2019 Consumer Confidence Report
Carroll Water Works
PWS#0381010

Introduction
Like any responsible public water system, our mission is to deliver the best quality drinking water and reliable service at the lowest appropriate cost. Aging infrastructure presents challenges to drinking water safety, and continuous improvement is needed to maintain the quality of life we desire for today and for the future.

These investments along with on-going operation and maintenance costs are supported by user rates. When considering the high value we place on water, it is truly a bargain to have water service that protects public health, fights fires, supports businesses and the economy, and provides us with the high-quality of life we enjoy.

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 report documents all detected primary and secondary drinking water parameters and compares them to their respective standards known as Maximum Contaminant Levels (MCLs).

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 stormwater runoff, and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts 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.

In order to ensure that tap water is safe to drink, EPA 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 drinking water supply at Carroll Water Works comes from two different wells on the Town Recreation Area Site. At the well pump station, there are facilities for soda ash addition for corrosion control of home plumbing.

Our Water is treated.

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
DES 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 1/22/2002 are noted below.

GPW-004; high susceptibility ratings-0; medium susceptibility ratings-1; low susceptibility ratings-11.
GPW-005; high susceptibility ratings-0; medium susceptibility ratings-3; low susceptibility ratings-9.

Note: This information is over seventeen 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.
How can I get involved?
The best way to get involved is to attend a regularly scheduled Town of Carroll Selectman’s Meeting. This takes place every other Monday, 7:00 PM at the Town Hall. If there are issues you wish to be considered at the meeting, please call ahead for the date and to be placed on the agenda. The Town of Carroll’s phone number is 603-846-5754.

Violations and Other information: Carroll Water Works had no violations in 2018.

Definitions:

**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.

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

**Maximum Contaminant Level or MCL:** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close as feasible 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

mg/L: milligrams per Liter

NA: Not Applicable

ND: Not Detectable at testing limits

NTU: Nephelometric Turbidity Unit

pCi/L: picocurie per Liter

ppb: parts per billion

ppm: parts per million

RRA: Running Annual Average

TTHM: Total Trihalomethanes

UCMR: Unregulated Contaminant Monitoring Rule

ug/L: micrograms per Liter

**THE FOLLOWING APPLIES** if these contaminants are present - see table for detected levels.

**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 Hotline or at http://water.epa.gov/drink/info/lead/index.cfm

**Radon:** Radon is a radioactive gas that you can’t see, taste or smell. It can move through the ground and into a home through cracks and holes in the foundation. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. It is a known human carcinogen. Breathing radon can lead to lung cancer. Drinking water containing radon may cause an increased risk of stomach cancer.
## Carroll Water Works
### EPA# 0381010
### 2019 Water Quality Report (2018 Data)

### ADDITIONAL TESTING

<table>
<thead>
<tr>
<th>Additional Tests &amp; Secondary MCLs (SMCL)</th>
<th>Results</th>
<th>Date</th>
<th>Treatment technique (if any)</th>
<th>AL (Action Level), SMCL or AGQS (Ambient groundwater quality standard)</th>
<th>Specific contaminant criteria and reason for monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium</td>
<td>2.7 mg/L</td>
<td>8/24/16</td>
<td></td>
<td>100-250</td>
<td>We are required to regularly sample for sodium.</td>
</tr>
</tbody>
</table>

### DETECTED WATER QUALITY RESULTS

#### Inorganic Contaminants

<table>
<thead>
<tr>
<th>Contaminant (Units)</th>
<th>Level Detected</th>
<th>MCL</th>
<th>MCLG</th>
<th>Violation YES/NO</th>
<th>Likely Source of Contamination</th>
<th>Health Effects of Contaminant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead (ppb)</td>
<td>4 90th Percentile 9/6/2018</td>
<td>AL=15</td>
<td>0</td>
<td>No</td>
<td>Corrosion of household plumbing systems; erosion of natural deposits</td>
<td>(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.</td>
</tr>
<tr>
<td>Copper (ppm)</td>
<td>0.331 90th percentile 9/6/2018</td>
<td>AL=1.3</td>
<td>1.3</td>
<td>No</td>
<td>Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.</td>
<td>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.</td>
</tr>
<tr>
<td>Chromium (ppb)</td>
<td>1 11/28/16</td>
<td>100</td>
<td>100</td>
<td>No</td>
<td>Discharge from steel and pulp mills; erosion of natural deposits</td>
<td>Some people who use water containing chromium well in excess of the MCL over many years could experience allergic dermatitis.</td>
</tr>
</tbody>
</table>
### Nitrate (as Nitrogen) (ppm)

<table>
<thead>
<tr>
<th>Value</th>
<th>Date</th>
<th>10</th>
<th>10</th>
<th>No</th>
<th>Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ND</td>
<td>8/14/2018</td>
<td></td>
<td></td>
<td></td>
<td>(5 ppm through 10 ppm) 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 be aware of your health care provider. (Above 10 ppm) Infants below the age of six months who drink water containing nitrate in excess of the MCL could become severely ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.</td>
</tr>
</tbody>
</table>

### Fluoride (ppm)

<table>
<thead>
<tr>
<th>Value</th>
<th>Date</th>
<th>4</th>
<th>4</th>
<th>No</th>
<th>Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.39</td>
<td>8/24/2016</td>
<td></td>
<td></td>
<td></td>
<td>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.</td>
</tr>
</tbody>
</table>

### Radioactive Contaminants

<table>
<thead>
<tr>
<th>Uranium (ug/L)</th>
<th>Value</th>
<th>30</th>
<th>0</th>
<th>No</th>
<th>Erosion of natural deposits.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 ug/L</td>
<td>7/23/13</td>
<td></td>
<td></td>
<td></td>
<td>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.</td>
</tr>
</tbody>
</table>

### Combined Radium 226 + 228 (pCi/L)

<table>
<thead>
<tr>
<th>Value</th>
<th>0.5+/-0.12 Rad 226 pCi/L</th>
<th>8/4/15</th>
<th>5</th>
<th>0</th>
<th>No</th>
<th>Erosion of natural deposits.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ND</td>
<td>Rad 228 pCi/L</td>
<td>8/4/15</td>
<td></td>
<td></td>
<td></td>
<td>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.</td>
</tr>
</tbody>
</table>

### Source Water Assessment Summary

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The complete Assessment Report is available for review at The Carroll Town Hall or visit the DES Drinking Water Source Assessment website at http://des.ph.gov/organization/divisions/water/dwgb/dwspp/dwsap.htm.