PWS ID
11300784

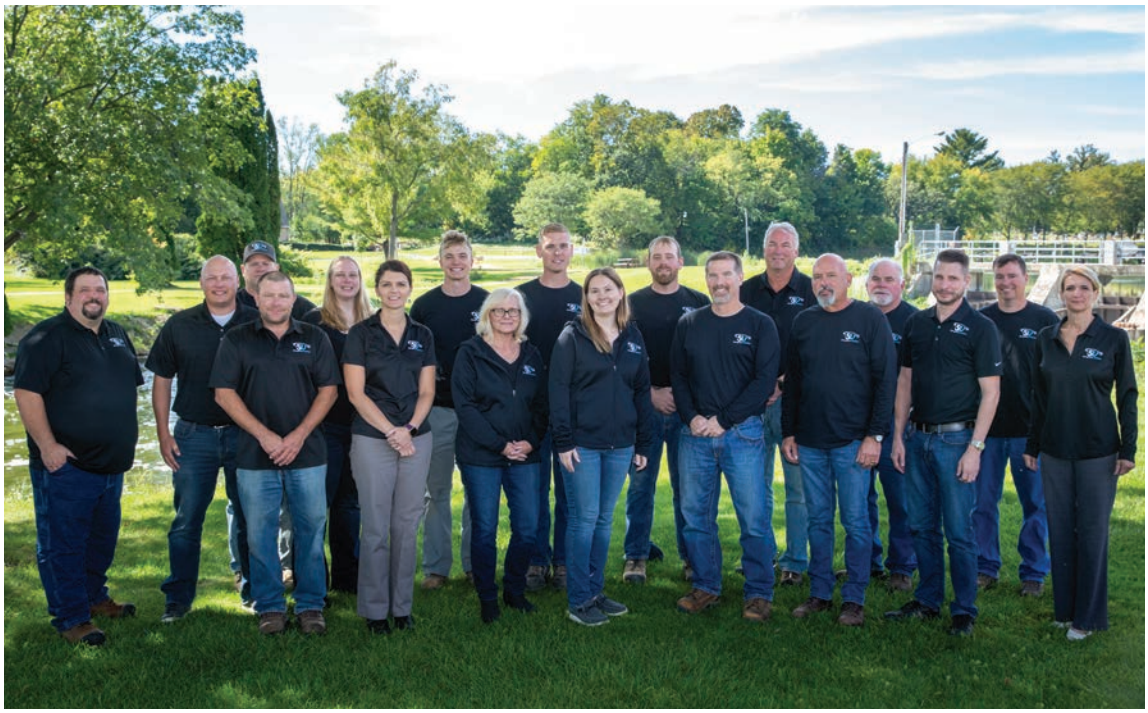
Drinking Water Quality Report

Stoughton Utilities

2022

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 customers of the findings from our ongoing water quality monitoring. We want you to understand the efforts we make continuously to improve water quality and protect our water resources. We are committed to ensuring that the quality of your drinking water remains at the highest possible level.

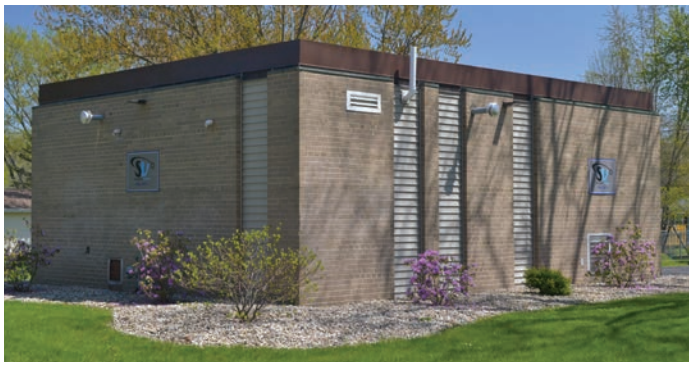
If you would like to know more about the information in this report, please contact Stoughton Utilities Customer Service at (608) 873-3379, or email us at *customerservice@stoughtonutilities.com*.

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 2022, Stoughton Utilities pumped a total of 443,509,000 gallons of water.

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 2022, Stoughton Utilities paid $850,067 to the City of Stoughton, making it the largest taxpayer in the city.

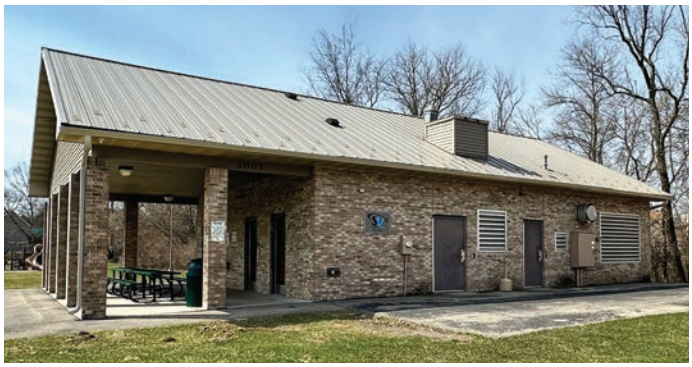
SOURCES OF WATER



Well No. 4
Source: Groundwater | **Depth:** 969 Feet | **Status:** Active

Well No. 5
Source: Groundwater | **Depth:** 1,113 Feet | **Status:** Active

Well No. 6
Source: Groundwater | **Depth:** 1,137 Feet | **Status:** Active



Well No. 7
Source: Groundwater | **Depth:** 1,040 Feet | **Status:** Active

WATER SYSTEM OVERVIEW

2
Water Towers

4
Wells

72
Miles of Water Main

722
Fire Hydrants

5,282
Water Meters

1.3
Million Gallons of Storage

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, sometimes containing 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:

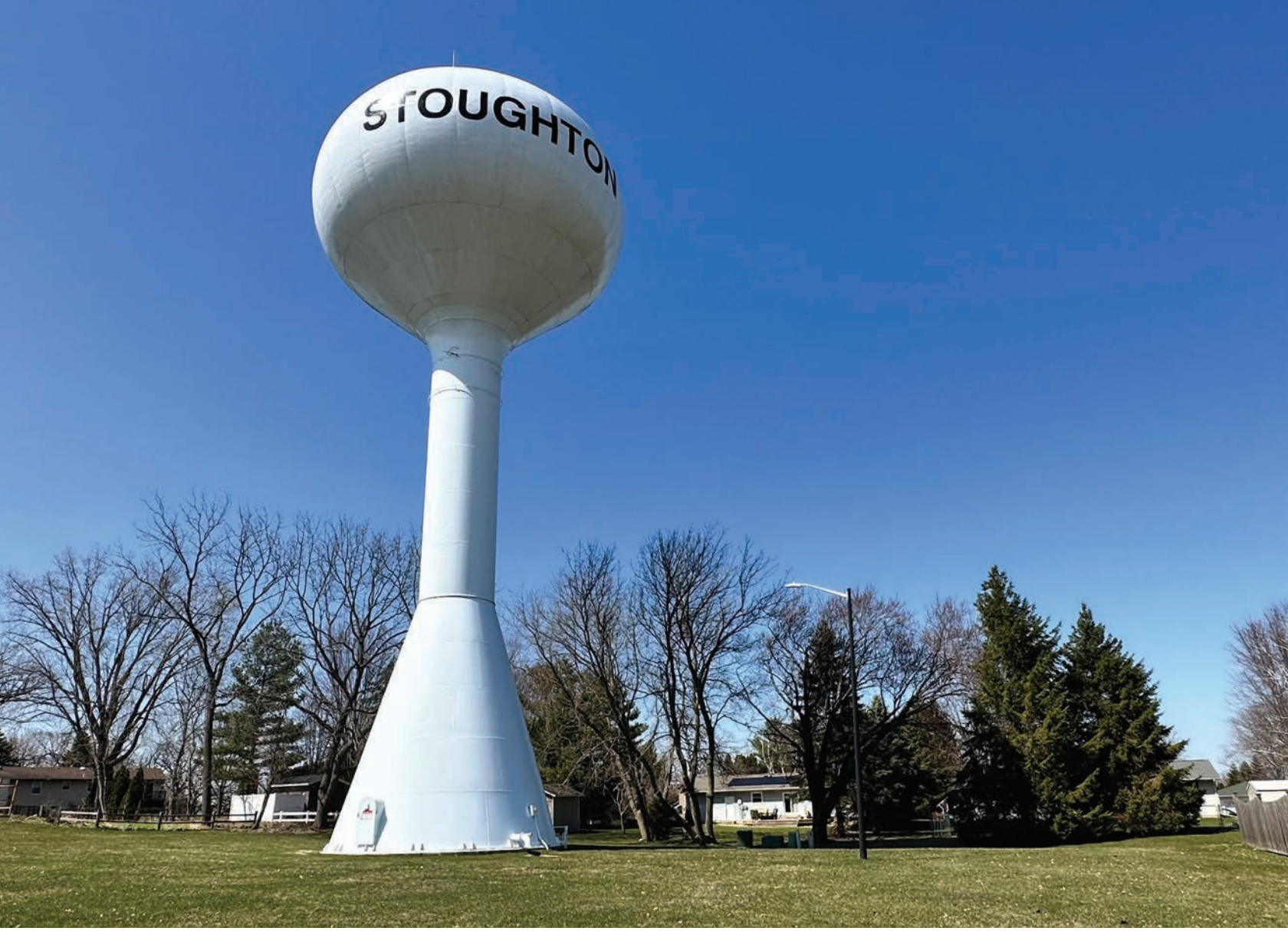
- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- 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.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

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.

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*.



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 two 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, persons 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.

DEFINITIONS

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

HAL - Health Advisory Level: The concentration of a contaminant which, if exceeded, poses a health risk and may require a system to post a public notice.

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)

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

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

RPHGS - Recommended Public Health Groundwater Standards: Groundwater standards proposed by the Wisconsin Department of Health Services. The concentration of a contaminant which, if exceeded, poses a health risk and may require a system to post a public notice.

SMCL - Secondary drinking water standards or Secondary Maximum Contaminant Levels for contaminants that affect taste, odor, or appearance of the drinking water. The SMCLs do not represent health standards.

TCR - Total Coliform Rule

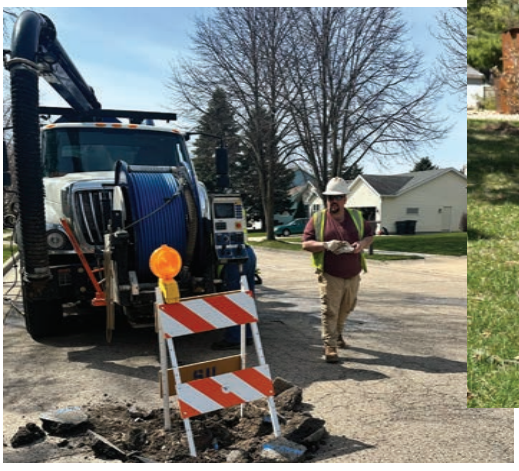
OUTDOOR WATER USE

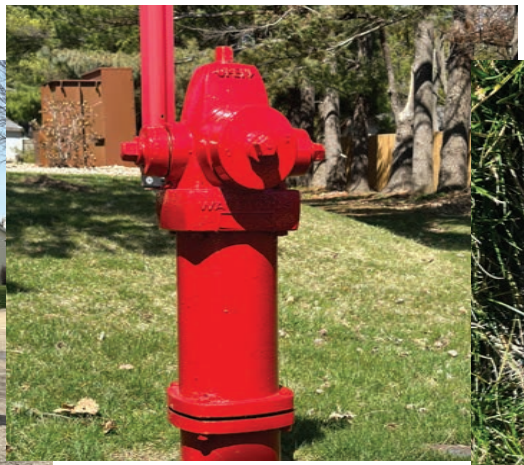
When using water outdoors for watering lawns and gardens or refilling your pool, please keep in mind that Stoughton Utilities does not offer sewer or wastewater billing credits unless you have already installed a secondary "water-only" meter to measure the usage that goes only to your outside faucets.

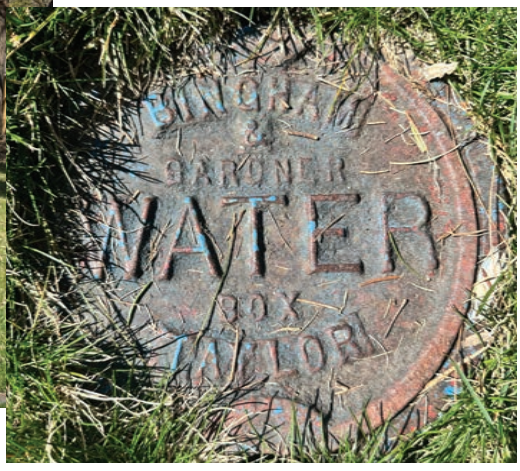
To have a water-only meter, you will first need to work with a plumber to complete in-house piping revisions to create a separate water line to your outside faucets and/or sprinkler system. Once that is complete, Stoughton Utilities will install a second meter in your home. Your primary meter will measure all water consumed inside the home, and standard wastewater charges will apply to its measured usage. The second meter will only measure 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 $10.15 monthly charge that is in addition to your current monthly charges, and any metered usage is billed at $3.55 per every 1,000 gallons of water used.

You should consume at least 25,000 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 QUALITY TESTING & 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, 2022 through December 31, 2022 (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 2022)	Typical Source of Contamination
Disinfection Byproducts						
HAA5 (site 19) (ppb)	60	60	3	3		By-product of drinking water chlorination
TTHM (site 19)(ppb)	80	0	15.2	15.2		By-product of drinking water chlorination
HAA5 (site 20)(ppb)	60	60	4	4		By-product of drinking water chlorination
TTHM (site 20)(ppb)	80	0	47.3	47.3		By-product of drinking water chlorination
Inorganic Contaminants						
Arsenic (ppb)	10	n/a	0	0-0	3/4/2020	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2	2	0.048	0.019 - 0.048	3/4/2020	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chromium (ppb)	100	100	2	0 - 2	3/4/2020	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride (ppm)	4	4	0.8	0.5 - 0.8	3/4/2020	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	3/4/2020	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	4.9	0.00 - 4.9		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	3/4/2020	n/a
Radioactive Contaminants						
Gross Alpha, Excl. R & U (pCi/l)	15	0	7.7	0.5 - 7.7	3/4/2020	Erosion of natural deposits
Radium, (226 + 228) (pCi/l)	5	0	3.7	0.0 - 3.7	3/4/2020	Erosion of natural deposits
Gross Alpha, Incl. R & U (n/a)	n/a	n/a	8.1	0.0 - 8.1	3/4/2020	Erosion of natural deposits
Combined Uranium (ug/l)	30	0	0.8	0.4 - 0.8	3/4/2020	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 2022)	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

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.

CONTAMINANTS WITH A HAL OR A SMCL

The following Table D. lists contaminants which were detected in your water and that have either a Health Advisory Level (HAL) or a Secondary Maximum Contaminant Level (SMCL), or both. There are no violations for detections of contaminants that exceed Health Advisory Levels, Groundwater Standards or Secondary Maximum Contaminant Levels. Secondary Maximum Contaminant Levels are levels that do not present health concerns but may pose aesthetic problems such as objectionable taste, odor, or color. Health Advisory Levels are levels at which concentrations of the contaminant present a health risk.

Table D.

Contaminant (units)	SMCL	HAL	Level Found	Range	Sample Date (if prior to 2022)	Typical Source of Contamination
HAL or SMCL Contaminants						
Aluminum (ppm)	0.05	0.2	0.01	0.00 - 0.01	8/5/2019	Runoff/leaching from natural deposits
Chloride (ppm)	250		45.00	3.00 - 45.00	8/5/2019	Runoff/leaching from natural deposits, road salt, water softeners
Iron (ppm)	0.3		0.26	0.07 - 0.26	8/12/2019	Runoff/leaching from natural deposits, industrial wastes
Manganese (ppm)	0.05	0.3	0.02	0.00 - 0.02	8/12/2019	Leaching from natural deposits
Sulfate (ppm)	250		24.00	15.00 - 24.00	3/4/2020	Runoff/leaching from natural deposits, industrial wastes

PFAS

Perfluoroalkyl and polyfluoroalkyl substances (PFAS) are a large group of human-made chemicals that have been used in industry and consumer products worldwide since the 1950s. The following Table E. lists PFAS contaminants which were detected in your water and that have a Recommended Public Health Groundwater Standard (RPHGS) or Health Advisory Level (HAL). There are no violations for detections of contaminants that exceed the RPHGS or HAL. The RPHGS are levels at which concentrations of the contaminant present a health risk and are based on guidance provided by the Wisconsin Department of Health Services.

Additional health information regarding PFAS can be found at *www.dhs.wisconsin.gov/chemical/pfas.htm.*

Table E.

Contaminant (units)	RPHGS or HAL (ppt)	Level Found	Range	Typical Source of Contamination
PFAS Contaminants with a Recommended Health Advisory Level				
PFBS (ppt)	450,000	1.14	0.00 - 1.14	Drinking water is one way that people can be exposed to PFAS. In Wisconsin, two-thirds of people use groundwater as their drinking water source. PFAS can be introduced into groundwater from places that make or use PFAS and released from consumer products in landfills.
PFHXS (ppt)	40	2.52	0.00 - 2.52	
PFOS (ppt)	20	1.00	0.00 - 1.00	

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.

LEAD & COPPER

In addition to the contaminants in Tables A. B. C. D and E., 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 F. shows the results of our lead and copper monitoring for the period from January 1, 2022, through December 31, 2022.

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 plumbing materials that contain lead.

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 F.

Contaminant (units)	Action Level	MCLG	90th Percentile Level Found	# of Results	Typical Source of Contaminant
Copper (ppm) [1]	AL =1.3	1.3	0.1400	0 of 60 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	2.80	0 of 60 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.

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. After 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.

REDUCE YOUR LEAD RISK

Lead is a naturally occurring metal that can be toxic to humans and animals if ingested. Some materials in your home's interior plumbing, including pipes, solder, and fixtures, could contain traces of lead. Stoughton's water does not have lead present when it leaves our wells, but it can become contaminated as it travels through these plumbing materials. Due to changes in laws pertaining to plumbing materials, homes that were built prior to 1986 are more likely to have plumbing components that contain higher levels of lead. Plumbing fixtures produced before 2013 may also contain elevated levels of lead.

In 2021, lead water service lines were replaced at 703 properties, making Stoughton's water distribution system completely lead free. Although all of the known lead water service lines in the city have now been replaced, some homes could still have internal plumbing components that contain lead, including pipe fittings, solder, and fixtures.

When your water sits for long periods of time inside water pipes and fixtures containing lead, some of the lead can dissolve into the water. There are a number of steps you can take to ensure that your water remains safe to drink, including letting the cold water run from the tap before using it for drinking or cooking any time the water has gone unused for more than 4 hours, and cleaning faucet aerators. More tips to reduce your lead risk can be found online at *epa.gov/lead*.

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.

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.

Can Stoughton Utilities test my home's water for contaminants?
Stoughton Utilities does not offer personal water testing services. To have the water tested at your home, please contact a certified laboratory to request a test kit. Options include:

Wisconsin State Laboratory of Hygiene
(800) 442-4618

Northern Lake Service, Inc
(715) 478-2777

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.

Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, o hable con alguien que lo entienda.

Dlaim ntawv tshaabzu nuav muaj lug tseemceeb heev nyob rua huv kws has txug cov dlej mej haus. Kuas ib tug paab txhais rua koj, los nrug ib tug kws paub lug thaam.