

**2018 Consumer Confidence Report Data  
BAYFIELD WATERWORKS, PWS ID: 80401266**

**Water System Information**

If you would like to know more about the information contained in this report, please contact Thomas G Kovachevich at (715) 779-5731.

**Opportunity for input on decisions affecting your water quality**

The Public Works Committee meetings will have the most information. These meetings are typically held the first Friday of each month at 9:00 am at the City of Bayfield Fire Hall located at 813 Washington Ave. Please visit the City of Bayfield website at [www.cityofbayfield.com](http://www.cityofbayfield.com) for a full list of monthly meetings and any changes.

**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
3	Groundwater	732	Active
4	Groundwater		Active

To obtain a summary of the source water assessment please contact, Thomas G Kovachevich at (715) 779-5731.

**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

<b>Term</b>	<b>Definition</b>
AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
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
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 2018)	Violation	Typical Source of Contaminant
HAA5 (ppb)	D-1	60	60	0	0		No	By-product of drinking water chlorination
TTHM (ppb)	D-1	80	0	0.0	0.0		No	By-product of drinking water chlorination

## Inorganic Contaminants

Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2018)	Violation	Typical Source of Contaminant
ARSENIC (ppb)		10	n/a	2	1 - 2	7/10/2017	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
BARIUM (ppm)		2	2	0.061	0.029 - 0.061	7/10/2017	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
CHROMIUM (ppb)		100	100	2	2 - 2	7/10/2017	No	Discharge from steel and pulp mills; Erosion of natural deposits
FLUORIDE (ppm)		4	4	0.1	0.1 - 0.1	7/10/2017	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NITRATE (N03-N) (ppm)		10	10	1.10	0.61 - 1.10		No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
SODIUM (ppm)		n/a	n/a	1.90	1.80 - 1.90	7/10/2017	No	n/a

Contaminant (units)	Action Level	MCLG	90th Percentile Level Found	# of Results	Sample Date (if prior to 2018)	Violation	Typical Source of Contaminant
COPPER (ppm)	AL=1.3	1.3	0.0860	0 of 5 results were above the action level.	8/18/2017	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD (ppb)	AL=15	0	1.80	0 of 5 results were above the action level.	8/18/2017	No	Corrosion of household plumbing systems; Erosion of natural deposits

### Radioactive Contaminants

Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2018)	Violation	Typical Source of Contaminant
GROSS ALPHA, EXCL. R & U (pCi/l)		15	0	2.7	2.4 - 2.7	7/10/2017	No	Erosion of natural deposits
RADIUM, (226 + 228) (pCi/l)		5	0	3.0	2.2 - 3.0	7/10/2017	No	Erosion of natural deposits
GROSS ALPHA, INCL. R & U (n/a)		n/a	n/a	2.7	2.4 - 2.7	7/10/2017	No	Erosion of natural deposits

### Additional 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. Bayfield Waterworks 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 30 seconds to 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 or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

### Other Compliance

#### Uncorrected Significant Deficiencies

Deficiency Description and Progress to Date	Date System Notified	Scheduled Correction Date
15. Not all the residential properties or non-residential properties with similar plumbing as residential properties (low hazard non-residentials) have been inspected for unprotected cross-connections within the last 10 years or during meter replacement up to 20 years. It is estimated that 43% of residential	6/22/2018	10/1/2019

Deficiency Description and Progress to Date	Date System Notified	Scheduled Correction Date
properties and 32% of the low hazard non-residential properties have not met the inspection frequency requirement. Since you have quite a few customers that have never been inspected, the Department will allow three years to meet the above inspection schedule requirements. You will need to inspect a third of the properties (those that have not been inspected at the required frequency) annually until you are in full compliance by June 1, 2021. (ch. NR810.15 Wis. Adm. Code)		
11. Five dead-end water mains are not being flushed on a regular basis since they do not have flushing devices on them. Solids, film, and bacteria accumulate in dead-end water lines and will result in unsanitary conditions, aesthetic problems, and may result in higher disinfection byproducts if not removed. The Department will allow a multi-year compliance schedule to install flushing devices capable of achieving the 2.5ft/second flushing velocity required by code. The final compliance schedule for correction is June 1, 2021. By October 22, 2018, submit the names of the dead-ends you and a schedule you will begin flushing them. One must be addressed by June 1, 2019, two by June 1, 2020, and the last two by June 1, 2021. (ch. NR810.03,.13(2d), and 811.70(8) Wis. Adm. Code)	6/22/2018	10/1/2019
17. Not all the high hazard non-residential properties (properties that do not have similar plumbing or end uses as residential properties) have been inspected for unprotected cross-connections within the last 2 calendar years. It is estimated that half of these properties have not met the inspection frequency requirement. All the non-residential properties and all high hazard non-residential properties that have not been inspected since 2016 or earlier, must be inspected by December 31, 2018. (ch. NR810.15 Wis. Adm. Code)	6/22/2018	10/1/2019

**Actions Taken**

- 15). Ongoing process to achieve compliance, 2/3rds will be finished by October 1st, 2019
- 11). Working on securing funding to remove all dead end water mains. Ongoing process.
- 17). Sending out notices every 30 days. Final 3rd notice was sent out, June 3rd, 2019. Non-compliance after this will result in shut notice.