PWS ID:
11300784

2020

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 regularly monitor Stoughton's drinking water for 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 our on going 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 2020, Stoughton Utilities pumped a total of 503,671,000 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 2020, Stoughton Utilities paid $883,261 to the City of Stoughton, making it the largest taxpayer in the city.

Drinking Water FAQ's

What is the hardness of 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.

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.

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.

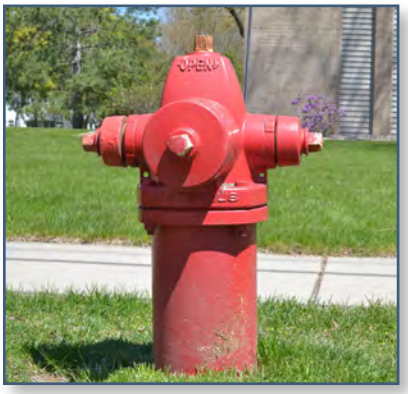
Distribution System Maintenance

A lot of work goes on behind the scenes to provide clean water for our community. Each year, Stoughton Utilities staff work to maintain all parts of Stoughton's water distribution system to ensure safe, clean, and reliable drinking water, and public fire protection.

Water Storage Maintenance
Stoughton has two elevated water storage tanks (water towers) and one water storage reservoir that must be regularly inspected and maintained. Exterior inspections of vent and overflow screens and hatches must be completed once per year, with a professional interior and exterior inspection required at least every 5 years.

Every 10 to 15 years, Stoughton's water towers need to be repainted to protect them from corrosion. Before painting can begin, all of the water must be drained from the water tower to prevent condensation from forming on the outside of the tower.

Water Valve Exercising
There are over 2,000 water valves in the city that must remain in working order so that water can be turned off at the street in the event of a water leak, broken water main, or broken shut off valve to a home or business. Each year, SU staff work to turn and exercise about 20% of the total water valves in the city to ensure that they are working properly. Valves are required to be inspected at least every five years.



Hydrant Flushing
Every year, water technicians open up the hydrants in the city to flush out the sediment and mineral deposits that settle at the bottom of the water mains. SU flushes our 70 miles of water mains at least once per year, allowing us to not only remove sediment that has accumulated in the mains, but to also verify that hydrants and valves are working properly.

Water Meter Testing
The water meters located inside of homes and businesses also need to be inspected regularly. Each year, we work to change out a portion of these water meters so that each meter can be changed and tested for accuracy every 10 years.

While technicians are completing these water meter inspections, they also complete a cross connection inspection at the property. Cross connection inspections ensure that all necessary precautions are in place to prevent water being pulled back into the water distribution system from your home, which could cause contamination of Stoughton's drinking water.

Water Sample Collection and Testing
We are required to collect at least 120 water samples to be tested each year to ensure that your water remains safe to drink. The results of this testing are included in this report.

Stoughton's Water Towers

Water towers are a vital part of Stoughton's water distribution system. Most people know that water towers store water for the community, but they also provide the pressure that brings that water into our homes and businesses.

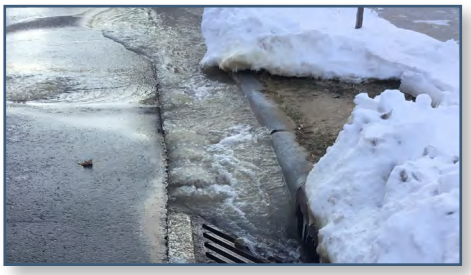
Stoughton has two water towers totaling a combined 900,000 gallons of water storage. Water is pumped from one of the city's four wells into these water towers where it is stored until you turn on a faucet or flush a toilet. The pressure from the water in these elevated water towers helps push the water through the distribution system and into your home.

Water towers also help to ensure that there is enough water and water pressure to fire hydrants in the event of a fire when firefighters need large amounts of water quickly. Since we don't rely solely on pumps to send water through the distribution system, you still have water pressure during power outages.

Water Main Breaks

Every year, our water technicians repair several water main breaks throughout the city. A water main break can be identified by unexplained water coming up out of the ground or road. Water mains can break from damage during construction, older materials that weaken and deteriorate over time, and stress on the pipes from fluctuations in temperature. We tend to see more water main breaks in the winter when the ground starts to freeze and in the spring when the ground starts to thaw.

If you notice any unexplained water seeping up out of the ground or pavement, please let us know. The sooner we are able to fix a water main break, the less water is wasted!



Water System Overview

2
Water Towers

4
Wells

70
Miles of Water Main

679
Fire Hydrants

5,194
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 and regulations. All sources of drinking water, including bottled 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, 2020 through December 31, 2020 (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.

Table A.

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2020)	Typical Source of Contamination
Disinfection Byproducts						
HAA5 (site 19) (ppb)	60	60	2	2		By-product of drinking water chlorination
TTHM (site 20)(ppb)	80	0	7.6	7.6		By-product of drinking water chlorination
HAA5 (site 20)(ppb)	60	60	2	2		By-product of drinking water chlorination
TTHM (site 20)(ppb)	80	0	22.4	22.4		By-product of drinking water chlorination
Inorganic Contaminants						
Arsenic (ppb)	10	n/a	0	0-0		Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2	2	0.048	0.019 - 0.048		Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chromium (ppb)	100	100	2	0 - 2		Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride (ppm)	4	4	0.8	0.5 - 0.8		Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nickel (ppb)	100		0.9100	0.0000 - 0.9100		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	4.75	0.00 - 5.30		Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium (ppm)	n/a	n/a	21.00	3.30 - 21.00		n/a
Radioactive Contaminants						
Gross Alpha, Excl. R & U (pCi/l)	15	0	7.7	0.5 - 7.7		Erosion of natural deposits
Radium, (226 + 228) (pCi/l)	5	0	3.7	0.0 - 3.7		Erosion of natural deposits
Gross Alpha, Incl. R & U (n/a)	n/a	n/a	8.1	0.0 - 8.1		Erosion of natural deposits
Combined Uranium (ug/l)	30	0	0.8	0.4 - 0.8		Erosion of natural deposits

Unregulated Contaminants

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

Table B.

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2020)	Typical Source of Contamination
Unregulated Contaminants						
Sulfate (ppm)	n/a	n/a	24.00	15.00 - 24.00		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

Table C.

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

Lead & Copper

In addition to the contaminants in Tables A. B. and C., 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 can sometimes make their way into our drinking water. Both metals can be toxic if ingested in large quantities. The following Table D. 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 may come from drinking water.

Stoughton's water does not have lead present when it leaves our wells, but can become 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 D.

Contaminant (units)	Action Level	MCLG	90th Percentile Level Found	# of Results	Sample Date	Typical Source of Contaminant
Copper (ppm) [1]	AL =1.3	1.3	0.2300	0 of 30 results were above the action level.	6/4/2019	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.	6/4/2019	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.

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 your home's plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for two minutes before using water for drinking or cooking.

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.*

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.

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six 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.

Other Compliance

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During the compliance period noted in the prior Table A., we did not complete all monitoring or testing for the contaminant(s) noted, and therefore did not meet our regulatory requirements for coliform bacteria testing during this period.

Description	Contaminant Group	Sample Location	Compliance Period Beginning	Compliance Period Ending
Monitoring Violations				
Fail to collect Routine Samples - RTCR	Microbiological Contaminants	Distribution System	10/1/2020	10/31/2020
Actions Taken				
We now have a spreadsheet that is both printed out and completed on the shared network monthly with dates and sample locations. All four acting certified water operators have access to the shared file to both complete and view to see what has occurred in prior weeks. This spreadsheet will ensure that all 10 bacteria samples are collected each month and that we are all able to see what has occurred during the prior weeks.				

Lead Service Line Replacement Program

Stoughton Utilities has worked with the Stoughton Utilities Committee and the Stoughton City Council to enact a new ordinance that declares lead service lines as a public nuisance and mandates the replacement of all public and privately-owned lead service lines.

We are excited to announce that Stoughton Utilities has been awarded grant funding from the Wisconsin Department of Natural Resources (DNR) that will cover the homeowner costs associated with lead service line replacement. Our goal is to use this grant funding to replace 100% of the lead service lines in the city prior to December 31, 2021.

Homeowners that have private lead service lines have been notified by utility staff. They will be contacted by the construction contractor in the upcoming months to schedule the replacement, which will require modifications to the plumbing inside the property's basement.

Construction efforts began in May and will continue throughout 2021. If you are not contacted by Stoughton Utilities, your home was either built after lead service lines were prohibited, or we have confirmed that your home is not served by a lead service line.

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 may be held liable for all repair costs and other damages.

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

Please visit *stoughtonutilities.com/construction* for regular project updates throughout the year.

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)

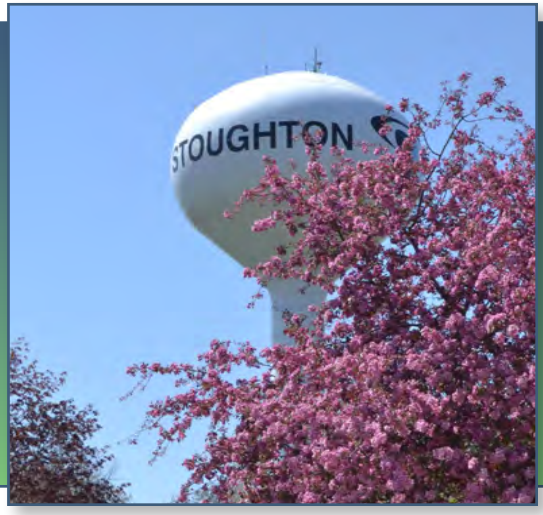
TCR - Total Coliform Rule

Did You Know?

• The average American family uses more than 300 gallons of water per day at home. Roughly 70 percent of this use occurs indoors.

• About 24% of the water we use literally goes down the toilet.

• Household leaks can waste approximately 900 billion gallons of water annually. This is equal to the annual household use of nearly 11 million homes.



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 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.

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 regarding 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.