

Drinking Water Quality

Annual

Report

2017

Get to know your drinking water. Hannahville Indian Community's Drinking Water System met and surpassed all quality standards in 2017. This report provides information where your drinking water comes from, how it's treated, and results from quality testing.

Hannahville Water Operations

Tel 906.723.2200
Fax 906.723.2205

N14911 B-1 Rd
Wilson, MI 49896

www.hannahville.net/services/hannahville-water-wastewater-department/



Please share this information with all other people who drink this water, especially those who may not have received this notice directly, for example, schools and businesses. You can do this by posting this report in a public place or distributing copies by hand or mail.

What is this Report?

The Environmental Protection Agency (EPA) requires public water suppliers to provide water quality reports to their consumers. This report is a snapshot of water quality in 2017.

Is my drinking water from Hannahville’s Water System?

Hannahville’s Community Water System (CWS) serves 130 homes located on:

B-1 Road (13 homes)	Balsam Lane	Cedar Drive	Cedarview Drive
Deer Ridge	Eagle Road	Maple Drive	Oak Road
Pine Drive	Ridge Road	Ridgeview Road	Spikehorn Ridge
Sunrise Lane	Tamarack Lane	Willow Road	38 th Road (3 homes)

Serves the following businesses and buildings:

Island Resort & Casino	Island Oasis/Pharmacy	Administration Offices	VISIONS
Hannahville Indian School	Environmental Offices	Health Center	RV Park
Housing Offices	Community Center	Elder’s Complexes	

How can I get more involved in my drinking water?

Meetings concerning your public water supply and its decision making on water quality can be discussed at Tribal Council Meetings which are the first Monday every month at the Administration; N14911 B-1 Road Wilson, MI 49896. (906) 723-2600.

Where Your Water Comes From

Your source water supply originates as water beneath the surface of the Earth, called Groundwater. It is naturally filtered as it travels through soil and rocks. Hannahville’s water system has three wells located near the Island Casino that pump groundwater (well water) to the Water Treatment Plant (WTP). Our Source Water Protection and Well Head Protection Program is an assessment that consists of identifying the area around the wells, which need to be protected from contamination, and determining the susceptibility of the wells to contamination. Because the water we drink comes from underground wells, we need to be careful how we dispose of harmful contaminants. An assessment provides us with the information we need, as a community to make sure our drinking water is safe now and in the future. This report is found at the Environmental Offices (906) 723-2296.

Possible Contaminates in all Source Water

The sources of all drinking water, both tap 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 and or from human activity.

Contaminants that may be present in source water include:

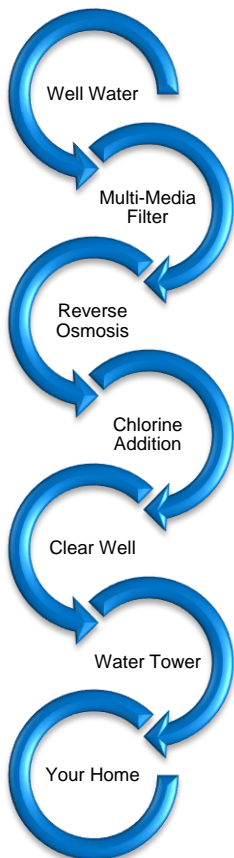


- Microbial Contaminants: viruses & bacteria; may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- Inorganic Contaminants: salt & metals; can be naturally occurring or result from urban storm water runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and Herbicides: may come from a variety of sources such as agriculture, urban storm water runoff and residential uses.
- Organic Chemical Contaminates: including Synthetic and Volatile Organic Chemicals, which are by-products of industrial processes and petroleum production can also come from gas stations, urban storm runoff and septic systems.
- Radioactive Contaminates: can be naturally occurring or be the result of oil and gas production and mining activities.

To protect public health, WTPs remove these contaminants to safe levels established by EPA regulations. In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in the water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for human health.

Hannahville’s Water Treatment Plant Process

Hannahville WTP first pumps well water through a Multi-Media Filter, which removes small particles such as dirt and rust. The water is then further filtered through a Reverse Osmosis Unit, which forces water through semi-permeable membranes, removing even smaller contaminants like ions and microbes but allowing clean water through. A small amount of chlorine is added for continuous disinfection. This treated and high-quality drinking water goes to a clearwell, which is an underground storage tank, then finally to the water tower for distribution.



Total Coliforms in Drinking Water

Total Coliforms (TC) are not a health threat in itself, they are used to indicate whether other potentially harmful bacteria may be present. EPA requires Hannahville WTP to sample and test for TC 5 times every month, a least one each week from various sites in the distribution system. We are happy to report that all weekly samples in 2017 tested were absent of TC.

Lead

EPA requires Hannahville WTP to sample for Lead and Copper every 3 years within our water system. Samples are taken then sent to the Michigan Drinking Water Laboratory for analysis. The last sampling period was in 2015, and the reportable 90th Percentile results for Lead were Not Detected. Therefore, no corrective action for Lead is needed in our water system. The next sampling period is during 2018.



Drinking water is essentially lead-free when it leaves the treatment plant, but lead can be released when the water comes in contact with pipes and plumbing fixtures that contain lead. Hannahville Water Operations is responsible for providing high-quality drinking water, but cannot control the variety of materials used in plumbing components. Elevated levels of lead can cause serious health problems, especially for pregnant women and young children. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for a few minutes before using water for drinking or cooking. If you are concerned about lead in your water, you can request your water to be 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 (800) 426-4791 or at www.epa.gov/lead.

Water Quality Data Table Definitions

- **MRDL:** Maximum Residual Disinfectant Level: The highest level of a drinking water 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. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- **MCL:** Maximum Contaminant Level: The highest level of a contaminant that is allowed in the water we drink. MCL's are set as close to the MCLG's 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. MCLG's allow for a margin of safety.
- **ppm:** Parts Per Million: Equal to mg/L, milligrams per liter. Equal to \$0.01 in \$10,000.00
- **AL:** Action Level: The concentration of a contaminant, which if exceeded, triggers treatment or other requirements, which a water system must follow.
- **TT:** Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
- **pCi/L:** Picocuries Per Liter: A measure of radio activity in water.

Water Quality Data Table

We are pleased to report Hannahville WTP met and surpassed all drinking water regulations set by the EPA. These regulations are Primary Standards that protect public health by setting legal limits on levels of potentially harmful contaminants in drinking water. EPA requires us to monitor for certain contaminants less than once a year because the concentrations of these contaminants do not frequently change. Some data reported is more than a year old but still representative. Other contaminants such as Arsenic, Nitrate and Nitrite, have been tested and results were Not Detected. Fluoride has not been added to the water system since 2015.

EPA Safe
Drinking
Water Hotline
(800) 426-
4791



Hannahville
Water (906)
723-2200



WATER QUALITY DATA TABLE - Regulated Contaminants Found in Your Water

ANALYTE NAME	UNITS	TEST DATE	LEVEL COMPARISON	VIOLATION	¹ Potential health effects <u>over</u> the MCL. ² Sources of contaminant in drinking water.
CHLORINE	ppm	8/25/2017	MRDL: 400 MRDLG: 400 Your Water: 56 *	NO	¹ Eye/nose irritation; stomach discomfort. ² Water additive used to control microbes.
TOTAL TRIHALOMETHANES	mg/L	8/1/2017	MCL: 800 MCLG: NA † Your Water: 28	NO	¹ Liver, kidney, or central nervous system problems; increased risk of cancer. ² Byproduct of drinking water disinfection.
TOTAL XYLENES	mg/L	5/23/2017	MCL: 10,000 MCLG: 10,000 Your Water: 5	NO	¹ Nervous system damage. ² Discharge from petroleum and chemical factories.
BARIUM	mg/L	3/9/2015	MCL: 200 MCLG: 200 Your Water: 1	NO	¹ Increase in blood pressure. ² Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
COPPER	mg/L TT	7/31/2015	AL: 13 MCLG: 13 Your Water: 1	NO	¹ Short-term exposure: Gastrointestinal distress. Long-term exposure: Liver or kidney damage. People with Wilson's Disease should consult their personal doctor if the amount of copper in their water exceeds the Action Level. ² Corrosion of household plumbing systems; erosions of natural deposits.
GROSS ALPHA	pCi/L	4/6/2015	MCL: 15.00 MCLG: 0.00 Your Water: 5.60 ‡	NO	¹ Increased risk of cancer. ² Erosion of natural deposits of certain minerals that are radioactive and may emit a form of radiation known as alpha radiation.
GROSS BETA	pCi/L	1/12/2015	MCL: 50.00 § MCLG: 0.00 Your Water: 1.33 	NO	¹ Increased risk of cancer. ² Decay of natural and man-made deposits of certain minerals that are radioactive and may emit forms of radiation known as photons and beta radiation.
RADIUM - 226	pCi/L	1/12/2015	MCL: 5.00 MCLG: 0.00 Your Water: 1.53	NO	¹ Increased risk of cancer. ² Erosion of natural deposits.

* Chlorine result reported here is the highest one-time test result for the whole year.

† There is no collective MCLG for this group, there are individual MCLG's for some individual contaminants.

‡ If the result of this sample was above 15 pCi/L, our system would have been required to do additional testing for uranium. Because the result was below 15 pCi/L, no testing for uranium was required.

§ The MCL for beta particles is 4 mrem/year. EPA considers 50 pCi/L to be the level of concern for beta particles.

|| Because the beta particle results were below 50.00 pCi/L, no testing for individual beta particles constituents was required.

EPA's Secondary Standards and Hannahville Water

Similar to EPA's Primary Standards for regulated contaminants are Secondary Standards, which are non-enforceable, but recommended guidelines. This table lists parameters tested frequently.

Parameter	2017 Average Tap	EPA Secondary MCL's
pH	7.25	6.50 - 8.50
Hardness Total	38 mg/L	No Federal Limit

The presence of contaminants in drinking water does not necessarily indicate that the water poses a health risk.



The pH level is maintained and kept within the Secondary MCL range. The level between 6.50 and 8.50 is considered neutral, though a pH slightly above 7.00 is desired. Our source water (well water) naturally has a high level of Hardness, about 250 mg/L. Hannahville WTP lowers the Hardness level to ideal conditions, but doesn't remove it all because some Hardness is still desired in tap water for easy rinsing of soaps.

A Message from the Environmental Protection Agency

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as people 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 their 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 Safe Drinking Water Hotline (800) 426-4791. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. Presence of contaminants in drinking water does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling Safe Drinking Water Hotline: (800) 426-4791

Additional
copies of this
report are
available
upon request.
Call us at
**(906) 723-
2200**

Water System Maintenance and Security

We encourage your help to secure and maintain your drinking water supply. If you notice something you think needs prompt attention from a Water Operator please immediately notify us. This includes hydrants, pipes, and leaks. Call our direct line: **(906) 723-2200**. If we are unavailable at the time of your call, our voicemail greeting states how to contact an operator.

A Message from the Water Operations Supervisor

Our Department's top priority is to protect public health by providing a safe and reliable supply of drinking water. This 2017 Water Quality Report is a testament to the hard work of our staff who ensure high-quality drinking water. In accordance with regulations, our tests are closely monitored by the EPA and the results are reported to them and the public. Delivering high-quality drinking water to our consumers is a job we take seriously and ensure the water is safe for all members of our community.

Supervisor

Dan Stein

Water Operators

Tom Broeders, Steve Javurek, Roxanne Miller, and Kevin Moreau