



2023 Water Quality Report

MANCHESTER WATER DEPARTMENT

The Manchester Water Department is pleased to provide our customers with this annual report on the drinking water supplied to the residents of Manchester and our customers in portions of Glastonbury, Vernon and South Windsor. The information contained in this brochure is compiled from data collected during 2023 (except where noted) and explains where your water comes from, what tests were performed to ensure the safety of your water and where you can get more information about your water supply. We hope you will find this publication both interesting and helpful.

We want to keep you informed about the quality of your drinking water.



Attention: This report contains important information about your drinking water. Please have someone translate for you or speak to someone that understands it well.

Spanish:

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

Bengali:

লক্ষ্য করুন: এই প্রতিবেদনে আপনার পানি পান করা সম্পর্কে গুরুত্বপূর্ণ তথ্য রয়েছে। দয়া করে কাউকে দিয়ে অনুবাদ করান অথবা এমন কাউকে বলুন যিনি এটা ভালো বুঝতে পারেন।

Hindi:

ध्यान दें: इस रिपोर्ट में आपके पीने के पानी के बारे में महत्वपूर्ण जानकारी है। कृपया किसी व्यक्ति से अनुवाद करवाएं या किसी ऐसे व्यक्ति से बात करें जो इसे अच्छी तरह समझता हो।

Punjabi:

ਧਿਆਨ ਦਿਓ: ਇਸ ਰਿਪੋਰਟ ਵਿੱਚ ਤੁਹਾਡੇ ਪੀਣ ਵਾਲੇ ਪਾਣੀ ਬਾਰੇ ਮਹੱਤਵਪੂਰਨ ਜਾਣਕਾਰੀ ਹੈ। ਕਿਰਪਾ ਕਰਕੇ ਕਿਸੇ ਵਿਅਕਤੀ ਤੋਂ ਅਨੁਵਾਦ ਕਰਵਾਓ ਜਾਂ ਕਿਸੇ ਅਜਿਹੇ ਵਿਅਕਤੀ ਨਾਲ ਗੱਲ ਕਰੋ ਜੋ ਇਸਨੂੰ ਚੰਗੀ ਤਰ੍ਹਾਂ ਸਮਝਦਾ ਹੋਵੇ।

French:

Ce rapport contient des informations importantes à propos de votre eau potable. De mander à quelqu'un de traduire ces informations pour vous ou discuter avec une personne qui comprend ces informations.

If you have questions about this report or your water supply, contact us directly at **(860) 647-3217** to reach the Laboratory Director, Brenda Williams. For general questions please call **(860) 647-6050**. If you wish to participate in decisions that may affect the quality of the water, the Board of Directors meets at Lincoln Center on the first Tuesday of each month. Meetings are currently being conducted in a hybrid fashion. For dates and times, and for information on virtual attendance please contact the Mayor's office at **(860) 647-3123** or go to our webpage at **manchesterct.gov/boardofdirectors**

125 Spring Street, PO Box 191
Manchester CT 06045-0191

www.manchesterct.gov/water-sewer

Sources of Drinking Water

Manchester's water supply includes both surface water from reservoirs and groundwater from wells. There are seven surface water reservoirs and nine active wells. Globe Hollow, Porter, Lydall #1 and #2 and Howard reservoirs are located in Manchester; Risley reservoir is located in Vernon and Buckingham reservoir is located in Glastonbury. The reservoirs supply the majority of water to our customers and are augmented with groundwater from five wells, which are located throughout Manchester on Parker Street, Progress Drive, Charter Oak Street and Fern Street. An additional area of Manchester is served by the Love Lane and New State Road wells. (To see where your water comes from see the map on Page 4).

The water from the reservoirs flows into the Globe Hollow water treatment plant on Spring Street, where the water is processed before it is sent into the water distribution system. The treatment process is comprised of flocculation, sedimentation, and filtration to remove impurities and disinfection to kill microbes that can cause illness. Lime and zinc orthophosphate are added to prevent corrosion of plumbing. The CT Department of Health also requires that fluoride be added to help prevent tooth decay. Treatment of the groundwater supplies consists of disinfection, fluoridation and corrosion control. The Parker Street and New State Road Wells are also treated to remove low levels of volatile organic compounds.

Source Water Assessment Program

A source assessment of the various water supplies used by the Manchester Water Department was completed by the Connecticut Department of Public Health, Drinking Water Section. The assessment reports are intended to provide an understanding of the potential risk of contamination based upon specific risk factors for surface and groundwater sources. Manchester's overall susceptibility to potential sources of contamination was considered to be low for its surface water supplies because more than fifty percent of the watershed is owned by the Town and is preserved as open space.

The overall susceptibility to potential sources of contamination for the groundwater supplies was considered to be high because most land around the supplies is not owned by the Town. To control this risk the Town has adopted the regulations described in the Aquifer Protection Program which are designed to protect the groundwater supplies. These regulations protect critical aquifer zones from pollution by managing land use. Protection requires coordinated responsibilities shared by the state, municipality and water companies to ensure a safe and plentiful supply of public drinking water for present and future generations. These regulations can be viewed on the Town's website at manct.us/AQUIFER.

The EPA wants you to know that...

Sources of drinking water (both tap and bottled) include rivers, lakes, ponds, reservoirs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in untreated source water include: *Biological 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, farming or industry; *Pesticides and herbicides*, which may come from a variety of sources such as agriculture or residential uses; *Organic chemicals*, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production and can come from gas stations, urban storm-water runoff and septic systems; *Radioactive contaminants*, which can be naturally occurring or the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants that are allowed in water provided by public water systems. The Food and Drug Agency establishes limits of contaminants in bottled water. 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 from the EPA's Safe Drinking Water Hotline at 1-800-426-4791 or website at <http://water.epa.gov/drink/hotline/index.cfm>.

Water Quality Monitoring Program

Manchester’s water is routinely monitored for bacteria, inorganic chemicals, organic chemicals and pesticides and herbicides. The following tables contain important information about your water quality and include all contaminants that were found in the water. The results of these tests are reported to the Connecticut Department of Public Health (CTDPH). In 2023, the Manchester Water Department processed approximately 4,850 drinking water samples and over 27,000 drinking water analyses.

SPECIAL NOTICES: Samples taken at the New State Road Wells were above the June 2022 action level set by the CT Department of Public Health for PFOS, 1 of the 29 PFAS compounds sampled. The results for all PFAS compounds detected are provided within this report under the heading PFAS monitoring on page 8.

Potential Sources of Contaminants	
Contaminant	How it gets in the water
Barium	Erosion of natural deposits
Bromodichloromethane	Disinfection by-product
Chloride	Natural deposits, runoff from road salting
Chlorodibromomethane	Disinfection by-product
Fluoride	Water additive which reduces tooth decay and promotes strong teeth
Nitrate as N	Erosion of natural deposits; runoff from fertilizer use or septic systems
PFAS (per- and polyfluoroalkyl substances)	Discharge from AFF fire fighting foam, manufacturing, and the breakdown of consumer products containing PFAS.
Sodium	Runoff from road salting, natural deposits
Trichloroethylene	Discharge from metal degreasing sites
Total Organic Carbon	Naturally present in the environment
Turbidity	Soil runoff

DEFINITIONS USED IN THIS REPORT:

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

HAL = Health Advisory Level—The concentration of a contaminant at which health effects are not anticipated to occur over specific durations of time.

MCL = Maximum Contaminant Level - The highest level of a contaminant that is allowed in drinking water. MCL’s are set as close to the MCLG 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.

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 contaminants.

N/A = Not applicable for the sample site area indicated

ND = Not detected

NL = Notification Level - The level of a contaminant that if exceeded requires public notification by a public water system to its customers.

NTU = Nephelometric turbidity units, used to measure the clarity of water and evaluate the treatment process.

pCi/L = Picocuries per liter, a measure of radioactivity

ppb = Parts per billion (for comparison, 1 cent in \$10,000,000)

ppm = Parts per million (for comparison, 1 cent in \$10,000)

ppt = Parts per trillion (for comparison 1 cent in 10 billion dollars)

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

The Water Distribution System

Find your location on the map below to find your water source. The columns in several tables correspond to areas on the map and will help you better understand your water characteristics.

How does the water get delivered?

Drinking water flows to your home via a two hundred and sixty mile network of water mains, five booster pumping stations and ten distribution system storage tanks.

The source of water is dependent upon your location in the distribution system *and* the time of year. Many of our customers experience a seasonal change in the water they receive due to the way we operate our water supply.

The water department uses both surface water treated at the Globe Hollow Water Treatment Plant and groundwater throughout the year. In the summer months, there is increased demand due to lawn watering and other outdoor uses. The water supply contains proportionately more groundwater in the summer, particularly during drought conditions, and will have a slightly higher mineral content.

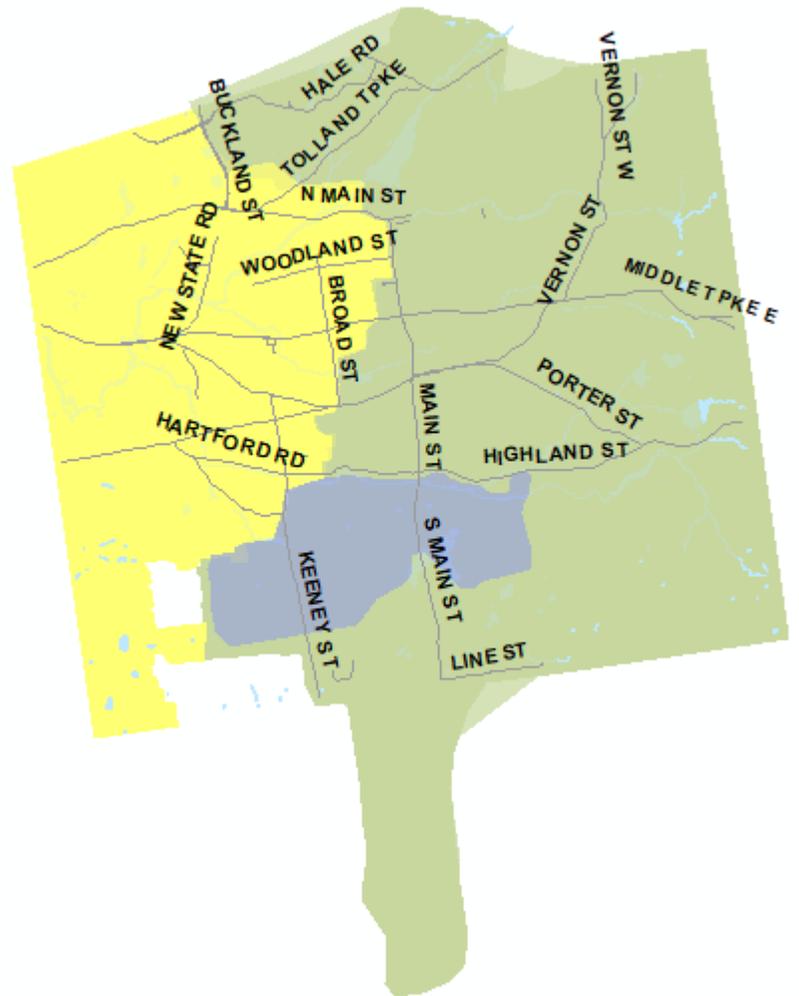
Some residents receive only groundwater (yellow on the map above), and some residents receive nearly all surface water (bluish-purple on the map).

The map represents an estimate of the blending conditions and should be considered an approximation of actual conditions.

Use the Map and the colors in the Map Legend to follow along in this report.

If you are not sure of your zone, we can look it up; call 860-647-6050 and we're happy to help!

Map of the Water Distribution System



- Globe Hollow Water Treatment Plant
- Blend of Globe Hollow Water Treatment Plant and Assorted Town Wells
- Blend of New State Road Wells and Love Lane Wells

How Much Water was used in 2023:

The Water Department produced a total of 1.80 billion gallons of water in 2023, or approximately 5 million gallons per day.

On June 13th, 2023 the department supplied 6.76 million gallons of water which was the highest single production day of the year. Overall, fifty one percent of the total water produced was supplied from reservoirs and the remaining forty nine percent was supplied by groundwater sources.

Regulated Contaminants -

Average Levels and Range (where applicable) in 2023.

The following were present at levels below State and Federal allowable limits:

Contaminant	MCLG	MCL	Units	Globe Hollow Water Treatment Plant	Blend of Globe Hollow, Parker St. Progress Dr and Charter Oak Wells	New State Road and Love Lane Wells	Meets EPA Drinking Water Standard?
Barium	2	2	ppm	0.03 N/A	0.08 0.03 - 0.33	0.31 0.26—0.32	YES
Chloride	250	250	ppm	31 25 - 50	47 25 - 104	217 156 - 238	YES
Fluoride	4	4	ppm	0.7 0.52 - 0.82	0.7 0.31 - 1.25	0.7 0.10 - 1.16	YES
Nitrate as N	10	10	ppm	0.16 ND - 0.38	0.73 ND - 2.8	2.65 2.3 - 4.1	YES
Sodium	None	NL=28	ppm	16 N/A	24 16 - 47	89 84 - 91	YES
Trichloroethylene	0	5	ppb	ND	ND ND - 0.59 *	ND	YES
Total Organic Carbon	None	TT=Ratio ≥ 1.0	-	1.6 0.95 — 1.9	N/A	N/A	YES
Turbidity Average level for area	None	TT=5	NTU	0.23 0.10 - 0.40	0.18 0.06 - 0.80	0.15 0.07 - 1.18	YES
Filter Plant: Highest single value % <0.3 NTU	None	TT= 95% of samples must be <0.3 NTU	NTU	0.29 100 % < 0.3	N/A	N/A	YES

Averages are weighted by estimated flow contribution.

* Detected in Progress Drive only

Non-detected contaminants are not included in this report.

For a full list of contaminants tested please email waterandsewer@manchesterct.gov.

Information about Turbidity:

Turbidity has no health effects; it is an indication of how much air or how many light-scattering particles are in a sample. At high enough levels, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. For results of bacteriological testing, see page 7.

Regulated Contaminants: System-wide testing - Radiological Analyses

Contaminant	MCLG	MCL	Range Detected	Major Sources in Drinking Water	Meets EPA Drinking Water Standard?
Alpha Emitters *	0	15 pCi/L	ND— 1.1	Erosion of natural deposits	YES
Comb. Radium (226/228) *	0	5 pCi/L	ND—1.9	Erosion of natural deposits	YES
Uranium *	0	30 ug/L	ND - 1.0	Erosion of natural deposits	YES
Gross Beta Particles **	0	50 pCi/L***	ND - 1.8	Decay of natural and man-made deposits	YES
Strontium-90 **	0	8 pCi/L	ND —0.2	Erosion of natural deposits	YES
Tritium **	0	20,000 pCi/L	ND -350	Erosion of natural deposits	YES

* Love Lane, Progress Drive, and Parker Street Wells tested in 2023; New State Road and Charter Oak Wells and Globe Hollow Treatment Plant are on a nine-year cycle and were tested in 2020.

** Testing performed at Love Lane, Progress Drive, and Parker Street Wells only.

*** The MCL is 4 mrem/year; results were below 50pCi/L, which is below the threshold for compliance calculations.

Information about Radon:

Radon is a naturally occurring radioactive gas which may be present in rock, soil, groundwater and air. Radon normally escapes from the ground in small concentrations into the atmosphere, where it dissipates harmlessly. Elevated concentrations of radon, however, can exist if this gas is trapped in our homes or businesses. Radon can enter the home through cracks and openings in foundations. Some radon can also enter homes through drinking water supplies during showering, cooking and other water activities.

The EPA has set an Action Level of 4 picocuries per liter (pCi/L, a measure of radioactivity) for radon in air. Studies have shown that approximately 10,000 pCi/L of radon in water will normally produce a concentration of about 1 pCi/L in air. The radon entering the home through tap water is a small source of all the radon in indoor air. The radon levels in Manchester groundwater have been found to be far below 10,000 pCi/L. If you are concerned about radon in your home, *test the air*.

For more information contact CTDPH at (860) 509-7367 or the National Radon Hotline at 1-800-767-7236.

Regulated Contaminants: System-wide testing					
Contaminant	MCLG	MCL	Level Detected	Major Sources in Drinking Water	Meets EPA Drinking Water Standard?
Chlorine	4 ppm (MRDLG)	4 ppm (MRDL)	0.8 Range 0.06 - 1.4	Water additive used to control microbes	YES
Total Coliform Bacteria	0	Coliform bacteria not present in more than 5 % of monthly samples	3 % (Highest monthly %) 0.3 % (% of 2023 samples)	Naturally present in the environment	YES
E. Coli	0	0	0	Human or animal fecal waste.	YES
Total Trihalomethanes	0 ppb	80 ppb as LRAA	61 ppb highest LRAA* Range 8 - 61	Byproduct of drinking water disinfection	YES
Haloacetic Acids	0 ppb	60 ppb	19 ppb highest LRAA* Range 4 - 19	Byproduct of drinking water disinfection	YES
Lead—90th % Calculation	0 ppb	AL = 15 ppb	3 ppb (2 samples out of 44 samples above AL)	Corrosion of household plumbing systems, erosion of natural deposits	YES
Copper-90th % Calculation	1.3 ppm	AL = 1.3 ppm	0.18 ppm (0 samples out of 44 samples above AL)	Corrosion of household plumbing systems, erosion of natural deposits	YES

* LRAA (Locational Running Annual Averages) are calculated using 2022 and 2023 data.

Special Health Considerations:

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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).

For more information visit the EPA website: <http://water.epa.gov/drink/hotline/index.cfm>

PFAS Monitoring

What's New? In May of 2023, the State of CT issued drinking water action levels (ALs) for PFBS, PFBA, PFHxA, HFPO DA (Gen X), 9-Cl-PF3ONS and 11Cl-PF3OUdS in addition to the ALs for PFOA, PFOS, PFNA, and PFHxS established in 2022. The EPA's established HALs—lifetime health advisory levels for PFOA and PFOS in 2022. Prior to these recent changes, the action levels were previously set at 70 parts per trillion combined for specific PFAS. It is important to note that while the levels of PFAS compounds detected have not changed significantly since initial sampling was done in 2019, the recommendations set forth by the CTDPH and the EPA have changed considerably. Watch our website for updates on regulations as they evolve and to see quarterly results: manct.us/LAB.

What's Next? A new study has been commissioned to review treatment and other mitigation alternatives and will enable a thorough review of opportunities for PFAS treatment throughout our system. This study will expand upon findings from a preliminary study that has already been completed and will enable compliance with the new MCLs just released by the EPA (4/10/24). The new MCLs will be effective in 2029.

Information about PFAS: Per- and polyfluoroalkyl substances are a group of well over 4000 manufactured chemicals collectively referred to as PFAS. The use of PFAS has been widespread since the 1950s. They have been used in the manufacturing of non-stick surfaces, waterproof material, stain-resistant materials, food packaging, and firefighting foam. Drinking water consumption is only one route of exposure to these compounds. PFAS is persistent in the environment, hence the moniker of "forever chemicals". They are so prevalent, they are even found in rainwater.

Health Effects: Exposure to PFAS has been shown to have health effects, especially for sensitive populations. These effects include immunological response effects and other developmental effects and are of particular concern for infants, and anyone pregnant. For adults, they present an elevated risk of liver and thyroid problems as well as hormone disruption and may increase the risk of kidney and testicular cancer.

PFAS Sampling: Of 29 PFAS compounds tested in 2023, 10 were detected, as shown in the table below.

PFAS Compounds Parts per Trillion (Treated Water)	Globe Hollow Water Treatment Plant	Blend of Globe Hollow Plant and the Progress Drive, Parker Street and Charter Oak Wells	New State Road and Love Lane Wells	EPA HALs *	CTDPH ALs *
PFOS (ppt)	1.7	2.3 (max 6.1)	14.7 (max 18) **	0.02 <i>interim</i>	10
PFOA (ppt)	1.9	2.4 (max 5.8)	9.6 (max 12)	0.004 <i>interim</i>	16
PFNA (ppt)	ND	ND	0.67 (max 0.85)	N/A	12
PFHxS (ppt)	ND	0.54 (max 2.1)	3.0 (max 3.3)	N/A	49
PFHpA (ppt)	ND	0.33 (max 1.7)	3.0 (max 3.4)	N/A	N/A
PFBS (ppt)	0.6	0.98 (max 3.0)	12.5 (max 15.6)	2000	760
PFHxA (ppt)	0.7	0.79 (max 3.1)	4.5 (max 5.0)	N/A	240
PFDA (ppt)	ND	ND	1.3 (max 1.5)	N/A	N/A
PFPeA (ppt)***	1.2	1.1 (max 3.4)	4.6 (max 4.8)	N/A	N/A
PFPeS (ppt) ***	ND	ND	0.4 (max 0.5)	N/A	N/A

As elsewhere, concentrations reflect the blended average for the supply zones found on page 4, with area maximum noted for the blended water zones.

* Levels established June 2022– May 2023. (Interim levels are below current detection limits).

** Exceeds the CTDPH Action Level established in June of 2022

*** Sampled for the first time in 2023.

Unregulated Contaminants

Unregulated contaminants are those that don't yet have a drinking water standard set by EPA. The purpose of monitoring is to help the EPA make a determination whether they should have a standard, which is based on prevalence of the contaminant, the ability to remove the contaminant through existing treatment technology, and the associated health effects of the contaminant. Being unregulated, these contaminants do not have an MCL.

While some of these contaminants were studied nationwide as part of UCMR4 conducted from 2018 –2020, the data below is reflective of routine monitoring completed in 2023. Ranges are provided where applicable and averages are weighted flow averages. The results of detected contaminants are shown in the tables below.

Contaminant	Units	Globe Hollow Water Treatment Plant	Blend of Globe Hollow Plant and the Progress Dr, Parker St. and Charter Oak Wells	New State Road and Love Lane Wells	Major Sources in Drinking Water
Sulfate	ppm	21 Range 14-30	19 Range 10 - 30	26 Range 16 - 30	Natural deposits
Bromodichloromethane *	ppb	4.35	ND—4.4	ND	Byproduct of drinking water disinfection
Chlorodibromomethane	ppb	0.68	0.51 Range ND — 0.73	0.60 Range ND — 0.84	Byproduct of drinking water disinfection
Chloroform *	ppb	14	Range ND — 14	ND	Byproduct of drinking water disinfection
Bromoform	ppb	ND	Range ND — 0.54 Parker Street Only	0.73 Range 0.4—1.1	Byproduct of drinking water disinfection
Dieldrin **	ppb	N/A	Range ND — 0.036 Parker Street Only	Range ND - 0.039 Love Lane Only	Run-off from pesticide use
Manganese ***	ppb	15.9 Range 1– 35	15.9 *** Range 1– 35 ***	30.7 Range 3 — 230	Natural deposits
Calcium ****	ppm	N/A	15 Range 12 — 20	79 Range 57 — 90	Natural deposits

* Detected only at Globe Hollow Treatment Plant.

** Measured at Parker Street and Love Lane Only

*** Measured at Globe Hollow Treatment Plant and New State Road Only.

**** Calcium was measured at select distribution sites with groundwater contribution.

Information about hardness: Hardness is due to dissolved minerals, primarily calcium and magnesium, naturally occurring in groundwater. The level of hardness is not associated with health risks.

Manchester's water ranges from moderately hard (Globe Hollow Treatment plant blended with groundwater) to very hard (New State Road Wells blended w/ Love Lane Wells). Areas served by the New State Road and Love Lane wells are in the 250 mg/L range for hardness (14.6 grains per gallon).

Unregulated Contaminants — Continued

Contaminant	MCL	Units	Average Levels Detected, Range	Major Sources in Drinking Water
Bromochloroacetic Acid*	Not Regulated	ppb	1.85 1.1 — 2.6	Byproduct of drinking water disinfection
Bromodichloroacetic Acid*	Not Regulated	ppb	1.70	Byproduct of drinking water disinfection
Chlorodibromoacetic Acid*	Not Regulated	ppb	0.54	Byproduct of drinking water disinfection
* Test results obtained 2018-2020 as a part of UCMR4, as part of an expanded group of haloacetic acids. Currently regulated haloacetic acids are reported under Regulated Disinfection Byproducts.				

Other Water Quality Information

DISCOLORED WATER:

Sometimes, the water coming out of the tap may appear discolored for a period of time. This is usually due to disturbances in the system, such as water department flushing, fire flow testing, or water main breaks. Flush cold water through your tub for 5-10 minutes or until the water clears.

Information on *Cryptosporidium*:

Cryptosporidium is a microscopic organism commonly found in the environment. *Cryptosporidium* can contaminate surface waters, including drinking water sources, via runoff from the watershed. Ingesting only a small amount of *Cryptosporidium* in contaminated water can cause Cryptosporidiosis, a gastrointestinal illness that typically lasts 10 to 14 days. The ozone system, installed as part of the water treatment plant upgrade in 2011, provides an additional barrier of protection against *Cryptosporidium*. The Manchester Water Department has completed a two year monitoring program for *Cryptosporidium*. Samples of untreated source water were collected monthly from October 2015 to September 2017 to comply with EPA's Long Term 2 Enhanced Surface Water Treatment Rule (LT2). *Cryptosporidium* concentration was less than 0.075 oocysts/Liter indicating compliance with the treatment requirements of the LT2 rule.

Conservation Information

Water Conservation Tips (Courtesy of the Environmental Protection Agency)

- * Repair all leaks. A leaky toilet can waste 200 gallons of water per day. To detect leaks in the toilet, add food coloring to the tank. If the colored water appears in the bowl, the toilet is leaking.
- * When using a hose, control the flow with an automatic shut-off nozzle.
- * Water only when necessary. The most effective time is early in the morning; never on windy, rainy or very hot days. Use water efficient, slow soaking irrigation systems. Direct the water onto your plants, not the driveway or sidewalk.
- * Consider replacing your five-gallon per flush toilet with an efficient 1.6-gallon unit. This will permanently cut your water consumption by 25%. Purchasing a high efficiency washing machine will save over 50% in water and energy use.

GET THE LEAD OUT!

Did you know that there is an initiative to replace all the lead pipes in the United States?

Older homes (especially homes built between 1880 and 1945) may be serviced by lead pipes.

Lead services were already being phased out of use in the 1930s, but there were limited instances of its use into the 1940s when materials were scarce. These service pipes connect to the water main in the street. The portion that is between the curb stop and building is owned by the property owner and may be a different material than the town-owned portion. Galvanized iron pipe leading into the home can also be a potential source of residual lead if they were ever connected to a lead pipe.

For more information, visit our website: manct.us/LEAD.

Information on Lead from the EPA: 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 Manchester Water Department is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components in your home. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. 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 at 800-426-4791 and at <http://www.epa.gov/safewater/lead>.

What you can do to Reduce Lead Exposure: When water has been sitting for several hours, minimize the potential for lead exposure by flushing the tap for 30 seconds to 2 minutes before using water for drinking or cooking.

Other sources of lead: Plumbing materials manufactured before 2014 may contain lead, even if they were marketed as being "Lead-free". Flushing the water will help reduce contact with internal plumbing as well as any exterior pipes.

Information on Copper in Drinking Water: Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

What the Manchester Water Department is doing to Reduce Lead and Copper Exposure: Phosphate is added to the water to inhibit corrosion from lead and copper. Town-owned lead service pipes and lead connectors are replaced whenever they are found in the system.

Lead testing: Testing is performed at regular intervals throughout the community. See page 7 for the latest results. As testing efforts are expanded in the years to come, you may be contacted to join our regular testing program.

What's Coming: Expect to see a map published on our website during the Fall of 2024 to see where the lead is (and isn't)! Customers with pipes of unknown materials and those with lead and galvanized pipes can also expect to get a letter advising of strategies to reduce lead exposure and will hopefully encourage more folks to self report their material to waterandsewer@manchesterct.gov following the instructions on the last page. We will also keep you informed of programs designed to help lower income residents with pipe replacement. In the event of a water shut-off you may be eligible to receive a water pitcher with filter and we provide free lead testing for customers with lead pipes after certain service disruptions. Check our website for important updates!

Spotlight on Lead—Identify Your Service Line

We are currently conducting a materials inventory of our entire system. In the event that we find or suspect or there may be lead pipes leading into your home we may contact you to participate in our targeted sampling program. This helps us to ensure that our water treatment is working optimally. Infants and children who drink water containing lead could have decreases in IQ and attention span and increases in learning and behavior problems. Lead exposure among women who are pregnant increases prenatal risks. Adults with long-term exposure have increased risks of heart disease, high blood pressure, kidney, or nervous system problems.

Flush your water after returning home and upon awakening.

Flushing the water for several minutes will provide you with fresh water from the water main, and will lessen the risk of any potential lead exposure. This is especially important if the water has not been used for several hours—such as overnight or if you have returned from being away. It is especially important to run the water after any service disruption. Always use cold water for cooking and drinking water as well as for formula preparation. The water department has been phasing out the use of lead pipes and actively replacing them since the early 1930s.

We are working on compiling a database of all of the piping material throughout Manchester, including the customer side, and could use your help. We may be reaching out to determine what materials are servicing your home. We are encouraging any homeowner with a lead or galvanized service pipe going into their home to replace it with a copper pipe. We will test your water before and after the replacement. If the attached Town-owned service is also lead, we will replace that as well.

Please see our website manct.us/LEAD for more information on how to identify your service line material.

1. Locate the pipe coming into your wall leading to the water meter.

Does a magnet stick to it? YES

Your pipe is iron or steel—most likely a galvanized iron - it will look black or dark gray and be dull when scratched lightly.

Does a magnet stick to it ? NO

Is it the same color as a penny if you lightly scratch it? YES— You have a copper service line

Is it blue, black, or white? YES—You have a plastic service line

Is it a dull gray metal? YES

Is it shiny if you lightly scratch it with a key? YES— You have a lead service line

2. Please take a picture and send it to bwilliams@manchesterct.gov.

Thank you for your cooperation!

If we confirm you have a lead service line, we will include your home in our lead sampling program. Even with a lead service pipe coming into your home, there may not be lead detected in the water due to the treatment we provide.

Operations



Manchester Water and Sewer is pleased to offer convenient online payment services on our Customer Portal at www.manchesterct.gov/water-sewer. Our online system provides customers access to view or pay bills using a credit card, debit card or bank account at no charge. Customers can register for an online account to access extended features like email and text alerts and automatic payment processing. If you need assistance with the online payment website, please contact **Customer Service at (860) 647-6050**.