

ANNUAL DRINKING WATER QUALITY REPORT—2009

WILLIAMS BAY WATERWORKS CONSUMER CONFIDENCE REPORT FOR 2009 (PWS ID 26500606)

We're pleased to present to you this annual Water Quality Report for 2009. 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 municipal water system is comprised of three deep wells; a central water treatment plant consisting of an induced draft aerator, lime-softening reactor, sludge thickener, chlorination and fluoridation systems, recarbonation basin, rapid rate gravity sand filters, clearwell storage, backwash holding tank, pumping equipment, telemetry and SCADA controls; one 500,000 gallon, two 100,000 gallon and one 50,000 gallon elevated storage tanks (water towers); and a water distribution system consisting of over 22 miles of water mains ranging from four to twelve inches in diameter. Our utility serves 1,992 customers: 1,899 residential, 73 commercial and 20 institutional accounts. All operators at the utility must have Department of Natural Resources (DNR) certification in both groundwater supply and lime softening. The source of our water, as stated above, is from three deep wells which draw water from the glacially-deposited sand and gravel aquifer.

The purpose of this annual report is to give you, the consumer, more information about our water, our water quality, and what it means. If you have any questions about this report or concerning your water utility, please contact Jerry Mehring, Director of Public Works at 262-245-2706 or Bob Carlson, Village Administrator at 262-245-2703. 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 meetings. They are held on the first and third Mondays of each month beginning at 7:00 PM in the Council Room at the Village Hall, 250 Williams Street, Williams Bay, WI.

The Williams Bay Water Utility routinely monitors your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1st, 2009 to December 31st, 2009. The Village has a source water protection plan available from our office that provides more information such as potential sources of contamination. 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. In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided some definitions.



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).

Water and Sewer Rates as of: 01/01/10

Water usage rate: \$3.52 per thousand gallons, \$3.22 per thousand over 100,000 used. Sewer usage rate: \$3.85 per thousand gallons of water used. In addition to the usage rate, there is a quarterly minimum charge that includes no usage.

Meter Size	Water	Sewer
5/8"-3/4"	\$29.00	\$52.00
1"	\$40.00	\$130.00
1.25"	\$80.00	\$182.00
1.5"	\$110.00	\$260.00
2"	\$168.00	\$416.00
3"	\$325.00	\$832.00
4"	\$540.00	\$1,300.00

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Source(s) of Water

Source id	Source	Depth (in feet)
1	Groundwater	257
2	Groundwater	293
3	Groundwater	1515

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.

Number of Contaminants Required to be Tested

This table displays the number of contaminants that were required to be tested in the last five years. The CCR may contain up to five years worth of water quality results. If a water system tests annually, or more frequently, the results from the most recent year are shown on the CCR. If testing is done less frequently, the results shown on the CCR are from the past five years.

Contaminant Group	# of Contaminants
Disinfection Byproducts	2
Inorganic Contaminants	16
Microbiological Contaminants	2
Radioactive Contaminants	3
Synthetic Organic Contaminants including Pesticides and Herbicides	23
Unregulated Contaminants	4
Volatile Organic Contaminants	20

Disinfection Byproducts

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2009)	Violation	Typical Source of Contaminant
HAA5 (ppb)	60	60	1	1	09/19/2007	NO	
TTHM (ppb)	80	0	.6	.6	09/19/2007	NO	By-product of drinking water chlorination

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Inorganic Contaminants

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2009)	Violation	Typical Source of Contaminant
ANTIMONY TOTAL (ppb)	6	6	.1	.1	05/05/2008	NO	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
ARSENIC (ppb)	10	n/a	1	1	05/05/2008	NO	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
BARIUM (ppm)	2	2	.014	.014	05/05/2008	NO	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
CHROMIUM (ppb)	100	100	2	2	05/05/2008	NO	Discharge from steel and pulp mills; Erosion of natural deposits
COPPER (ppm)	AL=1.3	1.3	.2040	0 of 10 results were above the action level.	05/05/2008	NO	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
FLUORIDE (ppm)	4	4	1.5	1.5	05/05/2008	NO	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
LEAD (ppb)	AL=15	0	1.20	1 of 10 results were above the action level.	05/05/2008	*	Corrosion of household plumbing systems; Erosion of natural deposits
NITRATE (NO ₃ -N) (ppm)	10	10	.26	.12- .36		NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
NITRITE (NO ₂ -N) (ppm)	1	1	.078	nd- .240		NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
SODIUM (ppm)	n/a	n/a	16.00	16.00	05/05/2008	NO	n/a

* 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 your water supply operator.

Radioactive Contaminants

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2009)	Violation	Typical Source of Contaminant
GROSS ALPHA, EXCL. R & U (pCi/l)	15	0	.2	.2		NO	Erosion of natural deposits
GROSS ALPHA, INCL. R & U (n/a)	n/a	n/a	0.2	0.2		NO	Erosion of natural deposits
RADIUM, (226 + 228) (pCi/l)	5	0	.3	.3		NO	Erosion of natural deposits

Unregulated Contaminants

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2009)	Violation	Typical Source of Contaminant
CHLOROFORM (ppb)	n/a	n/a	.61	.61	09/19/2007	NO	n/a

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Definition of Terms

Term	Definition
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.
MFL	million fibers per liter
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
TCR	Total Coliform Rule
TT	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.

