



Annual Drinking Water Report

2024 Consumer Confidence Report

MARSHFIELD UTILITIES, PWS ID: 77201652

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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.

Marshfield Utilities is pleased to present to you this year's Annual Drinking Water Consumer Confidence Report. This report is designed to inform you about the quality of water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

Our water source is 100% groundwater, obtained from 15 active producing wells located in six well fields in and around the City of Marshfield. Additional facilities include four booster pumping stations, four storage reservoirs, a water treatment facility, and approximately 144 miles of transmission and distribution water mains.

Marshfield Utilities has a source water protection plan (Well Head Protection Plan) available at our office that provides more information such as potential sources of contamination.

Marshfield Utilities routinely monitors for constituents in your drinking water according to Federal and State laws. The table on the reverse side shows the results of our monitoring for the period of January 1st to December 31st, 2024. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

Water System Information

We are pleased to report that our drinking water is safe and meets federal and state requirements. If you have any questions about this report or your water utility, please contact John Richmond, Water Manager at (715) 898.2170.

Opportunity for input on decisions affecting your water quality

We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled City of Marshfield Utility Commission meetings, which are held on the first Monday, prior to the second Tuesday of each month at 4:00 pm at the Marshfield Utilities office.

Health Information

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 (800-426-4791).

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 systems 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 microbial contaminants are available from the Environmental Protection Agency's safe drinking water hotline (800-426-4791).

Source(s) of Water

Source ID	Source	Depth (in feet)	Status
4	Groundwater	58	Active
5	Groundwater	60	Active
6	Groundwater	62	Active
8	Groundwater	60	Active
10	Groundwater	64	Active
17	Groundwater	58	Active
18	Groundwater	60	Active
19	Groundwater	59	Active
20	Groundwater	60	Active
21	Groundwater	85	Active
22	Groundwater	90	Active
23	Groundwater	95	Active
24	Groundwater	53	Active
25	Groundwater	66	Active
26	Groundwater	74	Active

To obtain a summary of the source water assessment please contact, John Richmond at (715) 898-2171.

Educational Information

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 and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or 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, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which shall provide the same protection for public health.

Definitions

Term	Definition
AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
HA and HAL	HA: Health Advisory. An estimate of acceptable drinking water levels for a chemical substance based on health effects information. HAL: Health Advisory Level is a concentration of a contaminant which, if exceeded, poses a health risk and may require a system to post a public notice. Health Advisories are determined by US EPA.

Term	Definition
HI	HI: Hazard Index: A Hazard Index is used to assess the potential health impacts associated with mixtures of contaminants. Hazard Index guidance for a class of contaminants or mixture of contaminants may be determined by the US EPA or Wisconsin Department of Health Services. If a Health Index is exceeded a system may be required to post a public notice.
Level 1 Assessment	A Level 1 assessment is a study of the water system to identify potential problems and determine, if possible, why total coliform bacteria have been found in our water system.
Level 2 Assessment	A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine, if possible, why an E. coli MCL violation has occurred or why total coliform bacteria have been found in our water system, or both, on multiple occasions.
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.
MFL	million fibers per liter
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.
mrem/year	millirems per year (a measure of radiation absorbed by the body)
NTU	Nephelometric Turbidity Units
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)
ppt	parts per trillion, or nanograms per liter
ppq	parts per quadrillion, or picograms per liter
PHGS	PHGS: Public Health Groundwater Standards are found in NR 140 Groundwater Quality. The concentration of a contaminant which, if exceeded, poses a health risk and may require a system to post a public notice.
RPHGS	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
TT	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.

Detected Contaminants

Your water was tested for many contaminants last year. We are allowed to monitor for some contaminants less frequently than once a year. The following tables list only those contaminants which were detected in your water. If a contaminant was detected last year, it will appear in the following tables without a sample date. If the contaminant was not monitored last year, but was detected within the last 5 years, it will appear in the tables below along with the sample date.

Disinfection Byproducts

Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2024)	Violation	Typical Source of Contaminant
HAA5 (ppb)	D-17	60	60	4	3 - 4		No	By-product of drinking water chlorination
TTHM (ppb)	D-17	80	0	22.1	9.7 - 22.1		No	By-product of drinking water chlorination
HAA5 (ppb)	D-19	60	60	5	4 - 5		No	By-product of drinking water chlorination
TTHM (ppb)	D-19	80	0	15.6	11.1 - 15.6		No	By-product of drinking water chlorination

Inorganic Contaminants

Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2024)	Violation	Typical Source of Contaminant
BARIUM (ppm)		2	2	0.088	0.063 - 0.088	5/31/2023	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLUORIDE (ppm)		4	4	0.8	0.6 - 0.8	5/31/2023	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NICKEL (ppb)		100		4.8000	2.1000 - 4.8000	5/31/2023	No	Nickel occurs naturally in soils, ground water and surface waters and is often used in electroplating, stainless steel and alloy products.
NITRATE (NO ₃ -N) (ppm)		10	10	3.00	1.60 - 3.00		No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
SODIUM (ppm)		n/a	n/a	30.00	29.00 - 30.00	5/31/2023	No	n/a

Contaminant (units)	Action Level	MCLG	90th Percentile Level Found	Range	# of Results	Sample Date (if prior to 2024)	Violation	Typical Source of Contaminant
COPPER (ppm)	AL=1.3	1.3	0.1800	0.0110 - 0.3900	0 of 30 results were above the action level.	7/21/2020	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD (ppb)	AL=15	0	27.00	0.44 - 60.00	8 of 30 results were above the action level.	7/16/2020	No	Corrosion of household plumbing systems; Erosion of natural deposits

PFAS Contaminants with a Recommended Health Advisory Level

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 1950. The following table list 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.

Note: The recommended health-based levels in the table below were in effect in 2024. These levels were revised by WDHS in 2025. They can be found here <https://www.dhs.wisconsin.gov/water/gws.htm>.

Typical Source of Contaminant		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 get in groundwater from places that make or use PFAS and release from consumer products in landfills.			
Contaminant (units)	Site	RPHGS or HAL (PPT)	Level Found	Range	Sample Date (if prior to 2024)
PFBS (ppt)		450000	0.92	0.00 - 0.92	
PFHXS (ppt)		40	1.50	0.00 - 1.50	
PFOS (ppt)		20	1.90	0.00 - 1.90	
PFOA (ppt)		20	1.30	0.00 - 1.30	
PFHXA (ppt)		150000	3.30	0.00 - 5.10	
PFBA (ppt)		10000	19.30	2.17 - 19.30	5/31/2022
PFOA AND PFOS TOTAL (ppt)		20	3.20	0.00 - 3.20	

Radioactive Contaminants

Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2024)	Violation	Typical Source of Contaminant
RADIUM, (226 + 228) (pCi/l)		5	0	1.3	1.3		No	Erosion of natural deposits
GROSS ALPHA, INCL. R & U (n/a)		n/a	n/a	0.4	0.4		No	Erosion of natural deposits
COMBINED URANIUM (ug/l)		30	0	0.5	0.5		No	Erosion of natural deposits

Synthetic Organic Contaminants including Pesticides and Herbicides

Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2024)	Violation	Typical Source of Contaminant
ATRAZINE (ppb)		3	3	0.0	0.0 - 0.0	5/31/2023	No	Runoff from herbicide used on row crops

Contaminants with a Public Health Groundwater Standard, Health Advisory Level, or a Secondary Maximum Contaminant Level

The following table lists contaminants which were detected in your water and that have either a Public Health Groundwater Standard (PHGS), 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, Public Health 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. Public Health Groundwater Standards and Health Advisory Levels are levels at which concentrations of the contaminant present a health risk.

Contaminant (units)	Site	SMCL (ppm)	PHGS or HAL (ppm)	Level Found	Range	Sample Date (if prior to 2024)	Typical Source of Contaminant
CHLORIDE (ppm)		250		110.00	55.00 - 110.00	8/19/2020	Runoff/leaching from natural deposits, road salt, water softeners
IRON (ppm)		0.3		0.36	0.00 - 0.36	11/30/2020	Runoff/leaching from natural deposits, industrial wastes
MANGANESE (ppm)		0.05	0.3	0.07	0.01 - 0.07	8/19/2020	Leaching from natural deposits
SULFATE (ppm)		250		49.00	15.00 - 49.00	5/31/2023	Runoff/leaching from natural deposits, industrial wastes

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.

Contaminant (units)	Level Found	Range	Sample Date (if prior to 2024)
METOLACHLOR (DUAL) (ppb)	0.02	0.00 - 0.02	5/31/2023

Within the last 12 months we conducted Unregulated Contaminant Monitoring in accordance with US EPA rules. We are required to inform you of this sampling. We are only required to include results showing detections within this report; however, if you would like a copy of all results, please contact us at (715) 898-2171.

We tested for PFAS and Lithium. The lithium was a No Detect and the PFAS are listed in the CCR.

Volatile Organic Contaminants

Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2024)	Violation	Typical Source of Contaminant
TETRACHLOROETHYLENE (ppb)		5	0	0.4	0.0 - 0.6		No	Leaching from PVC pipes; Discharge from factories and dry cleaners
TRICHLOROETHYLENE (ppb)		5	0	0.1	0.0 - 0.2		No	Discharge from metal degreasing sites and other factories

Health effects for any contaminants with MCL violations/Action Level Exceedances/SMCL exceedances/PHGS or HAL exceedances

Contaminant Health Effects

IRON	Waters containing iron in quantities above the SMCL are not hazardous to health but may be objectionable for taste, odor, or color.
LEAD	Exposure to lead in drinking water can cause serious health effects in all age groups. Infants and children can have decreases in IQ and attention span. Lead exposure can lead to new learning and behavior problems or exacerbate existing learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney or nervous system problems.
MANGANESE	Waters containing manganese in quantities above the SMCL are not hazardous to health but may be objectionable for taste, odor, or color.

Additional Health Information

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. Marshfield Utilities is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water and wish to have your water tested, contact Marshfield Utilities (John Richmond at (715) 898-2171). Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <https://www.epa.gov/safewater/lead>.

New, Federally Mandated Health Effects Language 40 CFR 141.85(a)(1)(ii)

There is no safe level of lead in drinking water. Exposure to lead in drinking water can cause serious health effects in all age groups, especially pregnant people, infants (both formula-fed and breastfed), and young children. Some of the health effects to infants and children include decreases in IQ and attention span. Lead exposure can also result in new or worsened learning and behavior problems. The children of persons who are exposed to lead before or during pregnancy may be at increased risk of these harmful health effects. Adults have increased risks of heart disease, high blood pressure, kidney or nervous system problems. Contact your health care provider for more information about your risks.

Additional Information on Service Line Materials

We are required to develop an initial inventory of service lines connected to our distribution system by October 16, 2024 and to make the inventory publicly accessible. You can access the service line inventory here/by: <https://www.marshfieldutilities.org/pdf/2024-ccr.pdf>

Other Compliance

Other Drinking Water Regulations Violations

Description of Violation	Date of Violation	Date Violation Resolved
Failed to develop an initial inventory for service line materials that meets federal requirements	10/17/2024	Spring 2025
Failure to complete requirements of the Lead/Copper Public Education Program	1/11/2025	Spring 2025

Actions Taken

In our public education materials that we have been sending out, the information contained wasn't written exactly how the EPA wanted it. They have since sent us the exact paragraph they want included in all of our lead public education materials and that paragraph was included in our Spring Press Release. This paragraph will be included all lead public education materials going forward. You will notice the paragraph above called **New, Federally Mandated Health Effects Language 40 CFR 141.85(a)(1)(ii)**.

As far as the lead service line inventory, the inventory was completed and submitted on time, but has not yet been reviewed and approved. If changes are needed to meet the federal requirements for approval, they will be done promptly. We believe it may have been due to not including any copper, cast iron, ductile iron, or hdpe services in the document. It was our interpretation of the rule that it was a lead service line inventory, so we included all services that had any documented or assumed lead connection to them. We will be including those services now and sending it back for review shortly.

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 Wilsons Disease should consult their personal doctor.