PWS ID:
11300784

2019

Drinking Water Quality Report

Stoughton Utilities

stoughtonutilities.com • (608) 873-3379

Introduction

The employees of Stoughton Utilities are pleased to provide you with this year's annual Drinking Water Quality Report. We are required to regularly monitor Stoughton's drinking water for specific contaminants to ensure that it meets all health and safety standards. The purpose of this report is to inform our water customers of the findings from this water quality monitoring.

We want you to understand the efforts we make continually to improve water quality and protect our water resources. We are committed to ensuring the quality of your water remains at the highest possible level.

If you would like to know more about the information contained in this report, please contact Stoughton Utilities Customer Service at (608) 873-3379.

About Stoughton Utilities

Stoughton Utilities' water comes from four wells located throughout the city and is pumped directly into the water distribution system and three storage facilities. The water is treated with chlorine and fluoride as it leaves the wells. In 2019, Stoughton Utilities pumped a total of 490,534,000 gallons of water.

Sources of Water			
Source ID	Source	Depth (in Feet)	Status
Well No. 4	Groundwater	969	Active
Well No. 5	Groundwater	1113	Active
Well No. 6	Groundwater	1137	Active
Well No. 7	Groundwater	1040	Active

Stoughton Utilities is nonprofit and is owned directly by the City of Stoughton. All operations are funded entirely by the water, electric, and wastewater rates paid for our services by customers. In lieu of taxes for 2019, Stoughton Utilities paid $855,940 to the City of Stoughton, making it the largest taxpayer in the city.

Drinking Water FAQ's

What is the hardness of the Stoughton's water?
Stoughton's water is 18.0 grains of hardness.

What is the PH level of Stoughton's water?
The PH level of the water supply ranges from 7.4 – 8.5.

How much iron is in Stoughton's water?
The average iron content in our water supply is 0.17 parts per million (ppm). This amount will vary between 0.00 ppm and 0.26 ppm based on your location within the city.

Educational Information

The sources of drinking water - whether it is obtained from the tap or store bought - 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, in some cases, radioactive material, and can pick up substances resulting from the presence of animals and from human activity.

Contaminants 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, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or 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 can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the United States Environmental Protection Agency (EPA) prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which shall provide the same protection for public health.

What is Added to Stoughton's Water?

Stoughton Utilities disinfects our water with chlorine, which is a step in the water treatment and distribution process to ensure the biological safety of water. We add different amounts of chlorine throughout the year to help combat possible contaminants that may become problematic in water with the elevated temperatures.

Stoughton Utilities fluoridates the water that leaves our wells. Fluoridated water keeps teeth strong and reduces cavities by about 25% in children and adults.

Community water fluoridation is recommended by nearly all public health, medical, and dental organizations. It is recommended by the American Dental Association, American Academy of Pediatrics, US Centers for Disease Control and Prevention, US Public Health Service, and World Health Organization

Outdoor Water Use

When using water outdoors for watering lawns and gardens or refilling your pool, please keep in mind that Stoughton Utilities does not offer sewer or wastewater billing credits unless you have already installed a secondary "water-only" meter to measure the usage that goes only to your outside faucets.

To have a water-only meter, you will first need to work with a plumber to complete in-house piping revisions to create a separate water line to your outside faucets and/or sprinkler system. Once that is complete, Stoughton Utilities will install a second meter in your home. Your primary meter will measure all water consumed inside the home, and standard wastewater charges will apply to its measured usage. The second meter will only measure all water consumed outside the home, and wastewater charges will not apply since it's known that this water is not going down the drain. Water-only meters must remain in place throughout the year, and must be installed for a minimum of 12-months.

In addition to your plumbing costs, Stoughton Utilities charges a one-time installation fee of $40.00 to set and activate the second meter. After that, there is a $9.00 monthly charge that is in addition to your current monthly charges, and any metered usage is billed at $2.82 per every 1,000 gallons of water used.

You should consume at least 22,000 gallons of water annually through your outside faucets and/or sprinkler systems in order to offset the additional monthly charges, and therefore benefit from a water-only meter.

Water System Overview

2 Water Towers

4 Wells

70 Miles of Water Main

713 Fire Hydrants

5,123 Water Meters

1.3 Million gallons of storage

Information From the EPA

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 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 (800) 426-4791.

Maximum Contaminant Levels (MCLs) are the highest level of a contaminant that is allowed in drinking water. MCLs are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

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/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the EPA's Safe Drinking Water Hotline at (800) 426-4791.

Water Quality Testing and Results

Stoughton Utilities routinely monitors for constituents in your drinking water in accordance with state and federal laws. All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or are man-made. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials.

The following Table A. shows the results of our monitoring for the period from January 1, 2019, through December 31, 2019 (unless otherwise noted). Please note that only water parameters that had a detect are listed. If you would like to see the other constituents that were tested for, but did not have any detects, please contact us.

Conserve Water by Finding and Fixing Leaks

According to the Environmental Protection Agency (EPA), the average household can waste nearly 10,000 gallons of water per year due to water leaks.

Save water and money by finding and fixing water leaks throughout your home or business. Check for leaking or running toilets, dripping faucets, and outside hose bibs. Water softeners that run low on salt or that are programmed incorrectly can also waste water.

Table A.

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2019)	Typical Source of Contamination
Disinfection Byproducts						
HAA5 (site 19) (ppb)	60	60	1	1		By-product of drinking water chlorination
TTHM (site 20)(ppb)	80	0	5.6	5.6		By-product of drinking water chlorination
HAA5 (site 20)(ppb)	60	60	1	1		By-product of drinking water chlorination
TTHM (site 20)(ppb)	80	0	11.6	11.6		By-product of drinking water chlorination
Inorganic Contaminants						
Barium (ppm)	2	2	0.035	0.019 - 0.035	4/26/2017	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chromium (ppb)	100	100	1	0 - 1	4/26/2017	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride (ppm)	4	4	0.6	0.1 - 0.6	4/26/2017	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nickel (ppb)	100		1.5000	0.5000 - 1.5000	4/26/2017	Nickel occurs naturally in soils, ground water and surface waters and is often used in electroplating, stainless steel and alloy products.
Nitrate (N03-N) (ppm)	10	10	3.80	0.00 - 3.80		Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium (ppm)	n/a	n/a	15.00	2.90 - 15.00	4/26/2017	n/a
Radioactive Contaminants						
Gross Alpha, Excl. R & U (pCi/l)	15	0	3.1	2.2 - 3.1	5/2/2017	Erosion of natural deposits
Radium, (226 + 228) (pCi/l)	5	0	4.3	3.9 - 4.3	5/2/2017	Erosion of natural deposits
Gross Alpha, Incl. R & U (n/a)	n/a	n/a	3.1	2.2 - 3.1	5/2/2017	Erosion of natural deposits
Unregulated Contaminants						
Sulfate (ppm)	n/a	n/a	17.0	12.00 - 17.00	5/31/2017	n/a
Manganese (ppb)	n/a	n/a	11.0	0.77 - 17.00	3/6/2018 and 9/11/2018	n/a
Bromide (ppb)	n/a	n/a	47.0	47.00 - 49.00	3/6/2018 and 9/11/2018	n/a
Dichloracetic Acid (ppb)	n/a	n/a	0.27	0.20 - 0.32	3/6/2018 and 9/11/2018	n/a

Unregulated Contaminants

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. EPA required us to participate in this monitoring. A summary of these contaminants is included in Table A. The following Table B. shows the individual results of this testing. Only contaminants that were detected are shown.

Table B.

Contaminant (units)	Facility Name	Sample Point Name	Collection Date	MRL	Analytical Result Value
Other Detected Contaminants					
HAA5 (ppb)	Distribution System	Well No. 5	3/6/2018	n/a	0.306
		Well No. 7	3/6/2018	n/a	0.200
			9/11/2018	n/a	0.318
HAA9 (ppb)	Distribution System	Well No. 5	3/6/2018	n/a	0.306
		Well No. 7	3/6/2018	n/a	0.200
			9/11/2018	n/a	0.318
Manganese (ppb)	KW617	Entry Point to Dist. System	9/11/2018	0.4	16.895
			3/6/2018	0.4	16.280
	BF566	Entry Point to Dist. System	9/11/2018	0.4	14.182
			3/6/2018	0.4	13.901
	HR527	Entry Point to Dist. System	9/11/2018	0.4	12.844
			3/6/2018	0.4	12.561
	BF551	Entry Point to Dist. System	3/6/2018	0.4	0.933
			9/11/2018	0.4	0.774

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.

MRL - Minimum Reporting Level: The minimum concentration that can be reported by a laboratory as a quantitated value for a method analyte in a sample following analysis.

pCi/l - picocuries per liter (a measure of radioactivity)

ppm - parts per million, or milligrams per liter (mg/l)

ppb - parts per billion, or micrograms per liter (ug/l)

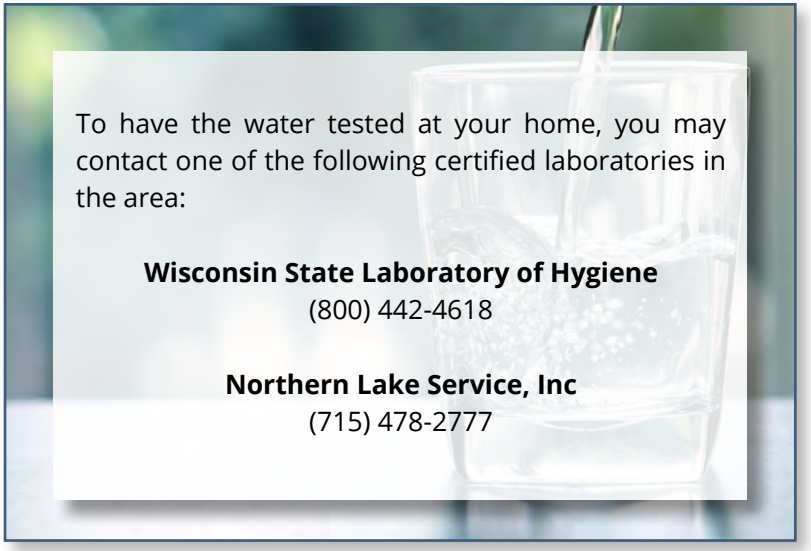
TCR - Total Coliform Rule

Lead & Copper

In addition to the contaminants in Table A. and Table B., we also regularly test for lead and copper in drinking water. Lead and copper are naturally occurring metals that can be found in the environment and sometimes make their way into our drinking water. Both metals can be toxic if ingested in large quantities. The following Table C. shows the results of our lead and copper monitoring for the period from January 1, 2019, through December 31, 2019.

Although the majority of lead exposure comes from sources around the home and in the environment, the Environmental Protection Agency (EPA) estimates that between 10 - 20% of lead exposure comes from drinking water.

Stoughton's water does not have lead present when it leaves our wells, but can be contaminated as it travels through lead service pipes that have started to corrode over time.



To have the water tested at your home, you may contact one of the following certified laboratories in the area:

Wisconsin State Laboratory of Hygiene
(800) 442-4618

Northern Lake Service, Inc
(715) 478-2777

There are a number of factors that can contribute to the amount of lead that enters your drinking water, including the corosivity of the water, the temperature of the water as it passes through the pipes, and the length of time the water stays in the pipes. Hot water and water that has been sitting in pipes for long periods of time are more likely to pick up contaminants from the pipes and fixtures.

Table C.

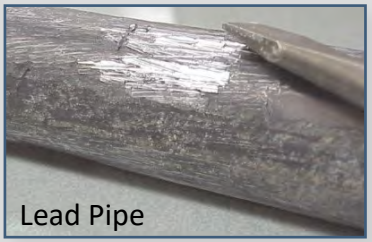
Contaminant (units)	Action Level	MCLG	90th Percentile Level Found	# of Results	Typical Source of Contaminant
Copper (ppm) [1]	AL =1.3	1.3	0.2300	0 of 30 results were above the action level.	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb) [1]	AL=15	0	18.00	6 of 30 results were above the action level.	Corrosion of household plumbing systems; Erosion of natural deposits

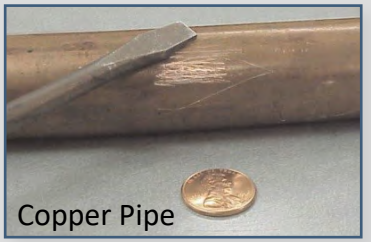
[1] Systems exceeding a lead and/or copper action level must take actions to reduce lead and/or copper in the drinking water. The lead and copper values represent the 90th percentile of all compliance samples collected. If you want information on the number of sites or the actions taken to reduce these levels, please contact Stoughton Utilities.

How to Identify a Lead Water Service Line

You can easily determine if your water service line is lead by inspecting the water line entering your home from the street, usually located in the basement.

Using a key or flathead screwdriver, carefully scratch the water pipe entering your home, prior to the water meter. If the scratch turns a shiny silver color, the pipe could be made of lead or steel. Try placing a strong kitchen magnet on the water line entering your home to determine if it is magnetic. Magnets will not stick to lead.


Lead Pipe


Copper Pipe


Galvanized Steel Pipe

If you're still unsure if your home has a lead service line, you should contact a plumber to have your water lines and fixtures inspected for lead.

Health Information

If present, elevated levels of 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. Stoughton Utilities 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 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 at www.epa.gov/safewater/lead.

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than 6 months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate level may rise quickly for short periods because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider.

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 and or high blood pressure.

Lead Service Line Replacement

If you determine that your home has a lead water service line, the best way to ensure that you continue to have safe drinking water is to replace the privately-owned portion of the line with copper, iron, or plastic pipe. Stoughton Utilities will replace the publicly-owned portion at the same time.

Stoughton Utilities is currently in the process of creating an ordinance that will declare lead service lines as a public nuisance, and mandate the removal of all lead service lines in the City of Stoughton. If passed, the ordinance will enable Stoughton Utilities to eliminate lead contamination in the city's drinking water, as well as to potentially qualify for grant funding to cover homeowners' expenses associated with lead service line replacement.

Stoughton Utilities hopes to secure grant funding through the Wisconsin Department of Natural Resources that would reduce or eliminate the cost of replacing privately owned lead service lines for property owners. This grant opportunity is the first available that doesn't determine program eligibility based on the community's average income, which has hindered our ability to secure this kind of grant in the past. If grant funding is obtained, Stoughton Utilities plans to replace all 776 known lead service lines in the city, making Stoughton completely lead free by the end of 2021.

Household Faucet Aerators:

The Wisconsin Department of Natural Resources (DNR) suggests homeowners remove and clean the aerators on all household faucets used for drinking or cooking monthly. Over time, mineral sediment can build up inside the aerator, and potentially contaminate drinking water.

What Causes Rusty Water?

Customers occasionally ask us, “what causes dirty or rusty water, and is it safe to drink?” Rusty water may look and taste unpleasant, and possibly stain sinks and clothing, but it is not a health concern.

Rust is oxidized iron, and is introduced to tap water from the corrosion of the water mains under the street and/or the plumbing inside your home, apartment, or business. Tap water can turn brown, red, orange, or yellow due to the iron particles that break free from corroded iron or steel pipes.

Rust and sediment is always present at the bottom of water mains, and regularly mixes with drinking water in microscopic amounts. Certain events can stir up the sediment in the water mains, causing discoloration as the particulates become visible to the naked eye, including water main breaks during the winter, water main replacement during construction projects, vehicular accidents involving a fire hydrant, fire fighting efforts with high water use, or other disturbances that cause a significant change in water flow.

Stoughton Utilities flushes our 70 miles of water mains at least once per year, which allows us to not only remove any sediment that has accumulated in the mains, but to also verify the proper operation of hydrants and valves, and maintain firefighting capabilities. Although this flushing is essential to provide high water quality and prevent long-term sedimentation and discoloration issues, it can cause short-term discoloration as the sediment is disturbed due to the higher water flows.

When sediment gets stirred up in the water system, the resulting discoloration will typically last approximately 2-4 hours or less. After this time, the sediment will settle back out and the water will become clear. You can speed up the process by turning on the cold water tap at full pressure nearest where the water enters your home, such as a basement laundry tub, or a first-floor sink, and allowing the water to run until it is clear. During these periods, it’s important to try to avoid using hot water, as the sediment can be drawn into your hot water heater’s water tank, which could require you to have to flush the tank later.

Ongoing System Improvements

Like most water systems across the country, Stoughton Utilities has aging underground infrastructure, and some critical elements have exceeded their service lifespan. When possible, this infrastructure is scheduled for repair or replacement.

The Stoughton Utilities Water Main Replacement Project is an ongoing program to replace aged pipelines each year. New water main is sized to best service the community now and into the future, and to provide adequate fire flow. New water main provides reliable service, and reduces the likelihood of water main breaks that have the potential to damage homes and businesses.

In 2020, scheduled infrastructure rehabilitation and water main replacement projects include:

- Grant Street, from Prospect Street to Taft Street
- Prospect Street, from Page Street to McKinley Street
- Fire hydrant, service valve, and system valve replacements as needed throughout the distribution system
- System valve adjustments to facilitate improvements to street pavement conditions on West Main Street and throughout the city

In 2021, Stoughton Utilities is planning the system-wide replacement of all publicly and privately-owned lead service lines, contingent upon available grant funding offered by the Wisconsin Department of Natural Resources.

Call or Click Before You Dig

Did you know that you must contact Diggers Hotline before any project that involves any digging in your yard? State law requires you to contact Diggers Hotline any time the soil is disturbed. If you do not contact Diggers Hotline and you damage any underground infrastructure while digging, you will be held liable for all repair costs and other damages.

At least three days before you dig, you can contact Diggers Hotline simply by calling (800) 242-8511, or dial 811. You can also submit your request online at www.DiggersHotline.com.

How to Contact Us

We welcome you to attend the monthly Stoughton Utilities Committee meetings. Meeting dates, locations, notices, agendas, and past meeting minutes are available at stoughtonutilities.com.

If you have, any questions concerning this report, your drinking water utility, or Stoughton Utilities in general, please contact us at (608) 873-3379 or at customerservice@stoughtonutilities.com.

If you have a water emergency, please contact us anytime, 24-hours per day and seven days per week, at (608) 873-3379.