

# 2016 Consumer Confidence Report

## Littleton Water and Light

Public Water System ID 1381010

### Introduction

Like any responsible public water system our mission is to deliver superior quality water to our customers that protects public health, preserves our environment, and supports economic growth and well-being at a reasonable cost.

Our aging infrastructure presents challenges in managing the quality of our water and the operational integrity of our system. Capital improvements are made to optimize system performance so that we can achieve our overall mission.

This past year a severely deteriorated 2 - inch galvanized water main was replaced with a new 8 -inch ductile iron pipe. This new loop feed improved water quality and fire suppression capacity throughout this entire neighborhood. Capital construction improvement projects like this and other operational enhancements insure that the integrity of our water system and water quality remains uncompromised.

These types of investments in our system, along with on-going operational and preventative maintenance programs, come at a cost that is supported by our rate payers. Our water rate remains among the lowest in the state at \$2.69/ CCF, when considering the high value we place on water and it's many uses it is truly a bargain.

Our drinking water is often taken for granted; we have come to expect that it will always be there when you open a faucet. We have come to rely on this high quality, safe and readily available water supply for all our personal needs, to protect public health and provide fire suppression when needed.

We would like to thank you for your continued support of our potable water system.

### What is a Consumer Confidence Report?

The Consumer Confidence Report (CCR) details the quality of your drinking water, where it comes from, and where you can get more information. This annual water quality report documents all **detected** primary and secondary drinking water parameters, and compares them to their respective standards known as Maximum Contaminant Levels (MCLs) for the year ended 2015.

NOW IT COMES WITH A LIST OF INGREDIENTS.



**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. In some cases radioactive material and other contaminants can be picked up resulting from the presence of animal and or human activity.

**Contaminants that may be present** in source water include:

**Microbial contaminants** such as viruses and bacteria 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** 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 storm water runoff, and septic systems.

**Radioactive contaminants** 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** USEPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The US Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

**What is the source of my drinking water?** Our primary drinking water source comes from the Gale River and is supplied to the majority of our customers by gravity. Located within the White Mountain National Forest this protected water supply can be supplemented, as needed, by a bedrock artesian well located in Littleton. Fortunately both these water sources are of the highest quality and require only minimal treatment and disinfection to comply with the Safe Water Drinking Act.

**Why are contaminants in my water?** 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 Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

**Do I need to take special precautions?** 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 Safe Drinking Water Hotline at 1-800-426-4791.

## Source Water Assessment Summary:

NHDES prepared drinking water source assessment reports for all public water systems between 2000 and 2003 in an effort to assess the vulnerability of each of the state's public water supply sources. Included in the report is a map of each source water protection area, a list of potential and known contamination sources, and a summary of available protection options. The results of the assessment, prepared on May 2002 are noted below.

1. Gale River, Surface Water, received a zero (0) susceptibility factors that were rated high, zero (0) were rated medium and eleven (11) were rated low.
2. Well, Groundwater, received two (2) susceptibility factors were rated high, four (4) were rated medium, and six (6) were rated low.

Note: This information is about 14 years old and includes information that was current at the time the report was completed. Therefore, some of the ratings might be different if updated to reflect current information. At the present time, DES has no plans to update this data.

The complete Assessment Report is available for review at the Littleton Water and Light, located at 65 Lafayette Avenue in Littleton, NH. For more information, call 603-444-2915 or visit the DES Drinking Water Source Assessment website at <http://des.nh.gov/organization/divisions/water/dwgb/dwspp/dwsap.htm>.

**How can I get involved?** The Board of Commissioners meeting is held on the 1st and 3<sup>rd</sup> Monday of each month and opens to the public. For more information about your drinking water, please call the Littleton Water and Light at 603-444-2915 or visit us on the web at [www.littletonwaterandlight.org](http://www.littletonwaterandlight.org)

Public participation is encouraged at all meetings unless stated otherwise, feel free to contact us with any questions you may have or specific concern.

**Violations and Other information:** The department was not cited for any violations in 2015.

### Definitions used throughout this report:

**Ambient Groundwater Quality Standard or AGQS:** The maximum concentration levels for contaminants in groundwater that are established under RSA 485-C, the Groundwater Protection Act.

**Maximum Contaminant Level or 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 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.

**Maximum Residual Disinfectant Level or MRDL:** 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.

**Maximum Residual Disinfectant Level Goal or MRDLG:** 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.

**Treatment Technique or TT:** A required process intended to reduce the level of a contaminant in drinking water.

**Turbidity:** A measure of the cloudiness of the water. It is monitored by surface water systems because it is a good indicator of water quality and thus helps measure the effectiveness of the treatment process. High turbidity can hinder the effectiveness of disinfectants.

## Abbreviations

BDL: Below Detection Limit

CCF: 100 cubic feet = 748 gallons

mg/L: milligrams per Liter = ppm

NA: Not Applicable

ND: Not Detectable at testing limits

NTU: Nephelometric Turbidity Unit

pCi/L: picoCurie per Liter

ppb: parts per billion (ug/L)

ppm: parts per million = mg/L

RAA: Running Annual Average

LRAA: Locational Running Annual Average

TTHM: Total Trihalomethanes

UCMR: Unregulated Contaminant Monitoring Ruleug/L: micrograms per Liter = ppb

### Drinking Water Contaminants:

**Lead:** 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. This water system is responsible for high quality drinking water, but can not control the variety of materials used in your plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing cold water from your tap for at least 30 seconds before using water for drinking or cooking. Do not use hot water for drinking and 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 Hot line or at <http://water.epa.gov/drink/info/lead/index.cfm>

System Name: LITTLETON, NH PWS ID: 1381010

## WATER SAMPLE RESULTS FOR - 2015

### ADDITIONAL TESTING

| Contaminant (Units) | Results | Date | Treatment technique (if any) | Action Level | Specific contaminant criteria and reason for monitoring |
|---------------------|---------|------|------------------------------|--------------|---|
|---------------------|---------|------|------------------------------|--------------|---|

#### Unregulated Contaminant Monitoring Regulation ( UCMR 3)

|                  |              |      |     |      |   |
|------------------|--------------|------|-----|------|---|
| Chlorate (ppb)   | <b>110</b>   | 2014 | N/A | None | Contaminants tested under UCMR are mostly man – made chemicals used in the manufacturing and health industries.<br><br>The UCMR program collects data of unregulated contaminant that do not have a specific health – based standard set under the Safe Water Drinking Act. |
| Chromium (ppb)   | <b>0.2</b>   | 2014 | N/A | None |   |
| Chromium 6 (ppb) | <b>0.16</b>  | 2014 | N/A | None |   |
| Strontium (ppb)  | <b>0.018</b> | 2014 | N/A | None |   |

### BULK WATER DELIVERIES - NONE

### VIOLATIONS – NONE

### LEAD AND COPPER

| Contaminant (Units) | Action Level | 90 <sup>th</sup> percentile sample value | Date | # of sites above AL | Violation Yes/No | Likely Source of Contamination   | Health Effects of Contaminant   |
|---------------------|--------------|--|------|---------------------|------------------|--|---|
| Copper (ppm)        | 1.3          | <b>0.649</b>                             | 2013 | 1                   | NO               | Corrosion of household plumbing systems; erosion of natural deposits; 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.   |
| Lead (ppb)          | 15           | <b>9</b>                                 | 2013 | 0                   | NO               | Corrosion of household plumbing systems, erosion of natural deposits                                   | (15 ppb in more than 5%) Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home’s plumbing. If you are concerned about elevated lead levels in your home’s water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791). (above 15 ppb) 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. |

## DETECTED WATER QUALITY RESULTS

| Contaminant (Units)                  | Level Detected                 | MCL      | MCLG      | Violation YES/NO | Likely Source of Contamination   | Health Effects of Contaminant  |
|--------------------------------------|--------------------------------|----------|-----------|------------------|--|--|
| <b>Microbiological Contaminants:</b> |                                |          |           |                  |  |  |
| Turbidity (NTU)                      | <b>0.059<br/>APRIL</b>         | TT       | N/A       | NO               | Soil runoff  | Turbidity has no health effects. However, 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.  |
| <b>Radioactive Contaminants:</b>     |                                |          |           |                  |  |  |
| Compliance Gross Alpha (pCi/L)       | <b>0.567<br/>Gale River</b>    | 15       | 0         | NO               | Erosion of natural deposits  | Certain minerals are radioactive and may emit a form of radiation know as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.  |
| Uranium (ug/L)                       | <b>1.88<br/>Brickyard Well</b> | 30       | 0         | NO               | Erosion of natural deposits  | Some people who drink water containing uranium in excess of the MCL over many years may have an increased risk of getting cancer and kidney toxicity.  |
| Combined Radium 226 + 228 (pCi/L)    | <b>0.891<br/>Gale River</b>    | 5        | 0         | NO               | Erosion of natural deposits  | Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.  |
| <b>Inorganic Contaminants:</b>       |                                |          |           |                  |  |  |
| Chlorine (ppm)                       | <b>0.59<br/>March</b>          | MRDL = 4 | MRDLG = 4 | NO               | Water additive used to control microbes  | Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.   |
| Fluoride (ppm)                       | <b>0.011<br/>2013</b>          | 4        | 4         | NO               | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories. | Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Fluoride in drinking water at half the MCL or more may cause mottling of children's teeth, usually in children less than nine years old. Mottling also known as dental fluorosis, may include brown staining and/or pitting of the teeth, and occurs only in developing teeth before they erupt from the gums.  |
| Nitrate (as Nitrogen) (ppm)          | <b>0.3<br/>Brickyard Well</b>  | 10       | 10        | NO               | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits                                | (5 ppm through 10ppm) Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.<br>(Above 10 ppm) Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome. |
| Phosphorus, Total (ppm)              | <b>0.19</b>                    | N/A      | N/A       | N/A              | Water additive used as a control corrosion preventative measure.   | A corrosion control inhibitor used in the drinking water system to help meet regulatory compliance with the US Environmental Protection Agency's Lead and Copper Rule in accordance with the Safe Drinking Water Act.  |

## DETECTED WATER QUALITY RESULTS – Continued

| Contaminant<br>(Units)  | Level<br>Detected  | MCL    | MCLG | Violation<br>YES/NO | Likely Source of<br>Contamination            | Health Effects of Contaminant  |
|---|--|--------|------|---------------------|--|--|
| <b>Volatile Organic Contaminants:</b>   |  |        |      |                     |  |  |
| Haloacetic Acids<br>(HAA)<br>(ppb)  | <b>Low: &lt; 17.0</b><br><b>High: 50.5</b><br><b>LRAA = 32.9</b> | 60     | NA   | NO                  | By-product of drinking<br>water disinfection | Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.   |
| Total<br>Trihalomethanes<br>(TTHM)<br>(Bromodichloro-<br>methane<br>Bromoform<br>Dibromomethane<br>Chloroform)<br>(ppb) | <b>Low: 15.9</b><br><b>High: 68.8</b><br><b>LRAA = 53.2</b>      | 100/80 | N/A  | NO                  | By-product of drinking<br>water chlorination | Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer. |