

# 2021 ANNUAL DRINKING WATER QUALITY REPORT

PWSID #: 7360003

## Bainbridge Water Authority

*Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, ó hable con alguien que lo entienda.* (This report contains important information about your drinking water. Have someone translate it for you, or speak with someone who understands it.)

### WATER SYSTEM INFORMATION:

This report shows our water quality and what it means. If you have any questions about this report or concerning your water utility or if you would like a paper copy of this report contact Angela Pantanella at (717) 413-8253.

We want you to be informed about your water supply and our Well Head Protection Plan. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the second Monday of each month at 7:00p.m. at the Water Authority office located at 145 Chestnut Street in Bainbridge.

### SOURCE(S) OF WATER:

Our water source is a groundwater basin, underlain entirely by the Triassic-aged New Oxford Formation, which consists of interbedded grayish-red sandstones, red shales, and siltstones. We have two wells in operation.

We have a Well Head Protection plan available from our office that provides more information such as potential sources of contamination.

**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 system 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).**

### MONITORING YOUR WATER:

We routinely monitor for contaminants in your drinking water according to federal and state laws. The following tables show the results of our monitoring for the period of January 1 to December 31, 2021. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data is from prior years in accordance with the Safe Drinking Water Act. The date has been noted on the sampling results table.

### DEFINITIONS AND ABBREVIATIONS:

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

**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 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 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.

**Minimum Residual Disinfection Level (MinRDL)** - The minimum level of residual disinfection required at the entry point to the distribution.

**Treatment Technique (TT)** - A required process intended to reduce the level of a contaminant in drinking water.

**Mrem/year** = millirems per year (a measure of radiation absorbed by the body)

**pCi/L** = picocuries per liter (a measure of radioactivity)

**ppb** = parts per billion, or micrograms per liter ( $\mu\text{g/L}$ )

**ppm** = parts per million, or milligrams per liter (mg/L)

**ppq** = parts per quadrillion, or picograms per liter

**ppt** = parts per trillion, or nanograms per liter

**DETECTED SAMPLE RESULTS:**

Chemical Contaminants							
Contaminant	MCL In CCR Units	MCLG	Highest Level Detected	Range of Detections	Units	Violation Y/N	Sources of Contamination
Nitrate (2021)	10.0	10.0	7.22	5.00 – 7.22	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Chlorine (2021) (Distribution)	4.0	4.0	0.88	0.51 – 0.88	ppm	N	Water additive used to control microbes
Haloacetic Acids (2021)	60		12.5	12.5	ppb	N	By-product of drinking water chlorination
TTHMs (2021)	80		28.9	24.9-28.9	ppb	N	By-product of drinking water chlorination
Combined Uranium (2015)	20		.685	.685	pCi/L	N	Erosion of natural deposits
Gross Alpha (2015)	15		2.35	2.35	pCi/L	N	Erosion of natural deposits
Radium 228 (2015)	5.0		0.32	0.32	pCi/L	N	Erosion of natural deposits
Barium (2021)	2.0		0.0912	0.0912	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Nickel (2021)	100		0.8	0.8	ppb	N	Erosion of natural deposits

Entry Point Disinfection Residual							
Contaminant	Minimum Disinfection Residual	Lowest Level Detected	Range of Detections	Units	Date of Lowest Sample	Violation Y/N	Sources of Contamination
Chlorine Residual (2021)	.50	1.00	1.00 – 1.19	ppm	2/21/21	N	Water additive used to control microbes

Lead and Copper							
Contaminant	Action Level (AL)	MC LG	90 <sup>th</sup> Percentile Value	Units	# of Sites Above AL of Total Sites	Violation of TT Y/N	Sources of Contamination
Lead (2019)	15	0	1.6	ppb	0 of 10	N	Corrosion of household plumbing
Copper (2019)	1.3	1.3	0.868	ppm	0 of 10	N	Corrosion of household plumbing

<b>Microbial</b>					
<b>Contaminant</b>	<b>MCL</b>	<b>MCLG</b>	<b>Highest # or % of Positive Samples</b>	<b>Violation Y/N</b>	<b>Typical Sources of Contamination</b>
Total Coliform Bacteria	For systems that collect <40 samples/month: More than 1 positive monthly sample	0	0	N	Naturally present in the environment.

Bainbridge Water Authority is required to test for Trihalomethanes and Haloacetic Acids annually between September 2nd and September 8th. In 2021 our lab had new covid regulations that made it difficult to acquire access to the testing sites on these dates. Because the tests were pulled on September 10, 2021, the Bainbridge Water received a testing violation from the Department of Environmental Protection. The violation was due to late monitoring. All results from the September 10, 2021 samples were within the required parameters.

## **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 run-off, 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 and DEP prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA and DEP regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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).

**Nitrate:** Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six 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 for advice from your health care provider.

**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. Bainbridge Water Authority 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>.

