

2023 Consumer Confidence Report

For
Kenwood Water District
Dracut, Massachusetts
MASSDEP PWSID # 3079001

This report is a snapshot of the drinking water quality that we provided last year. Included are details about where your water comes from, what it contains, and how it compares to state and federal standards. We are committed to providing you with this information because informed customers are our best allies.

PUBLIC WATER SYSTEM INFORMATION

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Water System Improvements

Our water system is routinely inspected by the Massachusetts Department of Environmental Protection (MassDEP). MassDEP inspects our system for its technical, financial, and managerial capacity to provide safe drinking water to you. To ensure that we provide the highest quality of water available, your water system is operated by a Massachusetts certified operator who oversees the routine operations and maintenance (O&M) of our system. As part of our ongoing commitment to you, last year we made the following improvements to our system:

- A pump was replaced at the Autumn Road Water Booster Station.

YOUR DRINKING WATER SOURCE

Where Does My Drinking Water Come From?

Your water is provided by the following sources listed below:

The Kenwood Water District is a consecutive municipal water system to the Lowell Regional Water Utility (PWS ID# 3160000) and the Methuen Water Department (PWS ID# 3181000). Being a consecutive water system means we are a distribution system only; we do not have our own water source, nor do we treat the water we purchase. We purchase water from Lowell and Methuen, who treat and purify the water, and supply it to our customers who are all located in the eastern portion of Dracut.

Both Lowell and Methuen's source of water is the Merrimac River (a surface water source), which originates in the White Mountains of New Hampshire. Customers in the eastern and northern portions of the Kenwood Water District receive water from Methuen, while the rest of our customers receive water from Lowell. The Lowell and Methuen 2023 Annual Water Quality Reports can be downloaded from the following websites, respectively: <https://www.lowellma.gov/645/Water-Utility> and <https://www.cityofmethuen.net/Archive.aspx?AMID=45>.

Kenwood Water District's distribution system is composed of water mains, service lines, pumping stations, metering stations, gates, and valves. Small Water Systems Services, L.L.C. operated and maintained the system From January to March 2023. As of mid-March 2023, Weston & Sampson Services, Inc. is the system's contracted O&M firm.

SUBSTANCES FOUND IN TAP WATER

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, and 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 Department of Environmental Protection (MassDEP) and U.S. Environmental Protection Agency (EPA) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) and Massachusetts Department of Public Health (DPH) regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's 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 system disorders, some elderly, and some infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control and Prevention (CDC) guidelines on lowering the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

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. Kenwood Water District 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>.

IMPORTANT DEFINITIONS

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.

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

90th Percentile – Out of every 10 homes sampled, 9 were at or below this level.

Massachusetts Office of Research and Standards Guideline (ORSG) – This is the concentration of a chemical in drinking water, at or below which, adverse health effects are unlikely to occur after chronic (lifetime) exposure. If exceeded, it serves as an indicator of the potential need for further action.

Maximum Residual Disinfectant Level (MRDL) -- The highest level of a disinfectant (chlorine, chloramines, chlorine dioxide) 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 (chlorine, chloramines, chlorine dioxide) below which there is no known expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

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

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

ND = Not Detected

N/A = Not Applicable

WATER QUALITY TESTING RESULTS

What Does This Data Represent?

The water quality information presented in the table is from the most recent round of testing done in accordance with the regulations. All data shown was collected during the last calendar year unless otherwise noted.

Bacteria	MCL / TT	MCLG	Value	Date	Violation (Y/N)	Possible Sources
Total Coliform Bacteria	MCL	0	Positive	8/8/23	N	Human and animal fecal waste
Repeat, upstream, and downstream samples collected 8/11/23 were all absent for Total Coliform.						

	Date(s) Collected	90 TH percentile	Action Level	MCLG	# of sites sampled	# of sites above Action Level	Possible Source of Contamination
Lead (ppb)	Sept 2023	2.0	15	0	20	0	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	Sept 2020	0.093	1.3	1.3	20	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

Regulated Contaminant	Date(s) Collected	Highest Result or Highest Running Average Detected	Range Detected	MCL or MRDL	MCLG or MRDLG	Violation (Y/N)	Possible Source(s) of Contamination
Volatile Organic Contaminants							
Trichloroethylene (TCE) (ppb)	10/19/2022	0.4	ND - 0.4	5	0	N	Discharge from metal degreasing sites and other factories
Disinfectants and Disinfection By-Products							
Total Trihalomethanes (TTHMs) (ppb)	Quarterly in 2023	61	15 – 61	80	N/A	N	Byproduct of drinking water chlorination
Haloacetic Acids (HAA5) (ppb)	Quarterly in 2023	20	12 – 20	60	N/A	N	Byproduct of drinking water disinfection
Chlorine, free (ppm)	Monthly in 2023	0.61	0.19-0.95	4	4	N	Water additive used to control microbes

COMPLIANCE WITH DRINKING WATER REGS

Does My Drinking Water Meet Current Health Standards?

We are committed to providing you with the best water quality available. However, some contaminants that were tested last year did not meet all applicable health standards regulated by the state and federal government. Due to contaminant violations of Lead and Copper during the monitoring period from July 1, 2023 – September 30, 2023, our system took the following corrective actions:

- During the Quarter 3 monitoring period, we did not collect all the required water samples to be tested for Lead and Copper.
- On December 27, 2023, three additional water samples were collected to make up for the missed samples required to be collected in September.
- Consumer Notices detailing the testing results were posted at each sample location. For one of the three samples, Lead was reported to be 18 ppb, which is over the established Action Level of 15 ppb. However, the 90th Percentile value was still below the Action Level, so no further actions were required.
- Attached is a copy of the Tier 3 Public Notice further detailing the monitoring requirements not met.

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.

EDUCATIONAL INFORMATION

Do I Need To Be Concerned about Certain Contaminants Detected in My Water?

Sodium sensitive individuals, such as those experiencing hypertension, kidney failure, or congestive heart failure, should be aware of the sodium levels where exposures are being carefully controlled. For additional information on sodium levels detected in the water sourced from Lowell and/or Methuen, please see the respective Annual Water Quality Reports.

Cross-Connection Control and Backflow Prevention

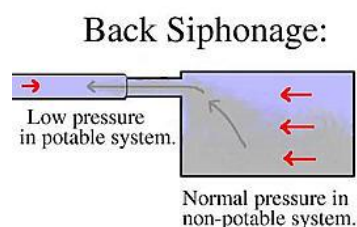
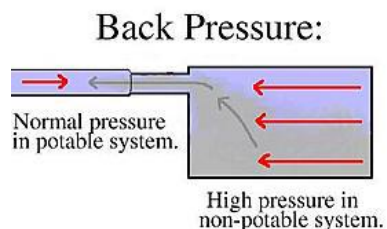
The Kenwood Water District makes every effort to ensure that the water delivered to your home and business is clean, safe and free of contamination. Our staff works very hard to protect the quality of the water delivered to our customers from the time the water is extracted via deep wells from underground aquifers or withdrawal point from a surface water source, throughout the entire treatment and distribution system. But what happens when the water reaches your home or business? Is there still a need to protect the water quality from contamination caused by a cross-connection? If so, how?

What is a cross-connection?

A cross-connection occurs whenever the drinking water supply is or could be in contact with potential sources of pollution or contamination. Cross-connections exist in piping arrangements or equipment that allows the drinking water to come in contact with non-potable liquids, solids, or gases (hazardous to humans) in event of a backflow.

What is a backflow?

Backflow is the undesired reverse of the water flow in the drinking water distribution lines. This backward flow of water can occur when the pressure created by equipment or a system such as a boiler or air-conditioning is higher than the water pressure inside the water distribution line (back pressure), or when the pressure in the distribution line drops due to routine occurrences such as water main breaks or heavy water demand causing the water to flow backward inside the water distribution system (back siphonage). Backflow is a problem that many water consumers are unaware of, a problem that each and every water customer has a responsibility to help prevent.



What can I do to help prevent a cross-connection?

Without the proper protection something as simple as a garden hose has the potential to contaminate or pollute the drinking water lines in your house. In fact over half of the country's cross-connection incidents involve unprotected garden hoses. There are very simple steps that you as a drinking water user can take to prevent such hazards, they are:

- NEVER submerge a hose in soapy water buckets, pet watering containers, pool, tubs, sinks, drains, or chemicals.
- NEVER attached a hose to a garden sprayer without the proper backflow preventer.
- Buy and install a hose bibb vacuum breaker in any threaded water fixture. The installation can be as easy as attaching a garden hose to a spigot. This inexpensive device is available at most hardware stores and home-improvement centers.
- Identify and be aware of potential cross-connections to your water line.
- Buy appliances and equipment with backflow preventers.
- Buy and install backflow prevention devices or assemblies for all high and moderate hazard connections.

If you are the owner or manager of a property that is being used as a commercial, industrial, or institutional facility you must have your property's plumbing system surveyed for cross-connection by your water purveyor. If your property has NOT been surveyed for cross-connection, contact your water department to schedule a cross-connection survey.

ADDITIONAL INFORMATION

Water Conservation Tips

Water, as a renewable, vital and valuable resource is becoming more and more important to all of us. The Kenwood Water District encourages all its customers to use water conservation measures in everyday living throughout the year; some practical measures are as follows:

Water Conservation in Your Home

- Fixing leaking faucets, pipes, toilets, etc.
- Wash only full loads of laundry.
- Use the dishwasher only when full.
- Don't use the toilet for trash disposal.
- Take shorter showers.
- When washing hands, brushing teeth or shaving, use only as much water as you need.
- Install water-saving devices in faucets, toilets and appliances

Water Conservation Outside

- Minimize the size of your lawn as lawn watering may consume more than 30% of summer residential water use.
- Use mulch around plants and shrubs and choose plants that don't need much water.
- Use water from a bucket to wash your car and save the hose for rinsing.
- Use a broom instead of water from a hose to clean your driveway and sidewalk.

Mandatory Water Restrictions

Dracut's outside watering restrictions allow odd numbered houses to use outside water on Wednesdays, Fridays and Sundays; even numbered houses on Tuesdays, Thursdays, and Saturdays; no outside watering on Mondays (handheld hoses only, with no automated devices). This restriction is in effect every year, from May 1 through October 31. In the event that time restrictions are required, customers will be notified in the local news media along with community signs.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER
Monitoring Requirements Not Met for Kenwood Water District

Our water system violated drinking water standards over the past year. Even though these were not emergencies, as our customers, you have a right to know what happened and what we did to correct these situations.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During the quarter three July 1, 2023 – September 30, 2023 monitoring period, we did not complete all monitoring or testing for Lead & Copper and therefore cannot be sure of the quality of our drinking water during that time.

What should I do?

There is nothing you need to do at this time.

The table below lists the contaminants we did not properly test/report for during the last year, how often we are supposed to sample for these contaminants, and how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date on which follow-up samples were taken.

Contaminant	Required sampling frequency	Number of samples taken	When all samples should have been taken	When samples were taken
Lead & Copper	Every 3 years	3	6/1/2023 – 9/30/2023	12/27/2023

What happened? What is being done?

During the monitoring period from July 1, 2023 – September 30, 2023, we did not collect the required water sample to be tested for Lead & Copper. Lead & Copper should be tested every three years; in quarter three, from July 1, 2023 – September 30, 2023, additional water samples were collected and tested for lead & copper to make up for the missed quarter three samples. Consumer Notices were posted at each sample location. Details of this violation will be included in the annual Consumer Confidence Report.

For more information, please contact Marguerite Hoover at (978) 957-0371 or at mhoover@dracutma.gov.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by:

Kenwood Water District

PWS ID#:

3079001

Date distributed:

January 12, 2023

Lowell 2023 Water Quality Data Table

Contaminant Detected	Unit	MCL	MCLG	Level Detected	Range of Detection	Major Sources	Violation
Regulated Contaminants							
Nitrate	ppm	10	10	0.240	0.05	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion from natural deposits.	NO
Fluoride *(see below)				0.69	0.63 to 0.69	Water additive which promotes strong teeth.	NO
* State (MCL)	ppm	2	none				
* EPA (MCL)	ppm	4	none				
Sodium	mg/l	none	none	38.9	38.9	Erosion of natural deposits; road salt and water treatment chemicals.	NO
Chlorite	ppm	1.0	0.8	0.39	0.23 to 0.39	By-product of drinking water disinfection.	NO
Turbidity (see note)	NTU	1.0	TT=100 %	0.214	0.026 to 0.214	Soil runoff.	NO
TT = lowest percentage of monthly samples < 0.3 NTU							
Note: <u>Turbidity</u> is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.							
Disinfectant residual	ppm	(MRDL) 4	(MRDLG) 4	1.17	0.17 to 1.17	By-product of drinking water disinfection.	NO
Perchlorate	ppb	2.0	none	ND	0.16ug	Rocket propellants, fireworks, munitions flares, blasting agents. Aged water treatment disinfection chemicals.	NO
PFAS6	ppt	20	none	11.8	ND to 11.8	Discharges and emissions from industrial and manufacturing sources associated with the production or use of these PFAS, including production of moisture and oil resistant coatings on fabrics and other materials. Additional sources include the use and disposal of products containing these PFAS, such as fire-fighting foams.	NO
Health effects: Some people who drink water containing these PFAS in excess of the MCL may experience certain adverse effects. These could include effects on the liver, blood, immune system, thyroid, and fetal development. These PFAS may also elevate the risk of certain cancers.							
*(NON) - For Lead and Copper Monitoring Period 6/1/2023 to 9/30/2023 our PWS failed to notify our customers of their lead and copper test results within the required 30-day notification period of the PWS receiving their test sample results which resulted in a Regulatory Citation 310 CMR 22.06B(6)							
Volatile Organic Contaminants							
(TTHM) [Total Trihalomethanes]	ppb (Highest Running Annual Average)	80	0	(53)	14 to 53	By-product of drinking water chlorination.	NO
Disinfection By-Product Contaminants							
(HAA) [Halo-acetic Acids]	ppb (Highest Running Annual Average)	60	0	(18)	9.1 to 18	By-product of drinking water chlorination.	NO
Unregulated Contaminants							
MTBE	ppb	none	none	N/D	N/D < 0.5	Gasoline Additive.	NO
Chloroform	ppb	none	none	23.8	13.7 to 23.8	By-product of drinking water chlorination.	NO
Bromodichloromethane	ppb	none	none	5.8	0.09 to 5.8	By-product of drinking water chlorination.	NO
Sulfate	ppm	none	none	5.80	1.8 to 5.8	Mineral and nutrient.	NO
Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining their occurrence in drinking water and whether future regulation is warranted.							

Lowell 2023 Water Quality Data Table cont'd

Contaminant Detected	Unit	MCL	MCLG	Level Detected	Range of Detection	Major Sources	Violation
Radionuclides next round of testing 2023							
Gross Alpha	pCi/l	15	0	- 0.700 (+-0.6)	N/A	Erosion of natural deposits	NO
Radium 228	pCi/l	5	0	0.44 (+-0.57)	N/A	Erosion of natural deposits	NO
Contaminant	Unit	AL	MCLG	90 th % Value	# of Samples Above AL	Major Sources	Violation
Lead	ppb	15	0	.006	1 of 50	Corrosion of household plumbing systems. Erosion of natural deposits.	NO
Copper	ppm	1.3	1.30	.040	0 of 50	Corrosion of household plumbing systems. Erosion of natural deposits; Leaching from wood preservatives	NO
Finished water pH 7.7 to 8.1							

2023 Water Quality Data from the Methuen Water Department and Distribution System

Parameter (UNIT S)	Year Sampled	MCLG	MCL	Amount Detected	Range Low-High	Violation (Y/N)	Typical Source
REGULATED SUBSTANCES							
Barium (ppm)	2023	2	2	0.012	0.012	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Beryllium (ppb)	2022	4	4	1.3	1.3	N	Discharge from electrical, aerospace, and defense industries; erosion of natural deposits
Chlorine (ppm)	2023	4	4	0.81	1.0-2.5	N	Water additive used to control microbes
Chlorite (ppm)	2023	1	0.8	0.230	ND - 0.230	N	By-product of drinking water disinfection
Haloacetic acids [HAA] (ppb)	2023	N/A	60	22	5.7-20	N	Byproduct of drinking water disinfection
Nitrate (ppm)	2023	10	10	0.34	0.25-0.34	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Perchlorate	2023	N/A	2	0.25	0.25	N	Inorganic chemicals used as oxidizers in solid propellants for rockets, missiles, fireworks, and explosives
PFAS6 (ppt)	2023	0	20	2.51	2.00-2.98	N	Discharges and emissions from industrial and manufacturing sources associated with the production or use of these PFAS, including production of moisture and oil resistant coatings on fabrics and other materials. Additional sources include the use and disposal of products containing these PFAS, such as fire-fighting foams.
Total Coliform	2023	0	>5%	0	—	N	Naturally present in the environment
Total Organic Carbon (% removal)	2023	N/A	TT=35-45% removal	1.94	1.5-2.7	N	Naturally present in the environment
Total Trihalomethanes [TTHMs] (ppb)	2023	N/A	80	56	21-83	N	Byproduct of drinking water disinfection

2023 Water Quality Data from the Methuen Water Department and Distribution System Cont'd

Turbidity	TT	Lowest Monthly % of Samples		Highest Daily Value		Violation (Y/N)	Typical Source
Daily Compliance (NTU)	5	—		0.268		N	Soil runoff
Monthly Compliance	At least 95%	100%		—		N	
Parameter (UNITS)	Year	AL	MCLG	Amount Detected (90th.% tile)	Sites Above AL/ Total Sites	Violation	Typical Source
Copper (ppm)	2023	1.3	1.3	0.066	0	N	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppm)	2023	0.015	0	0	0	N	Corrosion of household plumbing systems; Erosion of natural deposits

UNREGULATED or SECONDARY CONTAMINANTS (MCL has not yet been established)

Parameter (UNITS)	Year	Result or range	SMCL	Typical Source
Aluminum (ppb)	2022	95	200	Erosion of natural deposits; Residual from some surface water treatment processes
Perfluorobutanesulfonic Acid-PFBS (ppt)	2023	1.00-2.28	—	Manmade chemical; used in products to make them stain, grease, heat and water resistant
Perfluorohexanoic Acid-PFHXA (ppt)	2023	1.62-2.79	—	Manmade chemical; used in products to make them stain, grease, heat and water resistant
pH	2023	6.9-8.0	6.5—8.5	N/A
Sodium (ppm)	2023	42	20	Naturally present in the environment and road salt
Sulfate (ppm)	2022	18	250	Runoff/leaching from natural deposits
Total Alkalinity	2023	7.7-23.3	—	Alkalinity is a measure of water's ability to neutralize acids or resist changes that cause acidity, maintaining a stable pH
Total Dissolved Solids (ppm)	2022	68	500	Erosion from natural deposits
Zinc (ppm)	2022	0.104	5	Runoff/leaching from natural deposits; Industrial Waste

Other Organic Contaminants - when detected at treatment plant as VOC residuals, not TTHM compliance

Parameter (UNITS)	Year	ORSG	Highest Result	Range of Detection	Possible Source
Bromodichloromethane (ppb)	2023	§	7.0	1.6 – 7.0	By-product of drinking water disinfection
Chlorodibromomethane (ppb)	2023	§	1.6	ND – 1.6	By-product of drinking water disinfection
Chloroform (ppb)	2023	70	10.8	4.3 – 10.8	By-product of drinking water disinfection
Chloromethane (ppb)	2023	2.69 - 269	10.2	ND – 10.2	By-product of drinking water disinfection