

2022 Annual Drinking Water Quality Report

Public Water System I.D. 7670100

THE
YORK
WATER
COMPANY



W

e're pleased to present to you this year's ANNUAL DRINKING WATER QUALITY REPORT

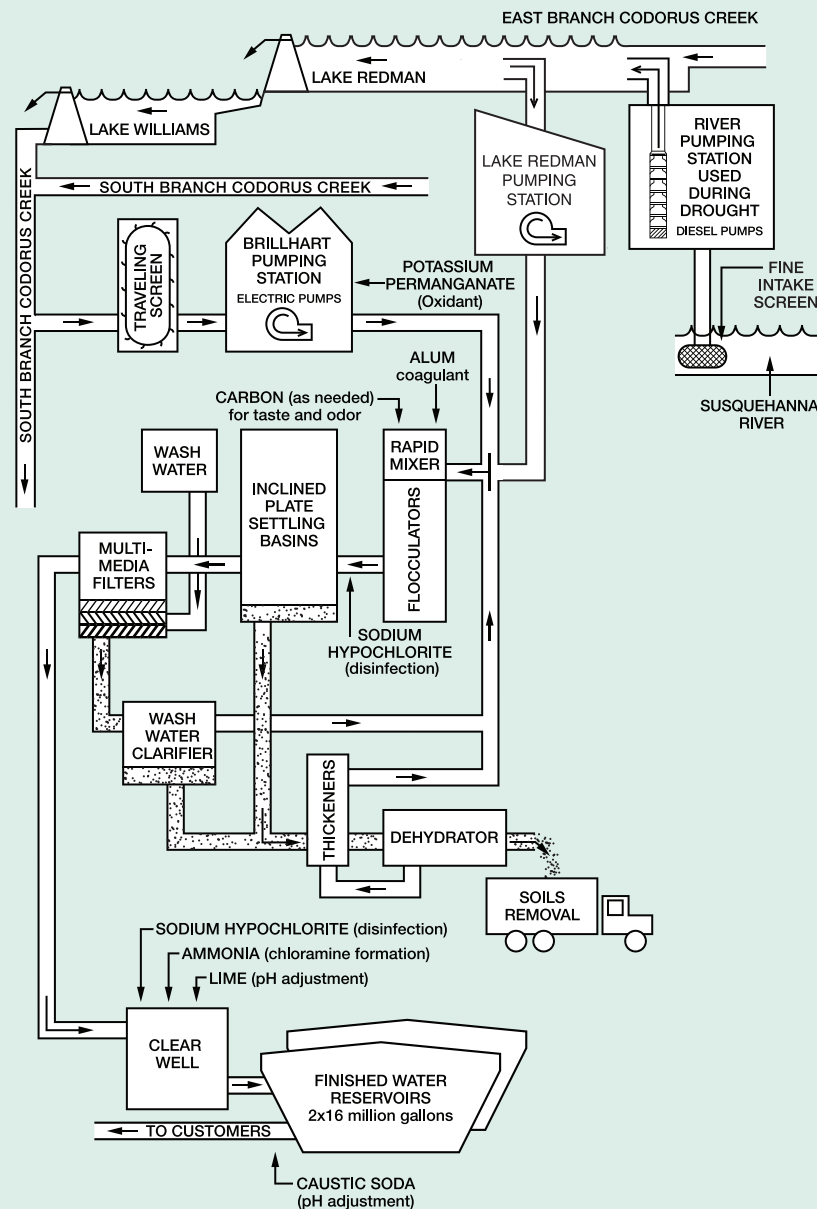
This report is to inform you about the fine quality water and services The York Water Company delivers to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and to protect our water resources. We are committed to ensuring the quality of your water.

'Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.

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.



Water Processing Flow Chart

CONTAMINANTS THAT MAY BE PRESENT IN SOURCE WATER (CONTINUED)

- 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, the Environmental Protection Agency prescribes regulations which 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 must provide the same protection for public health.

Your water source is the combined flow of the South and East Branches of the Codorus Creek. The Company's two lakes, Lake Williams and Lake Redman (William H. Kain County Park), are located on the East Branch of the Codorus Creek and are both used to release water into the Creek during periods of drought or other low-flow conditions. Water can also be transferred from the Susquehanna River to the head of Lake Redman during drought.

Our primary source water pumping station is located in Spring Garden Township, York County. The source water is pumped approximately 2.2 miles to our purification plant which is also located in Spring Garden Township. In 2017, the Company completed an **alternate pumping station** at Lake Redman, allowing us to pump water directly from Lake Redman approximately 3.0 miles to our purification plant.

York Water has created a **Source Water Protection Plan (SWPP)** committee that includes internal and external members. The Company's SWPP will be administered through internal professionals and will result in additional visibility and awareness of our water source(s) across the Company's operations.

We are pleased to report that our drinking water is safe and meets Federal and State requirements. Those items that were detected during our testing process are detailed on pages 6-9. If you have any questions about this Water Quality Report, please contact Doug Crawshaw, Water Quality Manager or Katrina Cooper, Assistant Filter Plant Superintendent at 717-848-2984, or email customer.service@yorkwater.com.

If you have any other questions concerning the Company and its operations, please contact JT Hand, President and CEO. We want our valued customers to be informed about their water utility at 717-845-3601, or email customer.service@yorkwater.com.

Although our Company's Board of Directors meets regularly throughout the year, the meetings are not open to the public. If you have concerns, questions or suggestions that need the Board's attention, please contact JT Hand. Your inquiries will receive prompt attention.

The York Water Company routinely monitors for constituents in your drinking water according to Federal and State laws. The table beginning on page 6 shows the results of our monitoring for the period of January 1 to December 31, 2022.

IN THIS REPORT MANY TERMS AND ABBREVIATIONS MAY NOT BE FAMILIAR TO YOU.

To help you better understand these terms, we've provided the definitions which appear on this page.

Non-Detect (ND)

Laboratory analysis indicates that the constituent is not present or is present in such low quantities that the laboratory cannot detect its presence.

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

One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Parts per trillion (ppt) or Nanograms per liter (nanograms/l)

One part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

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.

Nephelometric Turbidity Unit (NTU)

Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Action Level

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT)

A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level

The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs (see below) as feasible using the best available treatment technology. MCLs are set at very stringent levels. A person would have to drink 2 liters of water at the MCL level every day for a lifetime to have a one-in-a-million chance of having the identified health effect described for many regulated constituents.

Maximum Contaminant Level Goal

The "Goal" (MCLG) is 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.

WE CONSTANTLY MONITOR THE WATER SUPPLY FOR VARIOUS CONSTITUENTS.

Although we have not detected cryptosporidium in the finished water or in our primary or secondary sources, we did detect a low-level presence of 0.11 oocysts/L in our tertiary, drought emergency source on the Susquehanna River. Still, we believe it is important for you to know that cryptosporidium can enter the source water, and if not properly treated, may cause serious illness.

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.

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 an organ transplant, 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. Environmental Protection Agency/Centers

for Disease Control and Prevention guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

Lead:

Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

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. The York Water Company 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 following the 6-3-3 rule. If your water has not been used for six hours, flush your tap for 3 minutes, about 3 gallons of water, before consuming. 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>.

We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been

detected. The Environmental Protection Agency has determined that your water IS SAFE at these levels.

All 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 Safe Drinking Water Hotline at 1-800-426-4791.

Source Water Assessment:

The Company's Source Water Assessment Program (SWAP) has been completed. It identifies potential urban and agricultural sources of contamination and assigns low to moderate levels of risk. The report is available for review at the Company's office at 130 East Market Street, York, PA.

Special explanations regarding some common contaminants include:

Total Coliform:

The Total Coliform Rule requires water systems to meet a stricter limit for coliform bacteria. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, we must notify the public by newspaper, television or radio.

The items detected during 2022 follow on pages 6 to 9.

FREQUENTLY ASKED QUESTIONS

Is my water hard or soft?

Hardness describes the level of dissolved natural minerals (calcium and magnesium) in drinking water. These minerals are an important part of a healthy diet. Hard water contains more of these minerals. A gradual build-up of calcium and magnesium from hard water can form harmless, filmy white deposits on faucets, bathtubs and teakettles.

Hard water also requires more soap to lather fully. While some water system's hardness varies from time to time, The York Water system is consistent year-round.

Hardness can be expressed in grains per gallon or parts per million (ppm). York Water's hardness range is approximately 5.2 grains or 89 ppm. York's water falls into the transition range from soft to moderately hard.

Why is there chlorine in my water?

A century ago, serious diseases such as typhoid fever and cholera were a very real threat to our health because the microorganisms that caused these diseases were found in public drinking water.

However, for over 100 years, water suppliers in America and other countries have used chlorine to treat, or disinfect, drinking water. According to the U.S. Environmental Protection Agency (EPA) and other health agencies, chlorine is currently one of the most effective disinfectants to kill harmful microorganisms. Disinfection of all public water supplies is required by Federal and State laws and regulations, including the Safe Drinking Water Act and the Surface Water Treatment Rule.

Does The York Water Company add fluoride to my water?

The York Water Company does not add fluoride to the water with the exception of our West Manheim customers. West Manheim fluoridated its water prior to York Water's acquisition in 2008. As a condition of the acquisition, York Water has continued to fluoridate in West Manheim. Elsewhere in the system, a small amount of fluoride does occur naturally in your water. The amount varies from time to time. In 2020, fluoride was measured at less than 0.100 ppm in your water supply.

Why does my water look milky or cloudy at times?

The cloudy water is caused by tiny air bubbles in the water similar to the gas bubbles in beer and soda pop. After a little while, the bubbles rise to the top and are gone. The cloudiness may occur more often in winter when the drinking water is cold and can be enhanced by the aerators that are installed on modern home faucets.

Does The York Water Company monitor for any other contaminants?

The York Water Company has sampled for a series of unregulated contaminants. Unregulated contaminants are those that don't yet have a drinking water standard set by USEPA. The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants should have a standard. As our customers, you have a right to know that this data is available. If you are interested in examining the results, please visit our web page at www.yorkwater.com to view our 2022 Water Quality Analysis or contact Katrina Cooper, Assistant Filter Plant Superintendent at 717-848-2984, or email customer.service@yorkwater.com.

2022 TEST RESULTS

ENTRY POINT DISINFECTANT RESIDUAL

Contaminant	Units	Minimum Disinfectant Residual	Lowest Level Detected	Range of Detections	Sample Date	Compliance Achieved Yes/No	Source
Chloramine	ppm	0.2	0.73	0.73 - 2.87	2022	Yes	Water additive used to control microbes

MICROBIOLOGICAL CONTAMINANTS

Microbial (related to Assessments/Corrective Actions regarding TC positive results)					
Contaminant	Treatment Technique	Maximum Contaminant Level Goal (MCLG)	Assessments/ Corrective Actions	Compliance Achieved Yes/No	Source
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	0 – None Needed	Yes	Naturally present in the environment

Microbial (related to E. coli)					
Contaminant	Maximum Contaminant Level (MCL)	Maximum Contaminant Level Goal (MCLG)	Positive Samples	Compliance Achieved Yes/No	Source
E. coli	Routine and repeat samples are total coliform-positive and either is E. coli-positive or system fails to take repeat samples following E. coli-positive routine sample or system fails to analyze total coliform-positive repeat sample for E. coli	0	0	Yes	Human and animal fecal waste

2022 TEST RESULTS

MICROBIOLOGICAL CONTAMINANTS

Microbial (related to E. coli)					
Contaminant	Treatment Technique	Maximum Contaminant Level Goal (MCLG)	Assessments/ Corrective Actions	Compliance Achieved Yes/No	Source
E. coli	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	0 – None Needed	Yes	Human and animal fecal waste

Detected Parameter	Units	Maximum Contaminant Level (MCL)	Maximum Contaminant Level Goal (MCLG)	Results	Compliance Achieved Yes/No	Source
Total Coliform Bacteria	% Positive Sample	Presence of coliform bacteria in less than 5% of monthly samples	0	0	Yes	Naturally present in environment
Fecal Coliform and E. coli	Number of Samples	A routine sample and repeat sample are total coliform positive, and one is also fecal coliform or E. coli positive	0	0	Yes	Human and animal fecal waste

TURBIDITY – A MEASURE OF THE CLARITY OF THE WATER

Detected Parameter	Units	Maximum Contaminant Level (MCL)	Highest Monthly Average of All Readings for 2020	Highest Single Measurement	Compliance Achieved Yes/No	Source
Turbidity	NTU	TT - 95% of all monthly samples taken must be less than or equal to 0.3 NTU	100% of all monthly samples were less than 0.1 NTU	0.048	Yes	Soil erosion and runoff

2022 TEST RESULTS

INORGANIC CONTAMINANTS

Detected Parameter	Units	Maximum Contaminant Level (MCL)	Maximum Contaminant Level Goal (MCLG)	Results	Range of Detected Levels (if applicable)	Compliance Achieved Yes/No	Source
Asbestos	MFL	7	0	17	0 - 17	No (See Note 2)	Decay of asbestos-cement water mains; erosion of natural deposits
Atrazine	ppb	3	3	0.60	N/A	Yes	Runoff from herbicide used on row crops
Barium	ppm	2	2	0.019	N/A	Yes	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	ppb	100	100	5.90	N/A	Yes	Discharge from steel and pulp mills; erosion of natural deposits
Nitrate (as Nitrogen)	ppm	10	10	3.40	2.50 - 4.50	Yes	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

CHEMICAL CONTAMINANTS

Detected Parameter	Units	Maximum Residual Disinfectant Level (MRDL)	Maximum Residual Disinfectant Level Goal (MRDLG)	Results	Range of Detected Levels (if applicable)	Compliance Achieved Yes/No	Source
Chloramines	ppm	4	4	2.49	0.06 - 3.71	Yes	Water additive used to control microbes
Fluoride*	ppm	2	2	0.71	0.61 - 0.82	Yes	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories

* WEST MANHEIM CUSTOMERS ONLY

2022 TEST RESULTS

LEAD AND COPPER MEASURED AT THE CUSTOMER'S TAP

(RESULTS FROM 2022 SAMPLING. NEXT DUE IN 2025)

Detected Parameter	Units	EPA's Action Level for Sampling of Customer Homes	Maximum Contaminant Level Goal (MCLG)	Results	Number of Sites Above the EPA Action Level	Compliance Achieved Yes/No	Source
Lead	ppb	90% of all homes tested must be below 15 ppb	0	90% of all homes tested measured below 2.0 ppb	1 of the 50 homes tested measured greater than 15 ppb	Yes	Corrosion of household plumbing systems
Copper	ppm	90% of all homes tested must be below 1.3 ppm	1.3	90% of all homes tested measured below 0.047 ppm	50 of 50 homes tested measured below 0.095 ppm	Yes	Corrosion of household plumbing systems

Note: You can minimize your exposure to lead and copper by following the 6-3-3 rule. If your water has not been used for six hours, flush your tap for 3 minutes, about 3 gallons of water, before consuming.

VOLATILE ORGANIC CHEMICALS

Detected Parameter	Units	Maximum Contaminant Level (MCL)	Maximum Contaminant Level Goal (MCLG)	Results	Range of Detected Levels	Compliance Achieved Yes/No	Source
Trihalo-methanes	ppb	Average of last four consecutive quarterly sample results must be less than or equal to 80 ppb	0	33.0	15.0 - 56.1	Yes	By-product of disinfectant addition
Haloacetic Acids (5)	ppm	Average of last four consecutive quarterly sample results must be less than or equal to 60 ppb	0	26.0	13.5 - 38.1	Yes	By-product of disinfectant addition

- Notes:**
- 1: Other Violations: The York Water Company failed to report results for Coliform and Chlorine residual in a timely manner for July and August of 2022.
 - 2: York Water had a single sample for asbestos in our distribution system that exceeded the MCL (maximum contaminant limit). The first sample result, the one that exceeded the MCL, was likely an anomaly since the follow-up samples had no detectable fibers present. Asbestos is not present in our treated water, however sections of main that York Water has acquired over the years utilized asbestos-cement as a material of construction known as transite. Transite was commonly installed in the 1940s, 50s and 60s, though York Water has never installed any transite main/piping. York Water has had a program in place for many years, that we continue presently, removing and replacing large quantities of asbestos-cement (transite) piping each year.

Health Effects: Some people who drink water containing asbestos in excess of the MCL over many years may have an increased risk of developing benign intestinal polyps.



February 18, 1816, The York Water Company was formed by a group of leading York Citizens to protect against the danger of fire. Today, the company is the oldest investor owned utility in the United States.

1840 *Original wooden mains replaced with cast iron pipes.*

1848 *First step into the modern era, extension of water mains, pumping station built, and reservoir expanded.*

1897 *Brillhart raw water-pumping station built.*

1899 *The York Water Company Filtration Plant, designed by George W. Fuller, is placed in service.*

1912 *The Company's first impounding dam to create Lake Williams Reservoir completed.*

1967 *Lake Redman Reservoir completed.*

1977 *William H. Kain County Park open to the public for year-round recreational use.*

2005 *Pumping station built on the Susquehanna River.*

2016 *The York Water Company celebrated the 200th anniversary of uninterrupted service!*

2017 *Lake Redman raw water-pumping station built.*

Photo (above): Employees of The York Water Company in front of the Company's Headquarters, built in 1929.

Photo (front cover): A peaceful, misty view over Lake Redman, which provides 1.3 billion gallons of reserve water storage. During the "drought of record" in 1967, York Water built the Company's second dam, named after the General Manager at the time, John Redman. After Lake Redman's completion, York Water's total capacity of water reserve storage increased to 2.3 billion gallons. (photo credit: Douglas Crawshaw)

**130 East Market Street
York, Pennsylvania 17401
717-845-3601**

www.yorkwater.com

