

2024 Consumer Confidence Report (CCR) **Annual Water Quality Report**

Sterling Water System **Sterling, CT** **CT1360011**

We are pleased to present to you our Annual Drinking Water Quality Report, also known as the Consumer Confidence Report. This report, a requirement of the 1996 amendments to the Safe Drinking Water Act, is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

Water Source

Our water source consists of three gravel-packed groundwater wells located on the property. Our system serves a population of 308 residents. Our certified lab is Phoenix Environmental Laboratories.

Our water treatment techniques consist of chlorination to protect against potential bacterial contaminants, chemical feed injection to control pH, along with a phosphate injection for encapsulating minerals. Over the past year, our system underwent routine equipment replacement and maintenance. At this time, we do have a few projects scheduled including well control updating, chemical feed line replacement, and building maintenance.

Besides the normal equipment maintenance, other 2024 upgrades included upgrading water system internal component communication and alarming capabilities, well refurbishing, chemical cleansing, upgrades to chemical feed system piping, along with enhanced water meter replacements.

White Water, Inc. provides the Sterling Municipal Water Company with contract operation services. The contract operation includes the services of a state certified operator who monitors the water system for compliance with all state and federal drinking water regulations. The operating contract also includes services such as making emergency repairs when needed, making recommendations for improving water quality and increasing system reliability.

For a list of regularly scheduled commission meetings please check our website www.sterlingct.us for dates and time. If you have any questions about this report or concerning your water system, please contact Elycia Hood of WhiteWater, Inc. at 253B Worcester Road, Charlton, MA 01507 or at (888) 377-7678. We want our valued customers to be informed about their water system.

Source Water Assessment

A water assessment of the Sterling Water System was completed by the Department of Public Health Drinking Water Section. The updated assessment report can be found on the Department of Public Health's website at: <https://portal.ct.gov/DPH/Drinking-Water/DWS/Source-Water-Assessment-Program-SWAP-Reports>. The assessment found that this public drinking water source has a moderate susceptibility to potential sources of contamination.

Additional source water assessment information can be found at the Environmental Protection Agency's website: <https://www.epa.gov/sourcewaterprotection/source-water-assessments>.

Source Water Protection

Source water is untreated water from streams, rivers, lakes, or underground aquifers that is used to supply public drinking water. Preventing drinking water contamination at the source makes good public health, economic, and environmental sense. You can be aware of the challenges of keeping drinking water safe and take an active role in protecting drinking water. There are lots of ways that you can get involved in drinking water protection activities to prevent the contamination of the ground water source: dispose properly of household chemicals, help clean up the watershed that is the source of your community's water, attend public meetings to ensure that the community's need for safe drinking water is considered in making decisions about land use, etc. Contact our office for more information on source water protection or contact the Environmental Protection Agency (EPA) at 1.800.426.4791. You may also find information on EPA's website at <https://www.epa.gov/sourcewaterprotection>.

Water Quality

The Sterling Water System routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table shows any detection resulting from our monitoring for the period of January 1 to December 31, 2024. It is important to remember that the presence of these contaminants does not necessarily pose a health risk.

The sources of drinking water include rivers, lakes, ponds, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and radioactive material and can pick up substances resulting from human or animal activity. All sources of drinking water are subject to potential contamination by substances that are naturally occurring, or manmade. Contaminants that may be present in source water include:

- **Microbial contaminants**, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants**, such as salts and metals, can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and herbicides** may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- **Radioactive contaminants** can be naturally occurring or be the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, U.S. Environmental Protection Agency (EPA) prescribes regulations which limit the number of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health. For more information on the format of the detected contaminants table, please visit EPA's website on Understanding Your Water Quality Report at: <https://www.epa.gov/ccr/understanding-your-annual-water-quality-report>.

The table below lists all the drinking water contaminants that were detected throughout water quality monitoring and testing. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk.

Test Results						
<i>Unless otherwise noted, testing was done in 2024.</i>						
<i>Unless otherwise noted, the highest concentration of each contaminant that was collected has been reported.</i>						
Contaminant	Violation (Y/N)	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants						
Total Coliform Bacteria – Distribution	N	Absent	highest number of positive samples (monthly)	Absent	0 positive	Naturally present in the environment.
Total Coliform Bacteria – Wells	N	Present (1)	highest number of positive samples (monthly)	Absent	0 positive	Naturally present in the environment.
Turbidity (07/22/2024)	N	1.4	NTU	1		Soil run-off.
Inorganic Contaminants						
Asbestos (8/31/2022)	N	<1.75	MFL			Decay of asbestos cement water mains; Erosion of natural deposits.
Antimony (1/17/2022)	N	<0.0004	mg/L		0.0006	Decay of asbestos cement water mains; Erosion of natural deposits.
Arsenic (1/17/2022)	N	<0.0005	mg/L		0	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder.
Barium (1/17/2022)	N	0.007	mg/L		2	Erosion of natural deposits.
Beryllium (1/17/2022)	N	<0.0003	mg/L		0.004	Discharge from metal refineries and coal-burning factories; Discharge from electrical, aerospace, and defense industries.
Cadmium (1/17/2022)	N	<0.001	mg/L		0.005	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; Runoff from waste batteries and paints.
Chromium (1/17/2022)	N	<0.001	mg/L		0.1	Discharge from steel and pulp mills; Erosion of natural deposits.

Mercury (1/17/2022)	N	<0.0002	mg/L		0.002	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland
Fluoride (1/17/2022)	N	0.3	mg/L		4	Erosion of natural deposits.
Nickel (1/17/2022)	N	<0.001	mg/L		0.1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Nitrite (8/26/2024)	N	<0.004	mg/L		10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Nitrate (8/26/2024)	N	0.02	mg/L		10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Silver (1/17/2022)	N	<0.001	mg/L		0.05	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Sodium (1/17/2022)	N	11.2	mg/L	28		Erosion of natural deposits, urban storm runoff.
Selenium (1/17/2022)	N	<0.001	mg/L		0.05	Discharge from petroleum and metal refineries; erosion of natural deposits.
Sulfate (1/17/2022)	N	<5	mg/L	250		Erosion of natural deposits; urban storm runoff.
Thallium (1/17/2022)	N	<0.0003	mg/L	0.002	0.002	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories.
Chloride (1/17/2022)	N	14.8	mg/L	250	250	Erosion of natural deposits; storm water runoff containing road salt.
Total Cyanide (1/17/2022)	N	<0.005	mg/L		0.2	Erosion of natural deposits; discharge from industrial effluents.

Contaminants including Pesticides & Herbicides						
Synthetic Organic Compounds (SOCs) (1/17/2022)	N	ND	ug/L			Herbicides, pesticides, and other chemicals that come from agriculture, urban storm water runoff, or industrial, including synthetic and volatile organic chemicals, are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
Organic Chemicals (VOCs) (8/26/2024)	N	ND	ug/L			
Bromodichloromethane (8/26/2024)	N	ND	ug/L			Parameter included in Organic Chemicals (VOCs).
Chloroform (8/26/2024)	N	0.55	ug/L			Parameter included in Organic Chemicals (VOCs).
Dibromochloromethane (8/26/2024)	N	ND	ug/L			Parameter included in Organic Chemicals (VOCs).
Total Trihalomethanes (8/26/2024)	N	0.55	ug/L			Parameter included in Organic Chemicals (VOCs).
Radioactive Contaminants						
Uranium (1/17/2022)	N	<0.0010	mg/L		0.03	Erosion of natural deposits.
Radium 226 (1/17/2022)	N	ND±0.07	pci/L		5	Erosion of natural deposits.
Radium 228 (1/17/2022)	N	ND±0.0.53	pci/L		5	Erosion of natural deposits.
Net Gross Alpha (1/17/2022)	N	ND	pci/L		15	Erosion of natural deposits.
Gross Alpha (1/17/2022)	N	ND±2.0	pci/L		15	Erosion of natural deposits.
Gross Beta (1/17/2022)	N	20.3+1.42	pci/L			Erosion of natural deposits.
Photo Emitters (1/17/2022)	N	ND	mrem/y			Erosion of natural deposits.

Strontium (1/17/2022)	N	0.0745U±0.210	pci/L			Erosion of natural deposits.
Tritium (1/17/2022)	N	119U±372	pci/L			Erosion of natural deposits.
Disinfection Byproducts						
Chlorine (1/17/2022)	N	0.75	mg/L	4	4	Water additive used for disinfection.
Total Haloacetic Acids (HAA5) (8/26/2024)	N	0.55	ug/L	0	60	A byproduct of drinking water chlorination.
Total Trihalomethanes (TTHMs) (8/26/2024)	N	ND	ug/L	0	80	A byproduct of drinking water chlorination.
Bromodichloromethane (8/26/2024)	N	ND	ug/L			Parameter included in Total Trihalomethanes (TTHMs).
Bromoform (8/26/2024)	N	ND	ug/L			Parameter included in Total Trihalomethanes (TTHMs).
Chloroform (8/26/2024)	N	0.55	ug/L			Parameter included in Total Trihalomethanes (TTHMs).
Dibromochloromethane (8/16/2024)	N	ND	ug/L			Parameter included in Total Trihalomethanes (TTHMs).
Unregulated Contaminants						
PFAS (11/16/2022)	N	ND	ng/l			Per- and polyfluoroalkyl substances is a large, complex group of synthetic chemicals used in various consumer products.

Lead & Copper						
Contaminant	Violation (Y/N)	Level Detected	Unit Measurement	MCLG	AL	Likely Source of Contamination
Lead – 90 th Percentile	N	0.9	ppb	0	15	Corrosion of household plumbing systems.
Copper – 90 th Percentile	N	0.147	mg/L	1.3	1.3	Corrosion of household plumbing systems.

Range of results for **lead** samples collected: <1ppb – 1.7ppb
 Number of sites exceeding **lead** action level: 0
 Range of results for **copper** samples collected: 0.056 mg/L – 0.186 mg/L
 Number of sites exceeding **copper** action level: 0

The Sterling water system has completed and submitted the Initial Lead Service Line Inventory to meet compliance with the 2024 Lead & Copper Rule Revisions. If you would like to obtain a copy of this inventory, please reach out to WhiteWater Inc.

**Note: the state allows us to monitor for some contaminants less than once a year because the concentrations of these contaminants do not change frequently. Not all contaminants are tested for every year due to differing monitoring schedules or monitoring waivers. We use the most recent sample results for this report.*

Chlorine Residuals		
High	Low	Average
3.35 mg/L	0.20 mg/L	0.75 mg/L

Violations & Notices			
Violation or Notice	Date or Monitoring Period	Reason for Violation or Notice	Corrective Action
No violations occurred in 2024.	-	-	-

Assessments			
Assessment Type	Date	Reason	Findings & Corrective Action
No assessments were required in 2024.	-	-	-

**Note: Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.*

E. Coli are bacteria whose presence indicates that water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely compromised immune systems. We found E. Coli bacteria, indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

Small Community Water System Capacity Plan

As required by section 19a-37j of the Connecticut General Statutes, WhiteWater Inc. and the Sterling Water System maintain and update the information required for the small community water system capacity plan. This includes information about the water system, applicable treatment, drinking water sources and source water protection program, cross-connection control program, emergency response plan, ownership and operations, fiscal & asset management information, site maps, and capital improvement planning. This information is available to the Connecticut Department of Public Health, upon request.

Units of Measurement:

Parts per million (ppm) or Milligrams per liter (mg/L)	A measurement that corresponds to one minute in two years, or a single penny in \$10,000.
Parts per billion (ppb) or Micrograms per liter (µg/L)	A measurement that corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
Picocuries per liter (pCi/L) or Micrograms per liter (µg/L)	Measurements of radioactivity in water.
Millirems per year (mrem/year)	A measurement of radiation absorbed by the water.
Nephelometric Turbidity Unit (NTU)	A measurement of the clarity of water; turbidity more than 5 NTU is just noticeable to the average person.
Million fibers per liter (MFL)	A measurement of the presence of asbestos fibers that are longer than 10 micrometers.

Definitions:

Action Level (AL)	the concentration of contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Treatment Technique (TT)	a required process intended to reduce the level of a contaminant in drinking water.
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 using the best available treatment technology.
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.
Drinking Water Equivalent Level (DWEL)	a lifetime exposure concentration protective of adverse, non-cancer health effects, that assumes all the exposure to a contaminant is from a drinking water source.
Maximum Residual Disinfectant Level (MRDL)	the highest level of a disinfectant allowed in drinking water; there is convincing evidence that addition of disinfectant is necessary for control of microbial contaminants.
Maximum Residual Disinfectant Level Goal (MRDLG)	the level of 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 contaminants.
Running Annual Average (RAA)	the average of all monthly or quarterly samples for the last year at all sample locations.
Non-Detect (ND)	the specified contaminant was not detected.
Level 1 Assessment	a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria has been found in the water system.
Level 2 Assessment	a very detailed study of the water system to identify potential problems and determine (if possible) why an E. Coli MCL violation has occurred and/or why total coliform bacteria has been found in the water system on multiple occasions.

IMPORTANT INFORMATION

Lead & Copper:	Samples are generally collected, and action levels measured at the consumer's tap. 90% of the tests for a given system must be equal to or below the action level; therefore, a section of the results above has been calculated and are listed as the 90 th percentile.
Lead:	Major sources in drinking water: corrosion of household plumbing systems; erosion of natural deposits. Health effects statement: Exposure to lead in drinking water can cause serious health effects in all age groups. Infants and children can have decreases in IQ and attention span. Lead exposure can lead to new learning and behavior problems or exacerbate existing learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney or nervous system problems.
Copper:	Major sources in drinking water: corrosion of household plumbing systems; erosion of natural deposits. Health effects statement: 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 more than the action level over many years could, suffer liver or kidney damage. People with Wilson's Disease should consult their doctor.
Arsenic:	The United States Environmental Protection Agency (US EPA) adopted the new MCL standard of 10ppb in October 2001. Water systems were required to meet this new standard by January 1 2006.
Total Coliform:	Reported as the highest monthly number of positive samples for water systems that take less than 40 samples per month. Coliforms are bacteria which are naturally present in the environment and are used as an indicator that other, potentially harmful bacteria, may be present.
Turbidity:	Turbidity has no health effects, however, can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms, that can include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

As you can see by the table, our system had no violations. We are proud that your drinking water meets all Federal and State requirements. The EPA has determined that your water IS SAFE at these levels.

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1 (800) 426-4791.

For most people, the health benefits of drinking plenty of water outweigh any possible health risk from these contaminants. However, some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised 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 can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Center of Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline at 1 (800) 426-4791.

Lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Town of Sterling is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact WhiteWater Inc. at (888) 377-7678. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <http://www.epa.gov/safewater/lead>.

Water Conservation

Water is a limited resource, so it is vital that we all work together to maintain and use it wisely. Below are a few tips you can follow to help conserve. Additional information on water conservation may be obtained by accessing EPA's "WaterSense" webpage at: <https://www.epa.gov/watersense>.

- Check for leaky toilets (put a drop of food coloring in the tank and let it sit, if the water in the bowl turns color, you have a leak). A leaking faucet or toilet can dribble away thousands of gallons of water per year.
- Consider replacing your 5-gallon per flush toilet with an efficient 1.6-gallon per flush unit. This will permanently cut your water consumption by 25%.
- Run only full loads in dishwashers and washing machines. Rinse all hand-washed dishes at once.
- Turn off the faucet while brushing teeth or shaving.
- Store a jug of ice water in the refrigerator for a cold drink.
- Water lawn and plants in the early morning or evening hours, to avoid excess evaporation. Don't water on windy, rainy, or very hot days.
- Water shrubs and gardens using a slow trickle around the roots. A slow soaking encourages deep root growth, reduces leaf burn or mildew, and prevents water loss. Select low-water demanding plants that provide an attractive landscape without high water use.
- Apply mulch around flowers, shrubs, vegetables, and trees to reduce evaporation, promote plant growth, and control weeds. Shrubs and ground covers require less maintenance, less water, and provide year-round greenery.
- Be sure that your hose has a shut off nozzle. Hoses without a nozzle can spout 10 gallons more per minute.
- When washing your car, wet it quickly, turn off the spray, wash it with soapy water from a bucket, and rinse quickly.
- Be sure sprinklers water only the lawn, not the pavement.
- Never use the hose to clean debris off of your driveway or sidewalk. Use a broom.
- Rinse other items, such as bicycles or trash, on the lawn to give your grass an extra drink.

We, at Sterling Water System, work hard to provide top quality water to every tap. Water is a precious and limited resource. It is vital that we all work together to maintain and use it wisely. We ask that all our customers help us protect and preserve our drinking water resources, which are the heart of our community, our way of life, and our children's future. Please contact us with any questions. Thank you for working together for safe drinking water.