

Berks County Water and Sewer Association

In 2017, the Berks County Water and Sewer Association (BCWSA), with assistance from the Berks County Planning Commission (BCPC), the Pennsylvania Department of Environmental Protection, and other partners developed a comprehensive Source Water Protection Program for the entire county. RAWA participated in this initiative, after completing an individual source water protection plan in 2017. The goal is to work collaboratively to protect drinking water sources in Berks County like groundwater wells, springs and surface waters like rivers, creeks and lakes. A Source Water Protection Coordinator will assist all participating water systems sustain the watershed improvement strategies described in the SWP Plan such as public outreach, assistance with protection projects and reporting. The Berks County Water Source Water Protection Program will assist us in keeping our raw water, the single most important ingredient in providing service, protected from pollutants.

Public Participation Opportunities

This report shows our water quality and what it means. If you have any questions about this report or concerning your water utility, please contact Gary Phillips at 610-406-6300 extension 6326.

We want you to be informed about your water supply. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the third Tuesday of the month at 4:00 PM at the RAWA main office, 1801 Kutztown Rd, Reading PA 19604.

Date: Third Tuesday of each month
Time: 4 p.m.
Phone: (610) 406-6300
Location: RAWA main office
1801 Kutztown Rd.
Reading, PA 19604

En Español

Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, ó hable con alguien que lo entienda.

Reading Area Water Authority
1801 Kutztown Road
Reading, PA 19604

Reading Area Water Authority

PWS ID# 3060059



2025 Annual Drinking Water Quality Report

2025 Annual Drinking Water Quality Report

PWS ID# 3060059

Source of Drinking Water

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.

Where Do We Get Our Drinking Water?

The water supply for the Reading Area Water Authority (RAWA) service area is obtained from Lake Ontelaunee, located six miles north of the City of Reading. Lake Ontelaunee is a 1,082-acre manmade lake with a drainage (watershed) area of approximately 216 square miles. RAWA controls and maintains 3,142.5 acres around the lake which is owned by the City of Reading. A minimum 500-foot sanitary strip of land surrounds the periphery of the lake in all but one section of the lake at the dam breast. This strip of land was acquired to minimize the potential of pollution entering into the lake from the shoreline.

Surface water enters the lake primarily from Maiden Creek, and its main tributary Sacony Creek, with inputs from numerous other streams, including several small tributaries that flow directly into the lake.

The dam, which is located on Route 73, was constructed in 1926 and raised to its present height in 1935. The dam height creates an impoundment capacity of 3.88 billion gallons in Lake Ontelaunee. Water from the lake is then delivered to the Maiden Creek Filter Plant by gravity. The Reading Area Water Authority also has the capability of drawing water directly from Maiden Creek. The intake is located at the Filter Plant.

All of Drinking Water May Contain Contaminants

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 (1-800-426-4791).

Required Additional Health Information for Lead

Exposure to lead in drinking water can cause serious health effects in all age groups. Infants and children can have decreases in IQ and attention span. Lead exposure can lead to new learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney or nervous system problems.

Lead is not present in City drinking water when it leaves our water treatment plant and underground pipes. Water can leach lead from brass or chromed-plated brass faucets and fixtures in the home. If you have questions about your drinking water or think you have lead in your plumbing, contact us at (610) 406-6300 or info@readingareawater.com.

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, test methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline @ 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>.

Lead & Copper Pipes

RAWA needs your help to complete an inventory of all water service line pipes connected to the public system. Check your home for lead pipes, then complete the ONLINE SURVEY to tell us what you find, no matter what type of pipes you find.

<https://www.readingareawater.com/lead-pipe-survey-results>

RAWA has compiled a Service Line Inventory. It can be viewed at <https://trinex.cloud/leadcast/publicMap?tenantName=rawa>

People Who May Be More Vulnerable to Contaminants

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 (1-800-426-4791).

Source Water Protection

The Reading Area Water Authority is a leader in protecting their drinking water sources. Reading's original watershed assessment was conducted in 1998, which found that potential contaminants to the Lake included bacterial contamination, sediment, and algae growth. This study prompted RAWA to develop and implement a comprehensive Source Water Protection Plan, which was approved by the PA Department of Environmental Protection in 2007. Since then, RAWA has been very active in source water protection within Berks County, and received the national Exemplary Source Water Protection award from the American Water Works Association in 2013. In 2016, RAWA revised their potential contaminants inventory and time-of-travel studies, and in 2017 developed a 10-year update to their source water protection plan. Sediment and nutrients from agricultural runoff continue to be the highest potential contamination risk to Lake Ontelaunee and the Maiden Creek. RAWA continues to conduct water quality monitoring throughout the watershed. In addition, RAWA staff plants trees annually around the lake property to maintain the natural state of the watershed and reduce siltation of the lake. The 1998 watershed study, 2007 Source Water Protection Plan, its 10-year update (2017), and other water protection information can be found on the RAWA website at <http://www.readingareawater.com/one-water/>

Although the Reading Area Water Authority is concerned with protecting its sources of water, current treatment processes are capable of transforming raw water from the lake into finished water that meets all federal and state drinking water standards.

The water is treated at the filter plant by a conventional treatment method. The process consists of flocculation, sedimentation, filtration and disinfection, along with sequenced chemical additions to optimize treatment of the 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, 2025. 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.

Chemical Contaminants								
Contaminant	MCL in CCR Units	MCLG	Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
*Chlorine	MRDL=4	MRDLG=4	3.07	2.46-3.07	ppm	Mar 2025	N	Water additive used to control microbes
Fluoride	^2	4	0.89	0.33-0.89	ppm	Dec 2025	N	Water additive which promotes strong teeth
Nitrate	10	10	3.79	0-3.79	ppm	Jan 2025	N	Runoff from fertilizer use
HAA5	60	N/A	66.6	21.7-66.6	ppb	Oct 2025	N^^	By-product of drinking water disinfection
TTHM	80	N/A	69.7	25.9-69.7	ppb	Oct 2025	N	By-product of drinking water disinfection
Gross Alpha	15	0	0.593	0-0.593	pCi/L	Mar 2023	N	Erosion of natural deposits
Cyanide	0.2	NA	0.012	0-0.012	ppm	May 2025	N	Discharge from steel/metal factories & plastic and fertilizer factories
Perfluorooctane Sulfonic Acid (PFOS)	18	14	3.28	1.76-3.28	ppt	Jul 2025	N	Industrial & consumer products; clothing, carpeting, food packaging, non-stick cookware, firefighting foam, personal care products, adhesives, metal plating, wire manufacturing
Perfluorooctanoic Acid (PFOA)	14	8	8.53	4.37-8.53	ppt	Jul 2025	N	
Perfluorononanoic Acid (PFNA)	**10	10	3.07	0-3.07	ppt	Jul 2025	N	
Perfluorobutanesulfonic Acid (PFBS)	NA	NA	4.8	2.33-4.8	ppt	Mar 2025	N	
Sodium	20	NA	26.8	15.5-26.8	ppm	Oct 2025	Y #	US EPA's recommended maximum of 20 mg/L for people who follow sodium restricted diets.
Copper	1.3	1.3	0.003	0.001-0.003	ppm	May 2023	N	Copper Sulfate algal treatment of reservoir

*Based on the monthly average of all the individual sites tested
 ^EPA's MCL for fluoride is 4 ppm. However, Pennsylvania has set a lower MCL to better protect human health.
 ^^Compliance is based upon the LRAA & OEL of individual sites tested
 **EPA's MCL which is enforceable in 2029. Pennsylvania has not yet set a limit for this contaminant.
 # Secondary contaminant -non-enforceable guideline.

Entry Point Disinfectant Residual							
Contaminant	Minimum Disinfectant Residual	Lowest Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Chlorine	0.20	0.46	0.46-3.79	ppm	Jan 2025	N	Water additive used to control microbes.

Lead and Copper							
Contaminant	Action Level (AL)	MCLG	90 th Percentile Value	Units	# of Sites Above AL of Total Sites	Violation Y/N	Sources of Contamination
Lead	15	0	0	ppb	0 out of 31	N	Corrosion of household plumbing.
Copper	1.3	1.3	0.204	ppm	0 out of 31	N	Corrosion of household plumbing.

In June & July 2025, to comply with the Lead and Copper Rule, Reading Area Water Authority conducted one study of 31 samples. 0 samples out of 31 samples were found to be above the required Action Levels established for lead and copper

Microbial (related to Assessments/Corrective Actions regarding TC/EC positive results)					
Contaminant	TT	MCLG	Assessments/Corrective Actions	Violation Y/N	Sources of Contamination
Total Coliform Bacteria	Any system that has failed to complete all the required assessments or correct all identified sanitary defects, is in violation of the treatment technique requirement	N/A	None required	N	Naturally present in the environment.

Reading Area Water Authority is required, based on population served, to test 90 bacteriological samples per month.

Turbidity						
Contaminant	MCL	MCLG	Level Detected	Sample Date	Violation Y/N	Source of Contamination
Turbidity	TT=1 NTU for a single measurement	0	0.408 NTU	Apr 2025	N	Soil runoff
	TT= at least 95% of monthly samples ≤ 0.15 NTU##		99.93-100.0	N/A	N	

##<0.15 while using raw water source 002 (Maiden Creek) *<0.3 while using raw water source 001 (Lake Ontelaunee)

Total Organic Carbon (TOC)					
Contaminant	Range of % Removal Required	Range of percent removal achieved	Number of quarters out of compliance	Violation Y/N	Sources of Contamination
TOC	0-35	34.6-46.7	0	N	Naturally present in the environment. Total organic carbon (TOC) has no health effects. However, TOC provides a medium for the formation of disinfection byproducts. These byproducts include THMs and HAAs. Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, of nervous system effects, and may lead to an increased risk of getting cancer

UCMR5 (All units in ppt)							
Detectable Chemical	1/8/2024	4/8/2024	7/8/2024	10/1/2024	Average	Range of Detections	
Perfluoropentanoic acid (PFPeA)	3.9	4.1	5.4	4.9	4.6	3.9-5.4	
Perfluorohexanoic acid (PFHxA)	3.7	3.9	4.2	4.4	4.1	3.7-4.4	
Perfluorooctanoic acid (PFOA)	5.8	6.6	6.3	5.8	6.1	5.8-6.6	
Perfluorobutanesulfonic acid (PFBS)	5.6	4.4	5.0	5.1	5.3	4.4-5.6	
Perfluoroheptanoic acid (PFHpA)	none detected	3.0	none detected	none detected	0.8	0-3.0	

The purpose of UCMR5 is to "collect occurrence data for contaminants suspected to be present in drinking water, but that do not have health-based standards set under the Safe Water Drinking Act". Detectable Chemicals: Manganese, Haloacetic acids (HAA5, HAA6Br, HAA9) *All figures listed in Parts per Billion (ppb). *All testing performed quarterly starting in December 2018.

Violations We routinely monitor your water for turbidity (cloudiness). This tells us whether we are effectively filtering the water supply. On April 17, 2025, we experienced a condition at our filter plant where 1 of our 16 filters showed two consecutive readings above the DEP turbidity standard. The situation was attributed to an instrument malfunction and was NOT representative of water quality. The turbidity equipment was cleaned, and a calibration check was done before placing it back into service. The instruments measuring the combined turbidity of all of our filters continued to demonstrate results well below the DEP standards

Definitions In the table you might find terms and abbreviations you are not familiar with. To help you better understand these terms we've provided the following definitions:

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 Disinfectant Level (MinRDL) - The minimum level of residual disinfectant required at the entry point to the distribution system.

Level 1 Assessment - A Level 1 assessment is 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 Level 2 assessment is 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.

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 (µg/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