



2021 Annual

Water Quality Report

East Windsor Municipal Utilities Authority
PWS ID: NJ1101002

Our Commitment to Quality

Once again, we proudly present our annual water quality report which details the results of water quality testing completed from January to December 2020. The purpose of this report is to raise your understanding of drinking water and bring awareness of the need to protect our drinking water sources. Included in this report are details about where your water comes from, what it contains, and how our water quality results compare to federal and state standards.

We are pleased to tell you that we had no Safe Drinking Water Act violations in 2020. We are committed to delivering the best quality drinking water. To that end, we remain vigilant in meeting the challenges of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

We want you to be informed about your drinking water. For more information about this report, or for any questions relating to your drinking water, please call the East Windsor MUA at 609-443-6000.

Public Participation – Want to get involved?

If you have questions or would like to become involved in discussions about your water quality, the East Windsor MUA board members meet on the 3rd Thursday of each month. Please join us by calling in or attending virtually via ZOOM video conferencing. Access Instructions are available on our website at www.eastwindsormua.com/board-meeting-dates/. Your input is important to us!

How to Contact Us

During normal business hours, Mondays to Fridays from 8:30 am to 4:30 pm, call us at 609-443-6000. You may also leave us a message by visiting our website at www.eastwindsormua.com/contact-us/.

This report contains important information about your drinking water. If you do not understand it, please have someone translate it for you.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

Where does our water come from?

East Windsor MUA treats and distributes groundwater originating from the Potomac-Raritan-Magothy (PRM) aquifer formation.

What's in the water before we treat it?

In general, the sources of drinking water (both tap 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 can pick up substances resulting from the presence of animals or from human activity.

Substances that may be present in source water include:

- **Microbiological Contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife.
- **Inorganic Contaminants**, such as salts and metals (which can be naturally-occurring or may 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 byproducts of industrial processes and petroleum production), may also come from gas stations, urban stormwater runoff, and septic systems.
- **Radioactive Contaminants**, which can be naturally-occurring or may be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the United States Environmental Protection Agency (USEPA) prescribes regulations limiting the amounts of certain substances in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health. For more information about contaminants and potential health effects, call the [EPA's Safe Drinking Water Information Hotline at 800-426-4791](tel:8004264791).

East Windsor MUA PWSID # 1101002

East Windsor MUA is a public community water system consisting of 7 wells. None of the wells are under the influence of surface water (GUDI). There are no surface water intakes, as well as no groundwater sources or surface water sources purchased. The system's source water comes from the middle and the upper Potomac-Raritan-Magothy aquifer.

Protecting Your Water Source

What is S.W.A.P.?

Source Water Assessment Program (SWAP) was created by the New Jersey Department of Environmental Protection (NJDEP) to study existing and potential threats to the quality of public drinking water sources throughout the state. Sources are rated depending upon their contaminant susceptibility for 7 contaminant categories and radon. Each contaminant category was then assigned a rating of high (H), medium (M), or low (L).

More information on SWAP is available at www.state.nj.us/dep/swap/ or by contacting [NJDEP's Bureau of Safe Drinking Water at 609-292-5550](#).

Susceptibility Ratings for East Windsor MUA Water Sources

The table below illustrates the susceptibility ratings issued for our water system.

If a source is rated highly susceptible for a contaminant category, it does not mean a customer is or will be consuming contaminated drinking water. The rating reflects the potential for contamination of source water, not the existence of contamination. Public water systems are required to monitor for regulated contaminants and to install treatment if any contaminants are detected at frequencies and concentrations above allowable levels. As a result of the assessments, the DEP may customize (change existing) monitoring schedules based on the susceptibility ratings.

Source water protection is a long-term dedication to clean and safe drinking water. It is more cost effective to prevent contamination than to address contamination after the fact. Every member of the community has an important role in source water protection. The NJDEP recommends controlling activities and development around drinking water sources whether it is through land acquisition, conservation easements or hazardous waste collection programs. We will continue to keep you informed of SWAP's progress and developments.

	Pathogens			Nutrients			Pesticides			Volatile Organic Compounds			Inorganics			Radionuclides			Radon			Disinfection Byproduct Precursors		
Sources	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L
Wells - 7		5	2	5		2		3	4	4		3	1	1	5	5		2		5	2	2	4	1
GUDI - 0																								
Surface Water Intakes - 0																								

Wise Water Use Tips

Water conservation is an important first step in protecting our water supply. Such measures not only save the supply of our source water, but can also save you money by reducing your water bill. Here are a few suggestions:

Easy water conservation tips you can follow:

- Fix leaky faucets, pipes, toilets, etc. Faucet washers are inexpensive and take only a few minutes to replace.
- Run the washing machine and dishwasher only when full
- If washing by hand, soak dishes before washing
- Do not use the toilet for trash disposal
- Take shorter showers
- Do not let the water run while shaving or brushing teeth
- Water the lawn during the cooler parts of the day to reduce evaporation

Water Quality Statement

The data presented in the Table of Detected Contaminants is the same data collected to comply with USEPA and New Jersey state monitoring and testing requirements. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected well below the levels set by the EPA to protect public health. To assure high quality water, individual water samples are taken each year for chemical, physical and microbiological tests. Analyses are performed on water taken at the source, from the distribution system after treatment and, for lead and copper monitoring, from the customer's tap. Testing can pinpoint a potential problem so that preventative action may be taken. The Safe Drinking Water Act regulations allow monitoring waivers to reduce or eliminate the monitoring requirements for asbestos, volatile organic chemicals, and synthetic organic chemicals. Our system received a waiver for asbestos and synthetic organic chemicals because we are not considered vulnerable to these types of contamination.

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 [EPA's Safe Drinking Water Information Hotline at 800-426-4791](#).

How Do I Read the Table of Detected Contaminants?

Starting with the **Contaminant**, read across from left to right. The shaded column marked **MCL**, Maximum Contaminant Level, is 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. This is the Maximum Contaminant Level Goal, 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.

The column marked **Range Detected** shows the highest and lowest test results for the year. The column marked **Highest Level Detected** shows the highest test results used to compare with the MCL. A "Yes" under **Compliance Achieved** means the amount of the substance met government requirements. The **Typical Source** briefly explains where the contaminant usually originates. Substances not listed in the table were not detected in the treated water supply.

As you can see, our system had no MCL violations again this year. The footnotes and the definitions below will help you interpret other data presented in the Table of Detected Contaminants.

Table Definitions

- **90th Percentile:** Of the samples taken, 90% of the values of the results were below the level indicated in the table.
- **AL (Action Level):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **LRAA (Locational Running Annual Average):** The average of sample results during the previous four calendar quarters.
- **MCL (Maximum Contaminant Level):** 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.
- **MCLG (Maximum Contaminant Level Goal):** 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.
- **MRDL (Maximum Residual Disinfectant Level):** 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.
- **MRDLG (Maximum Residual Disinfectant Level Goal):** 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 contamination.
- **NA: Not Applicable**

- **ND: Not Detected**
- **NLE: No Limit Established**
- **ppb (parts per billion):** Corresponds to one part substance in one billion parts water (or micrograms per liter).
- **ppm (parts per million):** Corresponds to one part substance in one million parts water (or milligrams per liter).
- **pCi/L (picoCuries per liter):** Measurement of the natural rate of disintegration.
- **RUL (Recommended Upper Limit):** The highest level of a contaminant that is recommended in drinking water to protect aesthetic quality.

Vulnerable Populations Statement

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people such as those with cancer undergoing chemotherapy, those who have undergone organ transplants, those 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 and CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Information Hotline at 800-426-4791.

Lead Education Statement

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. East Windsor MUA 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 <http://www.epa.gov/safewater/lead> or by calling the EPA's Safe Drinking Water Information Hotline.

Unregulated Contaminant Monitoring Rule

East Windsor MUA participated in the Unregulated Contaminant Monitoring Rule (UCMR4). Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of these substances in drinking water and whether regulation is warranted. Information collected through the monitoring of these contaminants/chemicals will help to ensure that future decisions on drinking water standards are based on sound science.

Table of Detected Contaminants (2020)

Primary Regulated Substances

Contaminant	Units	MCL	MCLG	Range Detected	Highest Level Detected	Compliance Achieved	Typical Source
Inorganic Chemicals							
Barium	ppm	2	2	0.018 - 0.035	0.035	Yes	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits; runoff from cropland
Fluoride ¹	ppm	4	4	0.42 - 0.84	0.84	Yes	Erosion of natural deposits; water additive which promotes strong teeth
Nickel	ppm	NLE	NA	ND - 0.009	0.009	Yes	Naturally occurring; industrial electroplating, stainless steel, and alloy production; runoff from mining and refining operations
Nitrate	ppm	10	10	ND - 0.42	0.42	Yes	Runoff from fertilizer use; industrial or domestic wastewater discharges; erosion of natural deposits
Disinfectant Treatment Byproducts							
Total Trihalomethanes (TTHMs)	ppb	LRAA = 80	NA	1.2 - 10.2	9.2 ²	Yes	Byproduct of drinking water disinfection
Haloacetic Acids (HAA5s)	ppb	LRAA = 60	NA	ND - 1.89	2.0 ²	Yes	Byproduct of drinking water disinfection
Disinfectants							
Chlorine	ppm	MRDL = 4	MRDLG = 4	0.30 - 1.08	1.08	Yes	Water additive used to control microbes
Radiological Substances							
Alpha Emitters	pCi/L	15	0	9.2	9.2 ³	Yes	Erosion of natural deposits
Combined Radium 226 and 228	pCi/L	5 ⁴	0	3.4	3.4	Yes	Erosion of natural deposits

Copper and Lead Study

Contaminant	Units	AL	MCLG	90th Percentile	Homes Above AL	Compliance Achieved	Typical Source
Copper (2018) ⁵	ppm	1.3	1.3	0.018	0	Yes	Corrosion of household plumbing systems
Lead (2018) ⁵	ppb	15	0	0.99	0	Yes	Corrosion of household plumbing systems

Secondary Contaminants

Contaminant	Units	RUL	MCLG	Range Detected	Highest Level Detected	RUL Achieved
Iron ⁶	ppb	300	NA	ND - 218	218	Yes
Sodium ⁷	ppm	50	NA	1.62 - 8.49	8.49	Yes
Zinc	ppm	5	NA	ND - 0.06	0.06	Yes

Unregulated Contaminants (UCMR4)

Unregulated Contaminant	Units	MCL	MCLG	Range Detected	Average Level Detected	Typical Source
HAA5	ppb	NLE	NLE	0.615 - 1.279	0.782	Disinfectant byproduct - May be formed when disinfectants used to treat water react with naturally occurring organic and inorganic matter
HAA6Br	ppb	NLE	NLE	1.026 - 1.544	1.167	Disinfectant byproduct - May be formed when disinfectants used to treat water react with naturally occurring organic and inorganic matter
HAA9	ppb	NLE	NLE	1.026 - 1.977	1.276	Disinfectant byproduct - May be formed when disinfectants used to treat water react with naturally occurring organic and inorganic matter
Bromide ⁸	ppb	NLE	NLE	ND - 43.7	31.5	Erosion of natural deposits
Manganese	ppb	NLE	NLE	ND - 17.7	5.33	Erosion of natural deposits; Manganese is a naturally occurring mineral found in rocks, soil, and groundwater

¹ Fluoride is added to the water.

² This value is the highest LRAA calculated from the data collected.

³ If the results of this sample had been above the MCL, our system would have been required to perform additional testing for uranium. Because the results were below 15 pCi/L, no testing for uranium was required.

⁴ Radium 226 and Radium 228 have a combined MCL of 5 pCi/L.

⁵ The State of New Jersey allows us to monitor for certain contaminants less than once a year because the concentrations are not expected to vary significantly from year to year. Some of the data, though representative, are more than one year old.

⁶ The RUL for iron is based on unpleasant taste of the water and staining of laundry. Iron is an essential nutrient, but some people who drink water with iron levels well above the RUL could develop deposits of iron in a number of organs of the body.

⁷ For healthy individuals, the sodium intake from water is not important because a much greater intake of sodium takes place from salt in the diet. However, sodium levels above the RUL may be of concern to individuals on a sodium restricted diet.

⁸ Bromide was analyzed in raw source water samples taken prior to treatment. These samples are not representative of the water quality delivered to customers.