

# ANNUAL WATER QUALITY REPORT

Reporting Year 2023



*Presented By*  
**Southington  
Water Department**



## Our Commitment

We are pleased to present to you this year's annual water quality report. This report is a snapshot of last year's water quality covering all testing performed between January 1 and December 31, 2023. Included are details about your sources of water, what it contains, and how it compares to standards set by regulatory agencies. 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 and providing you with this information because informed customers are our best allies.

## Substances That Could Be in 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 (FDA) 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 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 U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

## Where Does My Water Come From?

The Southington Water Department supplies its customers with a mixture of groundwater and surface water. Sources include six groundwater wells located throughout Southington and three reservoirs (Southington Reservoirs 1, 2, and 3) on the Southington-Wolcott town line. Each of these sources is treated specifically based on the needs of the water before it becomes available to the public through a vast network of underground pipelines below the town.

## Important Health Information

Sources of lead in drinking water include corrosion of household plumbing systems 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 this water over many years could develop kidney problems or high blood pressure.

Sources of copper in drinking water include corrosion of household plumbing systems, 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. Environmental Protection Agency (U.S. EPA)/Centers for Disease Control and Prevention (CDC) 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

The Southington Water Department owns and controls over 90 percent of its watershed land and follows the best management practices for source water protection. This includes annual watershed inspections and an active forestry management program. The Southington Water Department has also implemented frequent patrols of watershed land and aquifer protection areas to reduce trespassing.

**QUESTIONS?** For more information about this report, or for any questions relating to your drinking water, please call Douglas R. Arndt, Superintendent, at (860) 628-5593.

## Safeguard Your Drinking Water

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides – they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain it to reduce leaching to water sources, or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use U.S. EPA's Adopt Your Watershed to locate groups in your community.
- Organize a storm drain stenciling project with others in your neighborhood. Stencil a message next to the street drain reminding people "Dump No Waste – Drains to River" or "Protect Your Water." Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.



**When the well is dry, we know the worth of water."**

*– Benjamin Franklin*

## Water Conservation Tips

Tips to conserve water can be found on our website.

## Lead in Home Plumbing

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. We are responsible for providing high-quality drinking water and removing lead pipes, but we 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, or 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. Contact us if you are concerned about lead in your water and wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at [epa.gov/safewater/lead](http://epa.gov/safewater/lead).

## About Our Violation

In 2021 and 2022, we did not monitor for the presence of synthetic organic chemicals in our reservoirs, sample for nitrate quarterly in Well 3, sample for *E. coli* monthly in Wells 2A and 7A) or monitor for nitrate, nitrite, lead, copper, or foaming agents (MBAS) in the public drinking water system. Upon being notified of this violation by the U.S. EPA, we immediately analyzed our water supply for the missed samples. Results of the analyses have been received and properly recorded as required by state and federal law. We do not believe that missing these monitoring requirements had any impact on public health and safety. Southington Water Department has ensured that adequate monitoring and reporting will be performed in the future to avoid a repeat of this oversight.

## Community Participation

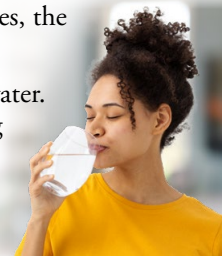
We encourage public interest and participation in our community and the decisions affecting our water. Information on regular monthly meetings of the Board of Water Commissioners can be found at [southingtonwater.org](http://southingtonwater.org), or call us at (860) 628-5593.

## Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule, which ensures that the water we deliver meets specific health standards. The table shows substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

The state recommends monitoring 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 is included, along with the year in which the sample was taken.

We participated in the fifth stage of the U.S. EPA's Unregulated Contaminant Monitoring Rule (UCMR5) program by performing additional tests on our drinking water. UCMR5 sampling benefits the environment and public health by providing the U.S. EPA with data on the occurrence of contaminants suspected to be in drinking water to determine if it needs to introduce new regulatory standards to improve drinking water quality. Unregulated contaminant monitoring data is available to the public, so please feel free to contact us if you are interested in obtaining that information. If you would like more information on the U.S. EPA's Unregulated Contaminant Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791.



### REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
<b>Alpha Emitters</b> (pCi/L)	2023	15	0	2.56	0.515–2.56	No	Erosion of natural deposits
<b>Barium</b> (ppm)	2023	2	2	0.409	0.006–0.409	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
<b>Beta/Photon Emitters</b> (pCi/L)	2023	50 <sup>1</sup>	0	1.05	0.180–1.05	No	Decay of natural and human-made deposits
<b>Chlorine</b> (ppm)	2021	[4]	[4]	0.9	0.3–0.9	No	Water additive used to control microbes
<b>Chromium</b> (ppb)	2023	100	100	0.001	ND–0.001	No	Discharge from steel and pulp mills; Erosion of natural deposits
<b>Combined Radium</b> (pCi/L)	2023	5	0	0.58	0.09–0.58	No	Erosion of natural deposits
<b>Fluoride</b> (ppm)	2023	4	4	0.678	0.493–0.678	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
<b>Haloacetic Acids [HAAs]–Stage 1</b> (ppb)	2023	60	NA	8.94	ND–8.98	No	By-product of drinking water disinfection
<b>Nitrate</b> (ppm)	2023	10	10	3.62	0.007–3.62	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
<b>Strontium 90</b> (pCi/L)	2023	30	NA	ND	NA	No	Nuclear fission
<b>Total Organic Carbon [TOC]</b> (ppm)	2021	TT <sup>2</sup>	NA	3.35	1.34–3.35	No	Naturally present in the environment
<b>TTHMs [total trihalomethanes]–Stage 1</b> (ppb)	2023	80	NA	43.30	5.13–43.30	No	By-product of drinking water disinfection
<b>Turbidity</b> <sup>3</sup> (NTU)	2023	TT	NA	0.99	NA	No	Soil runoff
<b>Turbidity</b> (lowest monthly percent of samples meeting limit)	2023	TT = 95% of samples meet the limit	NA	100	NA	No	Soil runoff
<b>Uranium</b> (ppb)	2023	30	0	1.25	ND–1.25	No	Erosion of natural deposits

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH %ILE)	RANGE LOW-HIGH	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2023	1.3	1.3	0.475	NA	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2023	15	0	0.0143	NA	0/30	No	Lead service lines; Corrosion of household plumbing systems, including fittings and fixtures; Erosion of natural deposits

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloride (ppm)	2023	250	NA	154	14.6–154	No	Runoff/leaching from natural deposits
Sulfate (ppm)	2023	250	NA	36.1	ND–36.1	No	Runoff/leaching from natural deposits; Industrial wastes

UNREGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Bromodichloromethane (ppb)	2023	0.63	ND–0.63	By-product of drinking water disinfection
Chloroform (ppb)	2023	31.3	ND–31.3	By-product of drinking water disinfection
Dibromochloromethane (ppb)	2023	0.74	ND–0.74	By-product of drinking water disinfection
Metolachlor (ppm)	2023	ND	NA	NA
Nickel (ppm)	2023	0.0022	ND–0.0022	Naturally occurring
Sodium <sup>4</sup> (ppm)	2023	64.8	14.8–64.8	Naturally occurring; Road salt

OTHER UNREGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Perfluorodecanoic Acid [PFDA] (ppb)	2023	ND	NA	Microplastics
Perfluorododecanoic Acid [PFDoA] (ppb)	2023	ND	NA	NA
Perfluoroheptanesulfonic Acid [PFHpS] (ppb)	2023	ND	NA	NA
Perfluoroheptanoic Acid [PFHpA] (ppb)	2023	ND	NA	NA
Perfluorohexanesulfonic Acid [PFHxS] (ppb)	2023	ND	NA	NA
Perfluorohexanoic Acid [PFHxA] (ppb)	2023	0.004	ND–0.004	NA
Perfluorononanoic Acid [PFNA] (ppb)	2023	ND	NA	NA
Perfluorooctanesulfonic Acid [PFOS] (ppb)	2023	0.006	ND–0.006	NA
Perfluorooctanoic Acid [PFOA] (ppb)	2023	0.008	ND–0.008	NA
Perfluoropentanesulfonic Acid [PFPeS] (ppb)	2023	ND	NA	NA
Perfluoropentanoic Acid [PFPeA] (ppb)	2023	0.004	ND–0.004	NA
Perfluorotetradecanoic Acid [PFTA] (ppb)	2023	ND	NA	NA
Perfluorotridecanoic Acid [PFTDA] (ppb)	2023	ND	NA	NA
Perfluoroundecanoic Acid [PFUnA] (ppb)	2023	ND	NA	NA

<sup>1</sup> The MCL for beta particles is 4 millirems per year. U.S. EPA considers 50 pCi/L to be the level of concern for beta particles.

<sup>2</sup> The value reported under Amount Detected for TOC is the lowest ratio between percentage of TOC actually removed and percentage of TOC required to be removed. A value of greater than 1 indicates that the water system is in compliance with TOC removal requirements. A value of less than 1 indicates a violation of the TOC removal requirements.

<sup>3</sup> Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system.

<sup>4</sup> If you have been placed on a sodium-restricted diet, it is best to inform your physician that our water contains up to 64.8 ppm of sodium. Please visit [southingtonwater.org](http://southingtonwater.org) for more information.

Definitions

**90th %ile:** The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

**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 contaminants.

**NA:** Not applicable.

**ND (Not detected):** Indicates that the substance was not found by laboratory analysis.

**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.

**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).

**SMCL (Secondary Maximum Contaminant Level):** These standards are developed to protect aesthetic qualities of drinking water and are not health based.

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