



2016 Annual Water Quality Report



City of New London Utilities

Serving New London and
Waterford Connecticut

The City of New London's annual water quality report shows the source of our water, lists the results of our tests, and contains important information about water and health.

We are pleased to show you how we have surpassed water-quality standards.

If you have concerns about the quality of water please contact the customer service office.

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



Maintenance of 2,000 hydrants



Treatment plant



Pump station



Treatment plant

Water system data

The City of New London's water comes from lakes and reservoirs in a protected watershed that is located in Waterford, Montville, and Salem. The principal reservoir is Lake Konomoc; storing over 1.2 billion gallons of water. The water is treated at Konomoc and delivered through a system of 210 miles of pipes, four pump stations and six water storage tanks with a capacity of fifteen million gallons.

The water system serves 45,000 customers through 14,000 water services. Over 2 billion gallons of water per year is processed using coagulation, flocculation, sedimentation and carbon filtration. Lime is added to the finished water to adjust the ph, sodium hypochlorite to disinfect, fluoride for dental health and phosphate for corrosion control. Water quality lab tests are performed regularly at the plant and by Groton Labs, a state certified facility.

Lead and copper advisory

Corrosion of household plumbing systems and erosion of natural deposits are sources of lead in drinking water. 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.

Sources of copper in drinking water are corrosion of household plumbing systems, erosion of natural deposits, and leaching from wood preservatives. 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.

Source water assessment

The Connecticut Department of Public Health, Drinking Water Division completed a water assessment of Lake Konomoc Reservoir System that can be accessed on the Department of Public Health's website: <http://www.dph.state.ct.us>. The assessment found that this public drinking water source, Lake Konomoc, has a low susceptibility to potential sources of contamination. Additional source water assessment information can be found at the Environmental Protection Agency's website at www.epa.gov.

Source water protection

Source water is untreated water from streams, rivers, lakes or underground aquifers that is used to supply public drinking water. Preventing drinking water contamination at the source makes good public health sense, good economic sense, and good environmental sense. You can be aware of the challenges of keeping drinking water safe and take an active role in protecting drinking water. There are many ways you can get involved in drinking water protection. Dispose properly of household chemicals, help clean up the watershed, or attend public meetings to ensure the community's need for safe drinking water is considered in making decisions about land use. For more information contact the EPA at 1-800-426-4791 or visit the EPA's website at www.epa.gov/safewater/protect.html



Additional health information

To ensure that tap water is safe to drink, EPA sets limits on the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water. Small amounts of some contaminants are commonly found in all drinking water, including bottled water. The presence of contaminants does not necessarily indicate that water poses a health risk.

Some people may be more vulnerable to contaminants in drinking water. Immuno-compromised persons, such as cancer patients undergoing chemotherapy, organ transplant recipients, 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 are available from the Safe Drinking Water Hotline (800) 426-4791.

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 radioactive material and can pick up substances from the presence of animals or human activity.

Contaminants that may be present in source water include:

(A) Microbial contaminants, (viruses and bacteria) which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

(B) Inorganic contaminants, (salts and metals) which can be naturally occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

(C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, storm water runoff, and residential uses.

(D) Organic chemical contaminants, (synthetic and volatile organics) which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems.

(E) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

Water quality

How to read this table

The table shows the results of our water-quality analyses. Every regulated contaminant detected in the water, even in the minutest traces, is listed here. The table contains the name of each substance, the ideal level for public health (MCLG), the highest level allowed by regulation (MCL), the amount detected, the usual sources of such contamination, footnotes explaining our findings, and a key to units of measurement.

Definitions of MCL and MCLG are important.

Maximum Contaminant Level or MCL:

The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLG's as feasible using the best available treatment technology.

Maximum Contaminant Level Goal or 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 or AL:

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

N/A: Not applicable

NTU: Nephelometric Turbidity Unit

Parts per million or ppm: The equivalent of one second in 12 days

Parts per billion or ppb: The equivalent of one second in 32 years.

Water conservation

It is vital that we all work together to maintain it and use it wisely. Here are a few tips you can follow to help conserve:

- Check for leaky toilets (put a drop of food coloring in the tank, let it sit. If the water in the bowl turns color, you have a leak). A leaking faucet or toilet can dribble away thousands of gallons of water a year.
- Consider replacing your 5-gallon per flush toilet with an efficient 1.6 gallon per flush unit. This will permanently cut your water consumption by 25%.
- Run only full loads in dishwashers and washing machines. Rinse all hand-washed dishes at once.
- Turn off the faucet while brushing teeth or shaving.
- Water lawn and plants in the early morning or evening hours to avoid excess evaporation. Don't water on a windy, rainy, or very hot day.
- Water shrubs and gardens using a slow trickle around the roots.
- Apply mulch around plantings.
- Select low-water demanding plants that provide an attractive landscape without high water use.
- Be sure your hose has a shut-off nozzle. Hoses without a nozzle can spout 10 gallons more per minute.
- Be sure sprinklers water only your lawn and not the pavement.

Regulated at the treatment facility

Substance	MCLG	MCL	Highest Level Detected	Major sources in drinking water
Turbidity	N/A	5 NTU	0.28 NTU	Soil runoff
Chloride	N/A	250 ppm	20 ppm	Natural deposits; runoff from roadsalting
Sodium	N/A	* 28 ppm *	11.4 ppm	Natural deposits; runoff from roadsalting
Sulfate	N/A	N/A	6.0 ppm	Naturally present in the environment
TOC	N/A	N/A	1.7 ppm	Naturally present in the environment
Fluoride	4 ppm	4 ppm	1.05 ppm	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
Barium	N/A	2 ppm	0.004 ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Nitrate	N/A	10 ppm	0.01 ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Regulated in the New London distribution system

Substance	MCLG	MCL	Highest Monthly Average	Range	Major sources in drinking water
HAA5	N/A	60 ppb	26 ppb	15.7 - 37.5 ppb	Byproduct of drinking water disinfection
TTHM	N/A	80 ppb	66 ppb	24.9 - 88.7 ppb	Byproduct of drinking water disinfection
Chlorine	4.0 ppm	4.0 ppm	0.7 ppm	0.3 - 1.4 ppm	Water additive used to control microbes

Regulated in the Waterford distribution system

Substance	MCLG	MCL	Highest Monthly Average	Range	Major sources in drinking water
HAA5	N/A	60 ppb	26 ppb	13.8 - 36.5 ppb	Byproduct of drinking water disinfection
TTHM	N/A	80 ppb	59 ppb	18.4 - 78.7 ppb	Byproduct of drinking water disinfection
Chlorine	4.0 ppm	4.0 ppm	1.3 ppm	0.46 - 1.77 ppm	Water additive used to control microbes

Regulated at the tap of New London's customers

Substance	MCLG	MCL	Your Water	Range	Sample Year	Violation	Major sources in drinking water
Lead	0 ppb	AL = 15 ppb	3.5 ppb	not detected over action level	2014	No	Corrosion of household plumbing systems
Copper	1.3 ppm	AL = 1.3 ppm	0.09 ppm	not detected over action level	2014	No	Corrosion of household plumbing systems

Infants and children: Delays in physical or mental development; children could show slight deficits in attention span and learning abilities; **Adults:** Kidney problems; high blood pressure; **Short-term exposure:** Gastrointestinal distress. Long-term exposure: Liver or kidney damage. People with Wilson's Disease should consult their personal doctor if the amount of copper in their water exceeds the action level

Regulated at the tap of Waterford's customers

Substance	MCLG	MCL	Your Water	Range	Sample Year	Violation	Major sources in drinking water
Lead	0 ppb	AL = 15 ppb	2.5 ppb	not detected over action level	2014	No	Corrosion of household plumbing systems
Copper	1.3 ppm	AL = 1.3 ppm	0.09 ppm	not detected over action level	2014	No	Corrosion of household plumbing systems

Infants and children: Delays in physical or mental development; children could show slight deficits in attention span and learning abilities **Adults:** Kidney problems; high blood pressure

*** Although there is no EPA MCL for sodium, the State of Connecticut requires systems which exceed 28 ppm notify their customers, so individuals on sodium restricted diets can inform their physicians.

Monitoring and reporting violations

None

Public Education and Information

Please call the customer service office for more information about the water system, wastewater system or environmental concerns. Additional information is available and public educational opportunities are available.



If you have any questions regarding this report or any other water quality questions please call (860) 447-5222

The data presented in this report is from the most recent testing done in accordance with regulations. Although we ran thousands of tests for more than a hundred contaminants, only the substances listed above were found. They are all within the required MCL.



Mayor Michael Passero

Water & Water Pollution Control Authority

Barry J. Weiner, Chairman

Robert Grills, Vice-Chair

Gregory Dziczek

Scott Loring

Margarita Mogollon

Martin Olsen

John Russell



W&WPCA regular meetings are held at 7:00 pm on the fourth Thursday of each month in the New London Senior Center Library at 120 Broad Street (rear)

Public Utilities
120 Broad Street
New London, CT 06320
(860) 447-5222
Fax: (860) 437-6323

The Water Department Office is located on the second floor of the Richard R. Martin Center, 120 Broad St., New London, CT. Water and sewer bills may be paid during the weekdays from 8:30 a.m. - 4:00 p.m.

Customer Service
(860) 447-5222

Safe Drinking Water Hotline
(800) 426-4791