

# **2021 ANNUAL WATER QUALITY REPORT**

#### Plymouth Utilities 900 CTH PP, P.O. Box 277, Plymouth, WI 53073 / Phone: (920) 893-1471

This Consumer Confidence Report (CCR) is required by the Environmental Protection Agency (EPA) for all Community Water Systems. The report identifies contaminant and monitoring violations and potential health effects created by those violations. The information provided in the report is based on results reported to the Wisconsin Department of Natural Resources for calendar year 2021.

If you would like to know more about the information contained in this report, please contact Matt Schultz, Water Foreman at (920) 893-1471. Opportunities for input on decisions affecting your water quality are available at regularly scheduled Common Council meetings held at Plymouth City Hall, 128 Smith Street, Plymouth, Wisconsin the second and last Tuesday of each month at 7:00 PM. We are pleased to report that our water is safe and meets or exceed state and federal standards.

## **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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) 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 cryptosporid-ium and other microbial contaminants are available from the EPA's Safe Drinking Hotline.

YOUR WATER SOURCE

Plymouth has a ground water supply which consists of 7 active wells in 4 different aquifers. Storage is provided by 3 reservoirs. Overall, we have 65.75 miles of water main. To obtain a summary of the source water assessment please contact Matt Schultz at (920) 893-1471.

### **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. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which provides the same protection for public health.

#### Lead Notice

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. Plymouth Utilities is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has not been used 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 (800-426-4791) or at www.epa.gov/safewater/lead.

#### Definitions

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements, which a water system must follow. Level 1 Assessment: 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 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.

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 technology.

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 Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfec-

tant 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. MFL (million fibers per liter)

mrem/year (millirems per year) (a measure of radiation absorbed by the body)

NTU (Nephelometric Turbidity Units)

ppm (parts per million), or milligrams per liter (mg/l)

ppb (part per billion), or micrograms per liter (ug/l)

pCi/l (picocuries per liter): A measure of radioactivity.

ppt (parts per trillion), or nanograms per liter

ppq (parts per quadrillion), or pictograms per liter

TCR (total coliform rule)

TT (treatment technique: A required process intended to reduce the level of a contaminant in drinking water)

Your water was tested for many contaminants. 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 five years, it will appear in the tables below along with the sample date.

	Cit-			Level	D	Sample Date (if prior to	Viola-		
Contaminant (units) Site MCL MCLG Found Range 2021) tion Typical Source of Contaminant   Inorganic Contaminants									
ANTIMONY TOTAL (ppb)		6	6	1.1	0.0-1.1	1/21/2020	No	Discharge from petroleum refineries; fire re- tardants; ceramics; electronics; solder	
ARSENIC (ppb)		10	n/a	4	0-4	1/21/2020	No	Erosion of natural deposits; Runoff from or- chards; Runoff from glass and electronics pro- duction wastes	
BARIUM (ppm)		2	2	0.054	0.026— 0.054	1/21/2020	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.	
CHROMIUM (ppb)		100	100	1	0-1	1/21/2020	No	Discharge from steel and pulp mills; Erosion of natural deposits	
FLUORIDE (PPM)		4	4	0.2	0.1—0.2	1/21/2020	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.	
NITRATE (NO3-N) (ppm)		10	10	5.37	0.00-5.49		No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	
NICKEL (ppb)		100		1.4000	0.0000— 1.4000	1/21/2020	No	Nickel occurs naturally in soils, ground water and surface water s and is often used in elec- troplating, stainless steel and alloy products.	
SODIUM (ppm)		n/a	n/a	21.00	6.15— 21.00	1/21/2020	No	n/a	
			[	<b>F</b>	Radioactive C	ontaminants	r		
GROSS BETA PARTI- CLE ACTIVITY (pCi/l)		n/a	n/a	1.5	0.0—1.5	2/19/2020	No	Decay of natural and man-made deposits. MCL units are in millirem/year. Calculation for compliance with MCL is not possible unless level found is greater than 50 pCi/l.	
GROSS ALPHA, EXCL. R&U (pCi/l)		15	0	4.7	0.0—4.7	2/19/2020	No	Erosion of natural deposits	
RADIUM, (226 + 228) (pCi/l)		5	0	1.0	0.1-1.0	2/19/2020	No	Erosion of natural deposits	
GROSS ALPHA INCL. R&U (n/a)		n/a	n/a	4.7	0.0—4.7	2/19/2020	No	Erosion of natural deposits	
COMBINED URANIUM (ug/l)		30	0	0.6	0.6	1/9/2019	No	Erosion of natural deposits	

Lead and Copper											
Contaminant (units)	Action Level	MCLG	90th Per- centile Level Found	# of Results	Sample Date (if prior to 2021)	Violation	Typical Source of Contaminant				
COPPER (ppm)	1.3	1.3	0.5070	0 of 20 were above the ac- tion level	7/9/2020	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservations.				
LEAD (ppb)	15	0	7.78	1 of 20 results were above the ac- tion level.	7/7/2020	No	Corrosion of household plumbing systems; erosion of natural deposits.				

## Additional Health Information

**Nitrate** in drinking water at levels above 10 ppm is a health risk for infants of less than 6 months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider. Females who are or may become pregnant should not consume water with nitrate concentrations that exceed 10 ppm. There is some evidence of an association between exposure to high nitrate levels in drinking water during the first weeks of pregnancy and certain birth defects. The Wisconsin Department of Health Services recommends people of all ages avoid long-term consumption of water that has nitrate level greater than 10 milligrams per liter (mg/L).

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. Plymouth Utilities 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.