

# CITY OF LAFAYETTE

## 2015 water quality report

Public Water System ID: CO0107473

The City of Lafayette Public Works Department is pleased to present our residents with the 2015 water quality report.

This report will give you information about Lafayette's water. Federal regulations require this report to be distributed to all water customers.

Citizens are invited to provide comments about drinking water quality at our City Council meetings.

Lafayette City Council provides these opportunities the 1st and 3rd Tuesday of every month at 6:30pm in the City Hall City Council Chambers: 1290 S. Public Rd., Lafayette, CO 80026

You may refer to the City's website for any changes in the meeting schedule.

To learn more about what you can do to help protect your drinking water sources, questions regarding this report, or to learn more about our system, please contact Ed Zimbleman at 303-494-9503

The City of Lafayette's drinking water meets or surpasses all federal and state drinking water standards and had no violations in 2014.



1290 S. Public Rd., Lafayette, CO 80026  
303-665-5588 x1273  
www.cityoflafayette.com/publicworks

Esta es información importante. Si no la puede leer, necesita que alguien se la traduzca.

### Our Source Water

Lafayette receives snowmelt runoff (surface water) from South Boulder Creek, Boulder Creek and Coal Creek. This raw water is transported by a system to ditches into the Baseline, Waneka and Goosehaven reservoirs.

### A Broader Look at Source Water

The Colorado Department of Public Health and Environment (CDPHE) is working to provide all public drinking water systems in Colorado with a Source Water Assessment Report (SWAP).

This report identifies potential sources of contamination in our watershed area. This does not mean contamination has or will occur, but it helps us to evaluate our water treatment capabilities and to prepare for possible contamination threats.

Potential sources of contamination identified in our watershed include: EPA areas of concern; permitted wastewater discharge sites; leaking storage tanks; solid waste sites; mines; and other facilities not identified.

Our sources of more diffuse contamination are: commercial industrial and transportation activities; residential areas; parks; agricultural uses; forests; septic systems; oil and gas wells; and road miles.

You may read the report online at <http://wqcdcompliance.com/ccr>



Goosehaven Reservoir

### Why Treat Water:

The sources for both tap water and bottled water include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels through the ground or over the ground's surface, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances caused by the presence of animals or human activities. These contaminants include:

\* **MICROBIAL CONTAMINANTS:** viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, pets, and wildlife.

\* **INORGANIC CONTAMINANTS:** salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

\* **PESTICIDES AND HERBICIDES:** that 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 also may come from gas stations, urban storm water runoff, and septic systems.

\* **RADIOACTIVE CONTAMINANTS:** that can be naturally occurring or be the result of oil and gas production and mining activities.

After treatment, both tap and bottled water may reasonably be expected to contain at least small amounts of some contaminants. In order to ensure that our tap water is safe to drink, the CDPHE prescribes regulations limiting the amount of some contaminants in water provided by public water systems.

The Food and Drug Administration is responsible for regulating the amounts of contaminants in bottled water. These regulations protect public health.

### Special Health Considerations

If you or someone in your family is undergoing chemotherapy, has had an organ transplant, or has any other disorder that compromises the body's immune function, please ask your health care provider for advice regarding drinking water. Some elderly people and infants may also be at increased risk of infections.

You may obtain more information regarding contaminants by calling the EPA Safe Drinking Water Hotline 1-800-426-4791.

If present, elevated levels of lead can cause serious health problems (especially for pregnant women and young children). It is possible that lead levels at your home may be higher than other homes in the community as a result of materials used in your home's plumbing. If you are concerned about lead in your water, you may wish to have your water tested. 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 your water for drinking or cooking.

To further minimize the risk, do not use hot tap water for drinking or cooking.

More information is available from the EPA Safe Drinking Water Hotline, 1-800-426-4791 or <http://www.epa.gov/safewater/lead>

## Water Quality Data

City of Lafayette routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table(s) show all detections found in the period of January 1 to December 31, 2014 unless otherwise noted. The State of Colorado requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Therefore, some of our data, though representative, may be more than one year old. Violations and Formal Enforcement Actions, if any, are reported in the next section of this report.

Note: Only detected contaminants sampled within the last 5 years appear in this report. If no tables appear in this section then no contaminants were detected in the last round of monitoring.

### Lead and Copper Sampled in the Distribution System

| Contaminant Name | Time Period              | 90 <sup>th</sup> Percentile | Sample Size | Unit of Measure | 90 <sup>th</sup> Percentile AL | Sample Sites Above AL | 90 <sup>th</sup> Percentile AL Exceedance | Typical Sources   |
|------------------|--------------------------|-----------------------------|-------------|-----------------|--------------------------------|-----------------------|---|---|
| <b>Copper</b>    | 06/16/2014 to 06/19/2014 | 0.03                        | 31          | ppm             | 1.3                            |                       | No  | Corrosion of household plumbing systems;<br>Erosion of natural deposits |
| <b>Lead</b>      | 06/16/2014 to 06/19/2014 | 2.5                         | 31          | ppb             | 15                             |                       | No  | Corrosion of household plumbing systems;<br>Erosion of natural deposits |

### Disinfection Byproducts Sampled in the Distribution System

| Name                                 | Year | Average | Range Low – High | Sample Size | Unit of Measure | MCL | MCLG | Highest Compliance Value | MCL Violation | Typical Sources                          |
|--------------------------------------|------|---------|------------------|-------------|-----------------|-----|------|--------------------------|---------------|--|
| <b>Total Haloacetic Acids (HAA5)</b> | 2014 | 30.34   | 23.2 to 40       | 16          | ppb             | 60  | N/A  |                          | No            | Byproduct of drinking water disinfection |
| <b>Total Trihalomethanes (TTHM)</b>  | 2014 | 62.64   | 41.9 to 83.8     | 16          | ppb             | 80  | N/A  |                          | No            | Byproduct of drinking water disinfection |

### Summary of Turbidity Sampled at the Entry Point to the Distribution System

| Contaminant Name | Sample Date        | Level Found  | TT Requirement  | TT Violation | Typical Sources |
|------------------|--------------------|--|---|--------------|-----------------|
| <b>Turbidity</b> | Date/Month:<br>Aug | <u>Highest single</u> measurement:<br>0.1 NTU  | Maximum 1 NTU for any single measurement                        | No           | Soil Runoff     |
| <b>Turbidity</b> | Month:<br>Dec      | <u>Lowest monthly</u> percentage of samples meeting TT requirement for our technology: 100 % | In any month, at least 95% of samples must be less than 0.3 NTU | No           | Soil Runoff     |

### Radionuclides Sampled at the Entry Point to the Distribution System

| Contaminant Name                    | Year | Average | Range Low – High | Sample Size | Unit of Measure | MCL | MCLG | MCL Violation | Typical Sources                        |
|-------------------------------------|------|---------|------------------|-------------|-----------------|-----|------|---------------|--|
| <b>Gross Alpha</b>                  | 2011 | 0.86    | 0.86 to 0.86     | 1           | pCi/L           | 15  | 0    | No            | Erosion of natural deposits            |
| <b>Combined Radium</b>              | 2011 | 0.5     | 0.5 to 0.5       | 1           | pCi/L           | 5   | 0    | No            | Erosion of natural deposits            |
| <b>Combined Uranium</b>             | 2011 | 1.1     | 1.1 to 1.1       | 1           | ppb             | 30  | 0    | No            | Erosion of natural deposits            |
| <b>Gross Beta Particle Activity</b> | 2010 | 1.3     | 1.3 to 1.3       | 1           | pCi/L*          | 50  | 0    | No            | Decay of natural and man-made deposits |

\*The MCL for Gross Beta Particle Activity is 4 mrem/year. Since there is no simple conversion between mrem/year and pCi/L EPA considers 50 pCi/L to be the level of concern for Gross Beta Particle Activity.

### Inorganic Contaminants Sampled at the Entry Point to the Distribution System

| Contaminant Name | Year | Average | Range Low – High | Sample Size | Unit of Measure | MCL | MCLG | MCL Violation | Typical Sources   |
|------------------|------|---------|------------------|-------------|-----------------|-----|------|---------------|---|
| <b>Barium</b>    | 2014 | 0.04    | 0.04 to 0.04     | 1           | ppm             | 2   | 2    | No            | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits                                |
| <b>Fluoride</b>  | 2014 | 0.83    | 0.83 to 0.83     | 1           | ppm             | 4   | 4    | No            | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories |
| <b>Nitrate</b>   | 2014 | 0.05    | 0.05 to 0.05     | 1           | ppm             | 10  | 10   | No            | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits                               |

### Unregulated or Secondary Contaminants\*\*

\*\*Secondary standards are non-enforceable guidelines for contaminants that may cause cosmetic effects (such as skin, or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water.

| Contaminant Name              | Year | Average | Range: Low – High | Sample Size | Unit of Measure | Secondary Standard |
|-------------------------------|------|---------|-------------------|-------------|-----------------|--------------------|
| <b>Total Dissolved Solids</b> | 2011 | 226     | 226 to 226        | 1           | ppm             | 500                |

### Violations, Significant Deficiencies, and Formal Enforcement Actions

No Violations or Formal Enforcement Actions

### Terms and Abbreviations Used in this Report

**MCL** (Maximum Contaminant Level) - the highest level of a contaminant allowed in drinking water.

**TT** (Treatment Technique) - a required process intended to reduce the level of a contaminant in drinking water

**AL** (Action Level) - the concentration of a contaminant which, if exceeded, triggers treatment and other regulatory requirements.

**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.

**MRDL** (Maximum Residual Disinfectant 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

**Violation** (No Abbreviation) - Failure to meet a Colorado Primary Drinking Water Regulation.

**Formal Enforcement Action** (No Abbreviation) - Escalated action taken by the State (due to the risk to public health, or number or severity of violations) to bring a non-compliant water system back into compliance.

**V/E** (Variance and Exemptions) – Department permission not to meet a MCL or treatment technique under certain conditions

**pCi/L** (Picocuries per liter) - Measure of the radioactivity in water.

**N/A** = Not Applicable

**NTU** (Nephelometric Turbidity Unit) = measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**Average (x-bar) - Typical value**

**Range (R)** - The lowest value to the highest value

**Sample Size (n)** - The number or count of values

**ppm** (Parts per Million) = Milligrams per liter (ppm = mg/L) - One part per million corresponds to one minute in two years or a single penny in \$10,000

**ppb** (Parts per Billion) = Micrograms per liter (ppb = ug/L) - One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000

**Compliance Value** (No Abbreviation) - Single or calculated value used to determine if regulatory contaminant level (e.g. MCL) is met. Examples of calculated values are the 90th Percentile, Running Annual Average (RAA) and Locational Running Annuyual Average (LRAA)

**Gross Alpha** (No Abbreviation) - Gross alpha particle activity compliance value. It includes radium -226, but excludes radon 222, and uranium.