

2018 Annual Water Quality Report for Peshawbestown Water System

This report covers the drinking water quality for Peshawbestown water system for the 2018 calendar year. This information is a snapshot of the quality of the water that we provided to you in 2018. Included are details about where your water comes from, what it contains, and how it compares to the United States Environmental Protection Agency (U.S. EPA) and state standards.

Your water comes from three groundwater wells, each over three hundred feet deep. There are no significant sources of contamination in our water supply. If you would like to know more about the report, please contact: Joe Burfield, Grand Traverse Band Department of Public Works

(231-534-7376) or joe.burfield@gtbindians.com

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 **U.S. 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. U.S. EPA/Center for Disease Control 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, the U.S. EPA prescribes regulations that limit the levels 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 2018 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, 2018. The EPA 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 the data is representative of the water quality, but some are more than one year old.

Terms and abbreviations used below:

- Parts per million (ppm) or milligrams per liter (mg/l): one part per million corresponds to one minute in two years or a single penny in \$10,000.
- Parts per Billion (ppb) or Micrograms per liter (ug/l): one part per billion corresponds to one minute in 2000 years, or a single penny in \$10,000,000.
- Picocuries per liter (pCi/L): Picocuries per liter is a measure of the radioactivity in water.
- Millirems per year (mrem/yr): measure of radiation absorbed by the body.
- 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.
- Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.
- Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
- Level 1 Assessment: A study of the water supply to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
- Level 2 Assessment: A very detailed study of the water system to identify potential problems and determine (if possible) why an *E. coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

Information about lead: 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. GTB Department of Public Works 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 <http://www.epa.gov/safewater/lead>.

Monitoring and Reporting to the EPA Requirements: The U.S. EPA require us to test our water on a regular basis to ensure its safety. We met all the monitoring and reporting requirements for 2018. 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 in the GTB Newsletter. This report will not be sent to you. We invite public participation in decisions that affect drinking water quality. For more information about your water, or the contents of this report, contact Joe Burfield, (231) 534-7376 or joe.burfield@gtbindinas.com. For more information about safe drinking water, visit the U.S. Environmental Protection Agency at <http://www.epa.gov/safewater/lead>.

1 Monitoring Data for Regulated Contaminants

Regulated Contaminant	MCL, TT, or MRDL	MCLG or MRDLG	Level Detected	Year Sampled	Violation Yes/No	Typical Source of Contaminant
Nitrate (ppm)	10	10	0	4/12/18	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Fluoride (ppm)	4	4	0.7	6/19/18	NO	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
TTHM Total Trihalomethanes (ppb)	80	80	7.5	8/1/16	NO	Byproduct of drinking water disinfection
HAA5 Haloacetic Acids (ppb)	60	60	0	8/1/16	NO	Byproduct of drinking water disinfection
Chromium	100	100	0	6/19/18	NO	Discharge of steel and pulp mills, erosion of natural deposits
Toluene	100	1	0	7/28/17	NO	Discharge from petroleum factories
Alpha emitters (pCi/L)	15	0	2.37	4/25/16	NO	Erosion of natural deposits
Combined radium (pCi/L)	5	0	1.28	4/25/16	NO	Erosion of natural deposits
Total Coliform (total number or % of positive samples/month)	TT	0	0	2x Monthly	NO	Naturally present in the environment.
E. coli in the distribution system (positive samples)	See E. coli note ¹	0	0	2x Monthly	NO	Human and animal fecal waste.
Inorganic Contaminant Subject to Action Levels (AL)	Action Level	MCLG	Your Water ²	Year Sampled	Number of Sample Above AL	Typical Source of Contaminant
Lead (ppb)	AL=15	0	5	7/28/16	NO	Lead service lines, corrosion of household plumbing including fittings and fixtures; Erosion of natural deposits
Copper (ppm)	AL=1.3	1.3	0.24	7/28/16	NO	Corrosion of household plumbing systems; Erosion of natural deposits, leaching from wood preservatives

¹ *E. coli* MCL violation occurs if: (1) routine and repeat samples total coliform-positive and either is *E. coli*-positive, or (2) supply fails to take all required repeat samples following *E. coli*-positive routine sample, or (3) supply fails to analyze total coliform-positive repeat sample for *E. coli*.

² 90 percent of the samples collected were at or below the level reported for our water.