

# 2022 Water Quality Report for Boyne Falls Village

This report covers the drinking water quality for the Village of Boyne Falls for the calendar year 2022. This information is a snapshot of the quality of the water that we provided to you in 2022. Included are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards.

Your water comes from three groundwater wells located on the west and east sides of the village. The State performed an assessment of our source water in 2003. To receive a copy of the assessment contact Boyne Falls DPW at 231-549-2425. Based on the state's assessment of our water system, well #3 has a susceptibility to contamination rating of moderately high, our other two wells #4 and #5 were rated very low.

- **Contaminants and their presence in water:** 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 **EPA's Safe Drinking Water Hotline (800-426-4791)**.

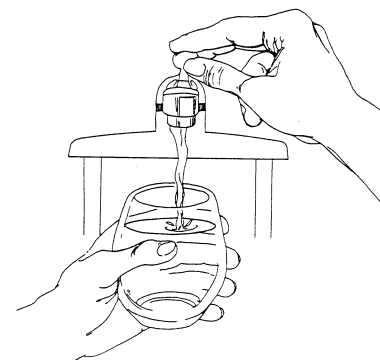
- **Vulnerability of sub-populations:** Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune 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 Safe Drinking Water Hotline (800-426-4791).

- **Sources of drinking water:** The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds,

reservoirs, springs, and wells. Our water comes from 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 and residential uses.
  - \* **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.
  - \* **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.

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. Food and Drug Administration regulations establish limits for contaminants in bottled water which provide the same protection for public health.



## Water Quality Data

The table below lists all the drinking water contaminants that we detected during the 2022 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 – December 31, 2022. The State allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. All of the data is representative of the water quality, but some are more than one year old.

### Terms and abbreviations used below:

- **Maximum Contaminant Level Goal (MCLG):** 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.
- **Maximum Contaminant Level (MCL):** 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.
- **Maximum Residual Disinfectant Level (MRDL):** 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.
- **Maximum Residual Disinfectant Level Goal (MRDLG):** 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.
- **ppb:** parts per billion or micrograms per liter **ppm:** parts per million or milligrams per liter **pCi/l:** picocuries per liter (a measure of radioactivity).
- **Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.  
**ND:** Not Detected    **RAA:** Running Annual Average

### Samples Collected at the Wellhouse:

Regulated Chemical Contaminants	MCL	MCLG	Our Water Range ( )	Sample Date	Violation Yes / No	Typical Source of Contaminants
Fluoride (ppm)	4	4	0.97 (0.95 to 0.98)	2021	No	Erosion of natural deposits
Barium (ppm)	2	2	0.09	2017	No	Erosion of natural deposits

Radioactive Contaminants	MCL	MCLG	Our Water Range ( )	Sample Date	Violation Yes / No	Typical Source of Contaminants
Alpha emitters (pCi/L)	15	0	<0.5	2015	No	Erosion of natural deposits
Combined radium 226 / 228 (pCi/L)	5	0	0.5	2015	No	Erosion of natural deposits

Unregulated Chemical Contaminants <sup>2</sup>	Our Water Range ( )	Sample Date	Violation Yes / No	Typical Source of Contaminants
Sodium (ppm)	7.0 ( 6.0 to 8.0 )	2022	No	Erosion of natural deposits
Sulfate (ppm)	22.5 (20 to 25 )	2022	No	Erosion of natural deposits

<sup>2</sup> Unregulated contaminants are those for which EPA has not established drinking water standards. Monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants.

## Samples Collected in the Distribution System:

Contaminants Subject to an Action Level	Action Level	Our Water 90 <sup>th</sup> %	Sample Date	Number of Samples Above AL	Typical Source of Contaminants
Lead (ppb) <sup>3</sup>	AL = 15 ppb	0 ppb	2022	0	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppb) <sup>3</sup>	AL = 1300 ppb	130 ppb	2022	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Combined Chlorine Residual (ppm) <sup>4</sup>	MRDL = 4.0 MRDLG = 4	RAA = 1.05 ppm Low=0.42 ppm High=1.32 ppm	2022	0	Water additive used to control microbes

<sup>3</sup> 90 percent of the samples collected were at or below the level reported for our water.

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. Boyne Falls Village 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 at 1-800-426-4791 or at <http://water.epa.gov/drink/info/lead..>

While our system does not have any lead service lines that we know of, we do have 47 lines out of 179 that are unknown. We are working to identify the material used for these.

In its effort to supply you with the safest possible product, the Village of Boyne Falls chlorinates the water supply against potential contamination from viruses and bacteria. Phosphates are also added to help control iron in the water. The levels of these two additives are monitored daily to ensure proper dosages are being added. Iron is an abundant and widespread constituent of rocks and soil in Northern Michigan. At sufficient concentrations, iron can adversely affect the taste of water and beverages and can leave rust-colored stains on laundry, plumbing fixtures, and porcelain.

Monitoring and Reporting Requirements: The State and EPA require us to test our water on a regular basis to ensure its safety. We met all the monitoring requirements for 2022.

We will update this report annually and will keep you informed of any problems that may occur throughout the year, as they happen. Copies are available at the DPW Garage located at 2290 Railroad St. This report will not be sent to you.

We invite public participation in decisions that affect drinking water quality. The village council meets on the second Tuesday of each month. These meetings are held at 7:00 pm in the village hall located at 2290 Railroad St. For more information about your water, or the contents of this report, contact David Carson DPW Supervisor at 231-549-2425 or by mail at P.O. Box 213 Boyne Falls, MI 49713 or by EMAIL at [carsond213@gmail.com](mailto:carsond213@gmail.com). For more information about safe drinking water, visit the U.S. Environmental Protection Agency at [www.epa.gov/safewater/](http://www.epa.gov/safewater/).