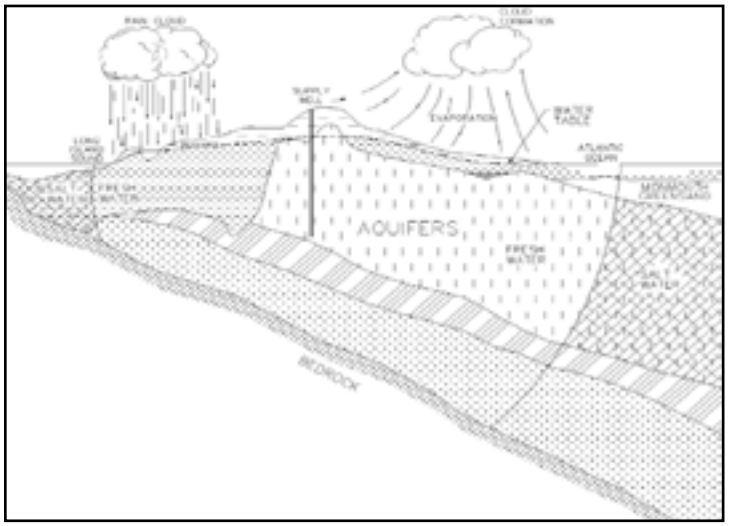
WHERE DOES OUR WATER COME FROM?

We have five (5) wells located throughout our community that pump water out of the Magothy aquifer which is located beneath the land surface of Long Island as shown in the adjacent drawing. Aquifers are underground layers of porous rock and sand that store about 50 percent of the rain and snow that fall on Long Island. Generally, the water quality of the aquifers in Franklin Square is excellent.

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: microbial contaminants; inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants.

In order to ensure that our tap water is safe to drink, the State and the EPA prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The State Health Department's and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

The population within the Franklin Square Water District during 2024 was approximately 20,000 people served across over 5,162 services. The total amount of water withdrawn from the aquifer during the year was 750.1 million gallons.



THE LONG ISLAND AQUIFER SYSTEM

WATER CONSERVATION MEASURES

The underground water system of Long Island has more than enough water for present water demands. However, saving water can reduce your water bill and most importantly will ensure that our future generations will have a safe and abundant water supply.

We would like to thank the residents who have begun implementing water conservation measures in their homes. We hope that making some small changes continues as the trend in 2025 and years to come. Some of the steps that can be made to conserve water are:

- Check for and repair leaks in the home. A slow drip can waste 15 to 20 gallons a day!
- Replace showerheads, faucets and toilets with water-saving devices or retrofitting existing plumbing fixtures with flow restrictors.
- Try to maintain an awareness of personal and family habits that can lead to water conservation. For example, don't let the faucet run when it isn't in use!
- Modify automatic lawn sprinklers to include rain sensors and don't forget - Nassau County Lawn Sprinkler Regulations are still in effect.

But we aren't leaving all conservation efforts to the consumers. The Franklin Square Water District has been implementing our own water conservation measures. In 2024, we continued to implement a water conservation program in order to minimize any unnecessary water use. The pumpage for 2024 was approximately 5.5 higher compared to 2023. This was most likely due to the hotter and drier weather conditions in 2024 and 2023. We will remain dedicated to implementing water conservation measures at our wells and throughout the distribution system. Additional education material are available at the District office.

WATER QUALITY FACTS

In accordance with State regulations, the Franklin Square Water District routinely monitors your drinking water for numerous parameters. We test your drinking water for coliform bacteria, turbidity, inorganic contaminants, lead and copper, nitrates, volatile organic contaminants, synthetic organic contaminants and radiological contaminants. Over 170 separate parameters are tested for in each of our wells numerous times per year. The table presented on page 3 depicts which parameters or contaminants were detected in your drinking water. It should be noted that many of these parameters are naturally found in all Long Island drinking water and do not pose any adverse health effects.

Some people may be more vulernable to disease causing microorganisms or pathogens in drinking water than the general population. Immuno-compromised persons such as person with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly and infants can be particularly at risk from infections. These people should seek advice from their health care provider about their drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium, Giardia and other microbial pathogens are available from the Safe Drinking Water Hotline (800-426-4791).

During 2023, the District collected 30 samples for lead and copper. The 90% level is presented in the table as the maximum result. The next round of samples will occur in 2026. If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. Franklin Square Water District is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at http://www.epa.gov/safewater/lead.

The District implements several measures to protect the quality of water. One of these measures is maintaining an active backflow prevention program where plumbing devices are installed on water services to prevent the backflow of any contaminant into the distribution system. The District requires all residents with automatic sprinkler systems to maintain a backflow device. Please contact the District office for the District's backflow requirements.

WHAT TYPE OF WATER TREATMENT DO WE PROVIDE?

The Franklin Square Water District provides treatment at all wells to improve the quality of the water pumped prior to distribution to the consumer. The pH of groundwater is normally a bit low, so to reduce any corrosion in water mains and in-house plumbing, sodium hydroxide is added to the water to raise the pH.

The District utilizes packed tower aeration, advanced oxidation process, and granular activated carbon for treatment. All four of the District's production wells utilize packed tower aeration treatment for volatile organic compounds. Well Nos. 4 and 5 also utilize advanced oxidation process and granular activated carbon for treatment of 1,4-dioxane and perfluorinated compounds. Well No. 3 was not utilized into the system during the 2024 calendar year.

The District also adds small amounts of sodium hypochlorite to the water as a disinfection agent.

PUBLIC INFORMATION AND PARTICIPATION

If you have any questions about this report or about your water supply, the following contacts and resources are available to you:

- Water District Superintendent John Hughes at (516) 354-0780.
- Nassau County Department of Health at (516) 227-9692.
- All our residents are welcome to attend any of our regularly scheduled meetings. They are normally held on the first, second, third and fourth Tuesday of each month at 5:00 p.m. at the Water District office.

The Franklin Square Water District routinely monitors for different parameters and contaminants in your drinking water as required by Federal and State laws. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk. If you would like to find more information on contamination and potential health risks, you can contact:

- USEPA Safe Drinking Water Hotline at (800-426-4791).
- Website addresses for EPA (www.epa.gov/safewater) and/or NYSDOH (www.health.state.ny.us).

CAPITAL IMPROVEMENT PROGRAM

The District completed construction of a new granular activated carbon system to treat perfluorinated compounds at the Schroeter Avenue plant site (Well Nos. 1 and 2). We are happy to report that the project received a New York State Water Infrastrcutre Improvement (WIIA) grant in the amount of $3.645 million (approximately 60% of the total project cost) to offset the costs to the Water District's constituents. The project is completed and will be providing reliable drinking water treatment in 2025 and beyond. This capital improvement project will help ensure that the residents of the Franklin Square Water District will have the highest quality and reliable drinking water for decades to come.

2024 DRINKING WATER QUALITY REPORT - TABLE OF DETECTED PARAMETERS

Contaminants	Violation (Yes/No)	Date of Sample	Level Detected (Maximum Range)	Unit Measurement	MCLG	Regulatory Limit (MCL or AL)	Likely Source of Contaminant
Inorganic Contaminants							
Copper	No	June - August 2023	0.01 - 0.15 0.062[1]	mg/l	1.3	AL = 1.3	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	No	June - August 2023	ND - 1.2 ND[1]	ug/l	0	AL = 15	
Calcium	No	08/06/24	6.7 - 9.2	mg/l	n/a	No MCL	Naturally occurring
Sodium	No	02/14/24	11.4 - 24.2	mg/l	n/a	No MCL[2]	
Chloride	No	08/06/24	20.6 - 26.8	mg/l	n/a	MCL = 250	
Iron	No	02/14/24	ND - 70.0	ug/l	n/a	MCL = 300[3]	
Sulfate	No	08/06/24	12.6 - 21.8	mg/l	n/a	MCL = 250	
Magnesium	No	08/06/24	4.1 - 5.1	mg/l	n/a	None	
Nickel	No	08/06/24	7.0 - 12.0	ug/l	n/a	MCL = 100	
Selenium	No	08/06/24	ND - 2.5	mg/l	n/a	MCL = 50	
Silver	No	08/06/24	ND - 0.0013	mg/l	n/a	No MCL	
Turbidity	No	08/06/24	ND - 1.5	NTU	n/a	No MCL	
Nitrate	No	02/14/24	1.1 - 2.1	mg/l	10	MCL = 10	Runoff from fertilizer and leaching from septic tanks and sewage
Perchlorate	No	06/04/24	ND - 2.5	ug/l	n/a	AL = 18[4]	Oxygen additive in solid fuel propellant for rockets, missles and fireworks
Disnfection By-Products							
Bromodichloromethane	No	08/06/24	ND - 0.62	ug/l	n/a	MCL = 80	Disinfection By-Products
Bromoform	No	08/06/24	ND - 1.1	ug/l	n/a	MCL = 80	Disinfection By-Products
Dibromochloromethane	No	08/06/24	ND - 1.2	ug/l	n/a	MCL = 80	Disinfection By-Products
Total Trihalomethanes (TTHMs)	No	08/06/24	ND - 2.9	ug/l	n/a	MCL = 80	Disinfection By-Products
Volatile Organic Contaminants							
Trichloroethene	No	10/01/24	ND - 1.1	ug/l	n/a	MCL = 50	Industrial chemical discharge
Radionuclides							
Gross Alpha	No	07/05/23	0.157 - 1.36	pCi/L	n/a	MCL = 50	Naturally occurring
Radium 226 & 228	No	07/05/23	1.31 - 2.14	pCi/L	n/a	MCL = 5[5]	
Uranium	No	07/05/23	0.0785 - 0.68	ug/l	n/a	MCL = 30	
Synthetic Organic Contaminants (SOCs)							
1,4-Dioxane	No	01/02/24	ND - 0.17	ug/l	n/a	MCL = 1.0[6][7]	Industrial discharge
Perfluorooctanesulfonic Acid (PFOS)	No	01/02/24	ND - 6.8	ng/l	0	MCL = 10	Released into the environment from widespread use in commercial and industrial applications
Perfluorooctanoic acid (PFOA)	No	07/02/24	ND - 3.55	ng/l	0	MCL = 10	
Disinfectants							
Chlorine Residual	No	Continuous	1.0 - 1.5	mg/l	n/a	MRDL = 4.0	Measure of disinfectant
Physical Characteristics							
pH	No	Continuous	7.6 - 8.2	pH units	n/a	7.5 - 8.5[8]	Measure of acidity or alkalinity
Calcium Hardness	No	08/06/24	16.7 - 22.9	mg/l	n/a	No MCL	Naturally occurring
Total Alkalinity	No	02/14/24	5.6 - 35.3	mg/l	n/a	No MCL	
Total Hardness	No	08/06/24	33.7 - 41.2	mg/l	n/a	No MCL	
Total Dissolved Solids (TDS)	No	02/14/24	83.0 - 110.0	mg/l	n/a	No MCL	

Definitions:

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

Maximum Contaminant Level Goal (MCLG) - 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.

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

Milligrams per liter (mg/l) - Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).

Micrograms per liter (ug/l) - Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).

2024 DRINKING WATER QUALITY REPORT - TABLE OF DETECTED PARAMETERS

Definitions: *(cont'd.)*

Nanograms per liter (ng/l) - Corresponds to one part of liquid in one trillion parts of liquid (parts per trillion - ppt).
Maximum Residual Disinfectant Level (MRDL) - The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
Nephelometric Turbidity Unit (NTU) - A measusre of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
Non-Detects (ND) - Laboratory analysis indicates that the constituent is not present.
pCi/L - pico Curies per Liter is a measure of radioactivity in water.

(1) - During 2023, we collected and analyzed 30 samples for lead and copper. The result indicated represents the 90th percentile as defined by the Lead and Copper Rule. The values reported for lead and copper represent the 90th percentile. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90th percentile is equal to or greater than 90% of the lead and copper values detected at your water system. In our sampling program, the 90th percentile value is the 4th highest result. The action levels for lead and copper was not exceeded at any site tested. Next testing is scheduled for 2026. If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. Franklin Square Water District is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at http://www.epa.gov/safewater/lead.
(2) - No MCL has been established for sodium. However, 20 mg/l is a recommended guideline for people on high restricted sodium diets and 270 mg/l for those on moderate sodium diets.
(3) - If iron and manganese are present, the total concentration of both should not exceed 500 ug/l. Iron is essential for maintaining good health. However, too much iron can cause adverse health effects. Drinking water with very large amounts of iron can cause nausea, vomiting, diarrhea, constipation and stomach pain. These effects usually diminish once the elevated iron exposure is stopped. A small number of people have a condition called hemochromatosis, in which the body absorbs and stores too much iron. People with hemochromatosis may be at greater risk for health effects resulting from too much iron in the body (sometimes called "iron overload") and should be aware of their overall iron intake. The New York State standard for iron in drinking water is 0.3 milligrams per liter, and is based on iron's effects on the taste, odor and color of the water.
(4) Perchlorate is an unregulated contaminant. However, the NYS Dept. of Health has established an action level of 18.0 ug/l.
(5) - MCL for Radium is for Radium 226 and Radium 228 combined.
(6) - 1,4-Dioxane -The New York State (NYS) established MCL for 1,4-Dioxane at 1 part per billion(ppb) effective August 2020.
(7) - It is used as a solvent for cellulose formulations, resins, oils, waxes and other organic substances. It is also used in wood pulping, textile processing, degreasing, in lacquers, paints, varnishes, and stains; and in paint and varnish removers.
(8) - As per, Nassau County Department of Health guidelines.
(9) - All perfluoroalkyl substances, besides PFOA and PFOS, are considered Unspecified Organic Contaminants (UOC) which have an MCL = 50,000 ng/L.

COST OF WATER

The District bills its consumers at a billing rate of $36.00 per quarter for the first 9,000 gallons and $3.60 per additional 1,000 gallons. Of the 750.1 million gallons that was withdrawn, approximately 93.0 percent was billed directly to the consumers. The typical District resident pays less than $1 per day for water. We are sure you will agree that your water bill is by far the cheapest of all your utility bills.

SOURCE WATER ASSESSMENT

The NYSDOH, with assistance from the local health department, has completed a source water assessment for this system, based on available information. Possible and actual threats to this drinking water source were evaluated. The source water assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how rapidly contaminants can move through the subsurface to the wells. The susceptibility of a water supply well to contamination is dependent upon both the presence of potential sources of contamination within the well's contributing area and the likelihood that the contaminant can travel through the environment to reach the well. The susceptibility rating is an estimate of the potential for contamination of the source water, it does not mean that the water delivered to consumers is, or will become contaminated. See section "Water Quality Facts" for a list of the contaminants that have been detected. The source water assessments provide resource managers with additional information for protecting source waters into the future.

As mentioned before, our water is derived from five (5) wells. The source water assessment has rated the wells as having a very high susceptibility to industrial solvents and a high susceptibility to nitrates. The elevated susceptibility to industrial solvents is due primarily to point sources of contamination related to transportation routes, and commercial/ industrial facilities and related activities in the assessment area. The elevated susceptibility to nitrates is due to residential land use and related practices, such as fertilizing lawns, as well as the commercial/industrial activities in the assessment area. The District routinely monitors for these contaminants and treats the water if elevated levels are found to meet all NYSDOH requirements for drinking water.

A copy of the assessment, including a map of the assessment area, can be obtained by contacting the District.

The Franklin Square Water District conducts over 7,500 water quality tests throughout the year, testing for over 170 different contaminants which have been undetected in our water supply including:

Lead	Carbaryl	Tribromoacetic Acid	Isopropylbenzene (Cumene)
MBAS, Calculated as LAS	Carbofuran	Trichloroacetic Acid	m&p-Xylene
Mercury	Chlordane (Technical)	1,1,1,2-Tetrachloroethane	Methylene Chloride
Nitrite as N	Dalapon	1,1,1-Trichloroethane	Methyl-tert-butyl ether
Nitrogen, Ammonia	Dicamba	1,1,2,2-Tetrachloroethane	n-Butylbenzene
Thallium	Dieldrin	1,1,2-Trichloroethane	n-Propylbenzene
Benzaldehyde	Dinoseb	1,1-Dichloroethane	o-Xylene
Butanal	Diquat	1,1-Dichloropropene	sec-Butylbenzene
Crotonaldehyde	Endothall	1,2,3-Trichlorobenzene	Styrene
Decanal	Endrin	1,2,3-Trichloropropane	tert-Butylbenzene
Glyoxal	Glyphosate	1,2,4-Trichlorobenzene	Toluene
Heptanal	Heptachlor	1,2,4-Trimethylbenzene	trans-1,2-Dichloroethene
Hexanal	Heptachlor epoxide	1,2-Dichlorobenzene	trans-1,3-Dichloropropene
Methyl glyoxal	Hexachlorobenzene	1,2-Dichloroethane	Trichlorofluoromethane
Nonanal	Hexachlorocyclopentadiene	1,2-Dichloropropane	Vinyl chloride
Octanal	Methomyl	1,3,5-Trimethylbenzene	Bromate
Pentanal	Methoxychlor	1,3-Dichlorobenzene	E.coli
Propanal	Metolachlor	1,3-Dichloropropane	gamma-BHC (Lindane)
Chlorite	Metribuzin	1,4-Dichlorobenzene	p-Isopropyltoluene
Cyclohexanone	Oxamyl	2,2-Dichloropropane	Total Coliforms
1,2-Dibromo-3-chloro-propane	PCB Screen	2-Chlorotoluene	Total Organic Carbon
1,2-Dibromoethane (EDB)	Pentachlorophenol	4-Chlorotoluene	11Cl-PF3OUdS
2,4,5-TP (Silvex)	Picloram	Benzene	8:2FTS
2,4-D	Propachlor	Bromobenzene	4:2FTS
3-Hydroxycarbofuran	Simazine	Bromochloromethane	6:2FTS
Alachlor	Toxaphene	Bromomethane	HFPO-DA
Aldicarb	Bromochloroacetic Acid	Carbon tetrachloride	ADONA
Aldicarb sulfone	Bromodichloroacetic Acid	Chlorobenzene	9Cl-PF3ONS
Aldicarb sulfoxide	Chlorodibromoacetic Acid	Chloroethane	NFDHA
Aldrin	Chloroform	Chloromethane	PFEESA
Atrazine	Dibromoacetic Acid	cis-1,2-Dichloroethene	PFMPA
Benzo(a)pyrene	Dichloroacetic Acid	cis-1,3-Dichloropropene	PFMBA
bis(2-Ethylhexyl)adipate	Haloacetic Acids (Total)	Dibromomethane	Perfluorodecanoic Acid (PFDA)
bis(2-Ethylhexyl)phthalate	Monobromoacetic Acid	Ethylbenzene	Perfluorododecanoic Acid (PFDoA)
Butachlor	Monochloroacetic Acid	Hexachloro-1,3-butadiene	Perfluoroundecanoic Acid (PFUnA)

Copies of the Supplemental Data Package, which includes the water quality data for each of our supply wells utilized during 2024, are available at the Franklin Square Water District office located at 895 Schroeter Avenue, Franklin Square, New York and the local Public Library.

We, at the Franklin Square Water District, work around the clock to provide top quality water to every tap throughout the community. The District is proud of the fact that we consistently are voted one of the Best Tasting Waters in Nassau County. We ask that all our customers help us protect our water supply, which is the heart of our community, our way of life and our children's future.

INFORMATION ON LEAD AND LEAD SERVICE LINE INVENTORY

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. *The Franklin Square Water District* is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water, you can have your water tested by a New York State certified laboratory for lead in drinking water. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at https://www.epa.gov/safewater/lead.

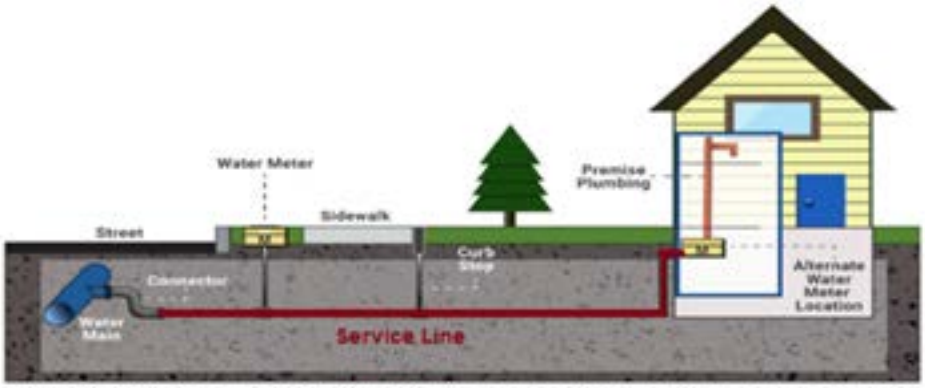
A Lead Service Line (LSL) is defined as any portion of pipe that is made of lead which connects the water main to the building inlet. An LSL may be owned by the water system, owned by the property owner, or both. The inventory includes both potable and non-potable SLs within a system. In accordance with the federal Lead and Copper Rule Revisions (LCRR) our system has prepared a lead service line inventory and have made it publicly accessible by visiting the Franklin Square Water District's main office at 895 Schroeter Avenue or by calling the District at (516) 354-0780.

You Can Help Us Identify your Service Material

If you have not done so already, please help the District update our records about residents' water service material, we are requesting your help by having you send a photo of the service pipe where it enters your home and provide the information to us by completing the online water service inspection form. You can access the form with your cell phone or tablet using the QR code on the right. If you feel that you cannot perform the survey but want to assist, please contact the District at (516) 354-0780, to set up an appointment for an inspection.

Franklin Square Water District owns the portion of the service from the public water main to the curb stop as indicated in the illustration. The property owner owns the service from the curb stop into the building structure.

Service Line Indentification



Example of a Service Line. If any section of the service line is made of lead, the service line is classified as a lead service line.