

monitor the water regularly. If our test results ever violates one of these standards, or if the department ever fails to report water quality data to the state, the Laconia Water Department will alert you promptly and advise you what to do.

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 the water poses a health risk. Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people with cancer undergoing chemotherapy, people who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk of infections. These people should seek advice about drinking water from their health care provider. EPA/CDCP guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 1-800-426-4791.

The Safe Drinking Water Act was passed by the U.S. congress in 1974, and it was updated as recently as 1996. We need your continued help protecting Paugus Bay, our water source.

Carefully follow instructions on pesticides and herbicides you use for your lawn and garden, and properly dispose of household chemicals, paints, and waste oil.

Fertilizers can contaminate surface and groundwater. The phosphorus and nitrogen in fertilizers are nutrients that not only promote grass growth, but also promote excessive growth of algae in surface water. This reduces the clarity of the water and ultimately threatens survival of fish and other aquatic life. Since phosphorus is a nutrient which can most adversely effect New Hampshire's water bodies, proper use and application of fertilizer is extremely important. The Conservation Shoreland Protection Act prohibits the use of all fertilizers except limestone within 25 feet of the reference line of public waters. Twenty five feet beyond the reference line, low phosphate, slow release nitrogen fertilizer or limestone may be used.

Laconia Water Dept.
PO Box 6146
Lakeport, NH 03247-6146

OUR DAILY WATER!

UPDATED

5/26/17

FOR THE YEAR

2016

CONSUMER CONFIDENCE REPORT

LACONIA
WATER DEPARTMENT

How Does Laconia's Water Measure Up?

Laconia's drinking water has met or exceeded the strict standards set by the State of New Hampshire and the United States Environmental Protection Agency. The Laconia Water Department works hard to make sure the water you drink is of the highest quality. This annual report, which covers all of 2016 and previous years, describes the quality of our drinking water, where it comes from, and where you can get more information.

Consumers of the Laconia Water Department receive their drinking water from Paugus Bay, our water source. The water is treated and filtered at our treatment facility located at 117 Stark Street. One of the contaminants we monitor for is turbidity. Turbidity is a measure of cloudiness in the water. It is monitored because it is a good indicator of the quality of the water, and the potential for interfering with our disinfection process. The turbidity readings indicate how well our filtration process is working to reduce the turbidity levels. The chemicals used to ensure safe drinking water are Sodium Hypochlorite (disinfection), Sodium Hydroxide (ph control), Aluminum Sulfate (coagulation), Sodium Fluoride (dental care), and Zinc Orthophosphate (corrosion control).

Generally, sources of drinking water include rivers, lakes, streams, natural springs and wells. As water travels over the surface of the land or under the ground, it dissolves naturally occurring minerals and radioactive material. It also picks up substances left by animal or human activity as it travels to its destination. For instance, microbial contaminants may come from sewage treatment plants, septic tanks, livestock operations and wildlife. Pesticides and herbicides come from agricultural runoff and excess residential use. Other contaminants come from urban runoff, petroleum products, mining and industrial wastewater. Radioactive materials can occur naturally or can come from oil and gas production and mining.

The quality of Laconia's drinking water is governed by the Safe Drinking Water Act. The U.S. E.P.A. and the NH Department of Environmental Services implement this very important law. It requires all of the nation's water suppliers to meet certain drinking water standards and to

The NH Department of Environmental Services completed a drinking water source assessment report for our water department. Included in the report is a map of our water protection area, a description of our water system, a list of potential contaminant sites (which we inspect on a tri annual basis), and a high-medium-low susceptibility rating for our raw water source. The ratings were low = 5, medium = 5, and high = 3. The three high susceptibility areas were two for MTBE detection (recreational watercraft and within our wellhead protection area), and roadways within 1,000 feet of our intakes (the possibility of accidental spills). It should be noted that all of our MTBE Test results for the last 11 years were below detection limits. The main purpose of this report is to show us what vulnerabilities are within our source waters and what we can do to minimize them. Being that the report is extensive, we will keep a report at our business office at 988 Union Avenue for our customers to look over.

Your public water supply is fluoridated. According to the Centers of Disease Control and Prevention (CDCP), if your child under the age of 6 months is exclusively consuming instant formula reconstituted with fluoridated water, there may be an increased chance of dental fluorosis. Consult your child's health care provider for more information.

All infant formulas, either concentrates or ready-to-feed, have some fluoride, but most infant formula manufacturers develop their products to ensure low levels of fluoride. A recent study by the American Dental Association (ADA) confirmed that fluoride concentrations in commercially available infant formulas are very low. It is not possible to remove this small amount of fluoride by filtering or boiling the formula; however, at normal consumption amounts, infant formula alone does not contain fluoride at levels that would be higher than the daily upper limit established by the Institute of Medicine. In liquid or powdered infant formula concentrate, the majority of fluoride comes from the water used to mix the formula. Some parents may choose bottled water. To learn more, check out the CDCP's Bottled Water and Fluoride and FDA's website <http://www.fda.gov/ForConsumers/ConsumerUpdates/ucm203620.htm>

Due to the recent concerns regarding lead concentrations in Flint, Michigan and other water suppliers in the U.S., we wanted our customers to know that the results from our lead testing done in 2014 as well as previous years, show little to no detection.

Test Results

CONTAMINANT	VIOLATION	RANGE	LEVEL DETECTED	UNIT MEASURED	MCLG	MCL	LIKELY SOURCE OF CONTAMINATION
Microbiological Contaminants							
E. coli	N		0	100 ml	0	0	Human and animal fecal waste
Turbidity	N		0.06	NTU	n/a	0.3	Soil runoff
Disinfection By-Products							
TTHM		L H					
LRCC	N	58 92	LRAA = 78	ug/l		80	Byproduct of drinking water chlorination
F.W. WEBB	N	58 99	LRAA = 74	ug/l		80	Byproduct of drinking water chlorination
LOWES	N	38 71	LRAA = 52	ug/l		80	Byproduct of drinking water chlorination
Cumberland Farms	N	54 71	LRAA = 62	ug/l		80	Byproduct of drinking water chlorination
HAA5		L H					
LRCC	N	11 15	LRAA = 13	ug/l		60	Byproduct of drinking water disinfection
F.W. WEBB	N	9 13	LRAA = 12	ug/l		60	Byproduct of drinking water disinfection
LOWES	N	10 18	LRAA = 14	ug/l		60	Byproduct of drinking water disinfection
Cumberland Farms	N	9 13	LRAA = 11	ug/l		60	Byproduct of drinking water disinfection
TOC RAW	N		RAA = 2.2	ppm		TT	Byproduct of drinking water chlorination
TOC FILTERED	N		RAA = 1.9	ppm		TT	Natural in the environment
Inorganic Contaminants							
LEAD (2014)	N		1 AVG.	ppb	0	AL= 15	Erosion of natural deposits
SCHOOLS 2016							
High School	N		2	ppb	0	AL= 15	
Middle School	N		BDL	ppb	0	AL= 15	
Elm St. School	N		BDL	ppb	0	AL= 15	
Pleasant St. School	N		BDL	ppb	0	AL= 15	
Woodland Heights	N		BDL	ppb	0	AL= 15	
COPPER (2014)	N		.045 AVG.	mg/l	1.3	AL= 1.3	Corrosion of household plumbing
NITRATE	N		ND	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
FLUORIDE	N		.65 AVG.	ppm	4	4	Erosion of natural deposits water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.

2013 UCMR3 Test Results		L	H
Chlorate		102 ug/l	452 ug/l
Strontium		32 ug/l	35 ug/l
Perfluorinated Chemicals			
PFOA		.002 ug/l = 2 ppt	
PFOS		BDL	
PFBS		BDL	
PFNA		BDL	
PFHpA		BDL	
PFHxS		BDL	

Definitions
MCLG: Maximum Contaminant Level Goal, or 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.
MCL: The highest level of a contaminant that is allowed in drinking water.
AL: Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
TT: Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water.

Abbreviations
BDL: Below Detection Limit
mg/L: Milligrams Per Liter
HAA5: Haloacetic Acids
NTU: Nephelometric Turbidity Unit
ppm: Parts Per Million
ppb: Parts Per Billion
ppt: Parts Per Trillion
TTHM: Total Trihalomethane
TOC: Total Organic Carbon
ug/L: Micrograms Per Liter
LRAA: Locational Running Annual Average
RAA: Running Annual Average
UCMR: Unregulated Contaminant Monitoring Rule

Our results were so low that we were granted a 3 year waiver from NHDES since 1996 (testing every 3 years instead of yearly). The most recent results are listed on the "Test Results" section of this report. We are currently doing random in-house lead testing on our water system during the year for our own information even though it is not required. We have also tested our public schools for lead as well. All results showed no detection with the exception of the high school. Those results listed minimal detection. The results are listed in the test result section of this report. We believe taking a proactive approach will help to quell any concerns our customers may have.

Due to the detection of perfluorinated chemicals (PFC), specifically perfluorooctanoic acid (PFOA), we felt it would be advisable to test our source water. The initial contamination was located in the southern section of the state. A company that makes Teflon products was the source. It was created from the discharge through the company smoke stack. The air-borne contaminant was deposited on the surface and eventually worked through the soil to the bedrock groundwater.

We were notified by NHDES that 2 companies in the Lexington Drive industrial park discharge similar contaminants. Our test result showed very minimal detection; only 2 parts per trillion (ppt) for PFOA. The health advisory level (HAL) set by DES, is at 70ppt. EPA previously lowered the level from 100 to 70ppt.

In 2013, we were required by EPA to do testing for contaminants that aren't mandated for compliance testing. The purpose is to see if there is a need to do so if there are detections and how high the detections are. We had minimal detections for two contaminants (chlorate and strontium). The results are listed in the test result section of this report.

Our water department has created a website detailing information about our business operation. To get to our website, just type in "Laconia Water Department" on the internet page of your computer and it will take you to our site.

For more information about Laconia's drinking water, please call Seth Nuttelman, Superintendent, at 524-0901 or Floyd Dungenman, Water Quality Control Supervisor, at 524-1096. The Laconia Water Department's Board of Water Commissioners generally meet each 2nd and 4th Thursday of each month at 8:00 a.m. at the Water Treatment Facility, 117 Stark Street. The meetings are open to the public.