

Annual Drinking Water Quality Report

New London Utilities New London Waterworks PWS ID: 46903989

The New London Utility Commission and Utility Management respectfully submit our Annual Water Quality Report covering the period January 1st, 2018 to December 31st, 2018.

This report is designed to inform you about the quality of the water and services we deliver 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 protect our water resources. We are committed to ensuring the quality of your water.

New London's water system now consists of three separate pressure zones, seven wells, three water towers, two booster stations, and two control valve stations. The water system is operated by a computer driven system called a SCADA. The high level pressure zone is located south of Cook Street from the west end of the city to Division Street, and south of Douglas Street. The primary pressure zone is everything north of Cook and Douglas Streets, and east of Mill Street including all parts of the city north of the Wolf River up to Jeanne St. The third zone is everything north of Jeanne St. A third zone has been established for the new Northeast New London Business Center. The three zones are made up of the following equipment:

High Level Pressure Zone

WELL	LOCATION	AQUIFER TYPE	SOURCE TYPE	DEPTH
Well # 2	Wyman Street	Sand and Gravel	Groundwater	170 FT
Well # 4	Oshkosh Street	Sand and Gravel	Groundwater	165 FT
Floral Hill Water Tower (400,000 gallon)/Control Valve B				

Primary Pressure Zone

WELL	LOCATION	AQUIFER TYPE	SOURCE TYPE	DEPTH
Well #1	Jeanne Street	Sand and Gravel	Groundwater	118 FT
Well #3	Beacon Street	Sand and Gravel	Groundwater	127 FT
Well #5	Douglas Street	Sand and Gravel	Groundwater	152 FT
Well #6	Industrial Park	Sand and Gravel	Groundwater	128 FT
Well #7	Mosquito Hill	Cambrian Sandstone	Groundwater	285 FT
Industrial Park Water Tower (300,000 gallon)/Beckert Booster Pump				

North Pressure Zone

North Booster Pump/Control Valve C/North Industrial Water Tower (500,000 gallon)

New London's three pressure zones are operated independently, and also have the capability of transferring water between zones in either direction. For a summary of the source water assessment please contact, Michael Pinch at (920) 982-8516.

The next section of this report shows the results of our most recent state and federal required water tests.

We are pleased to report that our drinking water is safe, and it meets state and federal requirements. **New London Utilities routinely monitors for contaminants in your drinking water according to Federal and State laws.** This table shows the detections of health related contaminants for the period of January 1st to December 31st, 2018.

Detected Contaminants

Your water was tested for many contaminants last year. We are allowed to monitor for some contaminants less frequently than once a year. The following tables list only those contaminants which were detected in your water. If a contaminant was detected last year, it will appear in the following tables without a sample date. If the contaminant was not monitored last year, but was detected within the last 5 years, it will appear in the tables below along with the sample date.

Disinfection Byproducts

Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2016)	Violation	Typical Source of Contaminant
TTHM (ppb)	D-10	80	0	10.2	10.2	07/21/2015	NO	By-product of drinking water chlorination
HAA5 (ppb)	D-17	60	60	2	2	07/21/2015	NO	By-product of drinking water chlorination

Inorganic Contaminants

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2016)	Violation	Typical Source of Contaminant
ARSENIC (ppb)	10	n/a	8	0 - 8	3/28/2017	NO	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
BARIUM (ppm)	2	2	.058	.018- .058	3/28/2017	NO	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
CHROMIUM (ppb)	100	100	0	0 -0	3/28/2017	NO	Discharge from steel and pulp mills; Erosion of natural deposits.

FLUORIDE (ppm)	4	4	1.0	.1- 1.0	3/28/2017	NO	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NICKEL (ppb)	100		2.3000	0- 2.3000	3/28/2017	NO	Nickel occurs naturally in soils, ground water and surface waters and is often used in electroplating, stainless steel and alloy products.
NITRATE (N03-N) (ppm)	10	10	4.2	0.05 – 4.2		NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
NITRITE (N02-N) (ppm)	1	1	.016	0 - .016	3/28/2017	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
SODIUM (ppm)	n/a	n/a	39.00	3.90-39.00	3/28/2017	NO	n/a
Contaminant (units)	Action Level	MCLG	90th Percentile Level Found	# of Results	Sample Date (if prior to 2016)	Violation	Typical Source of Contaminant
COPPER (ppm)	AL=1.3	1.3	0.1100	0 of 20 results were above the action level.	6/27/2017	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD (ppb)	AL=15	0	7.20	0 of 20 results were above the action level.	6/27/2017	No	Corrosion of household plumbing systems; Erosion of natural deposits

Radioactive Contaminants

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2016)	Violation	Typical Source of Contaminant
GROSS ALPHA, EXCL. R & U (pCi/l)	15	0	4.3	0.0-4.3	3/28/2017	NO	Erosion of natural deposits
RADIUM, (226 + 228) (pCi/l)	5	0	4.3	0.0-4.3	3/28/2017	NO	Erosion of natural deposits
GROSS ALPHA, INCL. R & U (n/a)	n/a	n/a	4.3	0.0-4.3	3/28/2017	NO	Erosion of natural deposits

Volatile Organic Contaminants

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2016)	Violation	Typical Source of Contaminant
TETRACHLOROETHYLENE (ppb)	5	0	1.4	1.4		NO	Leaching from PVC pipes; Discharge from factories and dry cleaners.

Additional Health Information

While your drinking water meets USEPA's standard for **arsenic**, it does contain low levels of arsenic. USEPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. USEPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

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. New London Waterworks 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 www.epa.gov/safewater/lead.

Information on Monitoring for Cryptosporidium and Radon

Our water system did not monitor our water for cryptosporidium or radon during 2017. We are not required by State or Federal drinking water regulations to do so.

Definition of Terms

Term	Definition
AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Level 1 Assessment	A study of the water system to identify potential problems and determine, if possible, why total coliform bacteria have been found in our water system.
Level 2 Assessment	A very detailed study of the water system to identify potential problems and determine, if possible why an E. coli MCL violation has occurred or why total coliform bacteria have been found in our water system, or both, on multiple occasions.
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.
MFL	million fibers per liter
MRDL	Maximum Residual Disinfection 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.
mrem/year	millirems per year (a measure of radiation absorbed by the body)
NTU	Nephelometric Turbidity Units
pCi/l	picocuries per liter (a measure of radioactivity)
ppm	parts per million, or milligrams per liter (mg/l)
ppb	parts per billion, or micrograms per liter (ug/l)
ppt	parts per trillion, or nanograms per liter
ppq	parts per quadrillion, or picograms per liter
TCR	Total Coliform Rule
TT	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which shall provide the same protection for public health.

As you can see from the above charts, New London's water did not exceed any of the Maximum Contaminant Levels established by the EPA. MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials. **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's Safe Drinking Water Hotline at 1-800-426-4791.

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 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 Environmental Protection Agency's safe drinking water hotline (800-426-4791).

The sources of drinking water, both tap water and bottled water, include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants**, such as salts and metals, which can be naturally occurring or result from urban storm water 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 storm water 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 storm water runoff, and septic systems.
- **Radioactive contaminants**, which can be naturally occurring, or be the result of oil and gas production and mining activities.

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In our continuing efforts to maintain a safe and dependable water supply it may be necessary to make improvements in your water system. The costs of these improvements may be reflected in the rate structure. A rate adjustment was done on November 1st, 2016. There are no known future water rate increases scheduled at this time. Well 4 will be getting a new well drilled just outside the present well building to replace the current well located there.

Thank you for allowing us to continue providing your family with clean, quality water this year. We at New London Waterworks work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

If you have any questions about this report or concerning your water utility, please contact Steve Thompson (Utility Manager) or Michael Pinch (Water Supervisor) at 920-982-8516. We want our valued customers to

be informed about their water utility. You may also attend any of our regularly scheduled meetings which are held on the first and third Tuesday of every month at the utility's office at 8 a.m. **Note:** This year New London Utilities will **not** be mailing a copy of this report to each customer. If you would like a copy of this report, please stop down to the office or visit our website at WWW.NEWLONDONUTILITIES.ORG.

The DNR representative for this system is KENNETH CHAMBERS, 920-662-5484.

Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, o hable con alguien que lo entienda. Dlawm ntawv tshaabzu nuav muaj lug tseemceeb heev nyob rua huv kws has txug cov dlej mej haus. Kuas ib tug paab txhais rua kij, los nrug ib tug kws paub lug thaam.