

JAMESTOWN TOWN OF 2018 Drinking Water Quality Report For Calendar Year 2017

Public Water System ID: CO0107401

Esta es información importante. Si no la pueden leer, necesitan que alguien se la traduzca.

We are pleased to present to you this year's water quality report. Our constant goal is to provide you with a safe and dependable supply of drinking water. Please contact TARA SCHOEDINGER at 303-544-1361 with any questions or for public participation opportunities that may affect water quality.

General Information

All 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. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791) or by visiting <http://water.epa.gov/drink/contaminants>.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 of infections. These people should seek advice about drinking water from their health care providers. For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and microbiological contaminants call the EPA Safe Drinking Water Hotline at (1-800-426-4791).

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:** viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants:** 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 storm water runoff, and residential uses.
- Radioactive contaminants:** can be naturally occurring or be the result of oil and gas production and mining activities.
- 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.

In order to ensure that tap water is safe to drink, the Colorado Department of Public Health and Environment prescribes

JAMESTOWN TOWN OF, PWS ID: CO0107401

regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Lead in Drinking Water

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 water for drinking or cooking. Additional information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

Source Water Assessment and Protection (SWAP)

In 2004, the Colorado Department of Public Health and Environment provided us with a Source Water Assessment Report for our water supply. You may obtain a copy of the report from the CDPHE's SWAP program website located at: <http://www.colorado.gov/cs/Satellite/CDPHE-WQ/CBON/1251596793639>.

The Source Water Assessment Report identified the following potential sources of contamination in our source water area: storage tanks, hazardous waste generators, existing/abandoned mine sites, transportation, low intensity residential, pasture/hay, forests, septic systems, and roads. The Report provided a screening level evaluation of potential contamination that **could** occur. It does not mean that the contamination **has or will** occur. The source water assessment results provided a starting point for developing a source water protection plan.

During 2011, the Town of Jamestown worked with area stakeholders to complete a Source Water Protection Plan to protect our drinking water source, the James Creek and upper South St. Vrain Creek watersheds. The

protection plan identified the following potential sources of contaminants and issues of concern: mining activities, septic systems, impacts from transportation on roads, climate change, flood hazards, public lands, wildland fires, mountain pine beetle, reservoir and diversion operation and maintenance, and residential practices. A Steering Committee was formed to implement protection measures identified in the protection plan.

We can use this information to evaluate the need to improve our current water treatment capabilities, prevent contaminants from entering our water source, and prepare for future contamination threats. This can help us ensure that quality finished water is delivered to your homes.

Please contact Jon Ashton at 720-310-8258 to learn more about what you can do to help protect your drinking water sources, to obtain a copy of the Jamestown Source Water Protection Plan, to answer any questions about the Drinking Water Consumer Confidence Report, to learn more about our system, or to attend scheduled public meetings. We want you, our valued customers, to be informed about the services we provide and the quality water we deliver to you every day.

Our Water Sources

| <u>Source</u> | <u>Source Type</u> | <u>Water Type</u> | <u>Potential Source(s) of Contamination</u> |
|---------------|--------------------|-------------------|--|
| INF GAL | Intake | Surface Water | Mining, septic systems, wildland fire, flood, mountain pine beetle, climate change |
| JAMES CREEK | Intake | Surface Water | SAME AS ABOVE |

Terms and Abbreviations

- **Maximum Contaminant Level (MCL)** – The highest level of a contaminant allowed in drinking water.
- **Treatment Technique (TT)** – A required process intended to reduce the level of a contaminant in drinking water.
- **Health-Based** – A violation of either a MCL or TT.
- **Non-Health-Based** – A violation that is not a MCL or TT.
- **Action Level (AL)** – The concentration of a contaminant which, if exceeded, triggers treatment and other regulatory requirements.
- **Maximum Residual Disinfectant Level (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 Contaminant Level Goal (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 Goal (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.
- **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.
- **Variance and Exemptions (V/E)** – Department permission not to meet a MCL or treatment technique under certain conditions.
- **Gross Alpha (No Abbreviation)** – Gross alpha particle activity compliance value. It includes radium-226, but excludes radon 222, and uranium.
- **Picocuries per liter (pCi/L)** – Measure of the radioactivity in water.
- **Nephelometric Turbidity Unit (NTU)** – Measure of the clarity or cloudiness of water. Turbidity in excess of 5 NTU is just noticeable to the typical person.
- **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 Annual Average (LRAA).
- **Average (x-bar)** – Typical value.
- **Range (R)** – Lowest value to the highest value.
- **Sample Size (n)** – Number or count of values (i.e. number of water samples collected).
- **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.
- **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.
- **Not Applicable (N/A)** – Does not apply or not available.
- **Level 1 Assessment** – A study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
- **Level 2 Assessment** – A very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

Detected Contaminants

JAMESTOWN TOWN OF 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, 2017 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.

| Disinfectants Sampled in the Distribution System | | | | | | |
|--|--------------------|---|--------------------------------------|--------------------|---------------------|-------------|
| TT Requirement: At least 95% of samples per period (month or quarter) must be at least 0.2 ppm <u>OR</u> | | | | | | |
| If sample size is less than 40 no more than 1 sample is below 0.2 ppm | | | | | | |
| Typical Sources: Water additive used to control microbes | | | | | | |
| Disinfectant Name | Time Period | Results | Number of Samples Below Level | Sample Size | TT Violation | MRDL |
| Chlorine | December, 2017 | <u>Lowest period</u> percentage of samples meeting TT requirement: 100% | 0 | 1 | No | 4.0 ppm |

| Lead and Copper Sampled in the Distribution System | | | | | | | | |
|---|--------------------------|-----------------------------------|--------------------|------------------------|--------------------------------------|------------------------------|---|--|
| Contaminant Name | Time Period | 90th Percentile | Sample Size | Unit of Measure | 90th Percentile AL | Sample Sites Above AL | 90th Percentile AL Exceedance | Typical Sources |
| Copper | 02/28/2017 to 02/28/2017 | 0.84 | 10 | ppm | 1.3 | 0 | No | Corrosion of household plumbing systems; Erosion of natural deposits |
| Lead | 02/28/2017 to 02/28/2017 | 6 | 10 | ppb | 15 | 0 | No | Corrosion of household plumbing systems; Erosion of natural deposits |
| Copper | 07/01/2017 to 07/03/2017 | 1.83 | 10 | ppm | 1.3 | 6 | Yes | Corrosion of household plumbing systems; Erosion of natural deposits |
| Lead | 07/01/2017 to 07/03/2017 | 15 | 10 | ppb | 15 | 1 | No | Corrosion of household plumbing systems; 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 |
|-------------------------------|------|---------|------------------|-------------|-----------------|-----|------|--------------------------|---------------|--|
| Total Haloacetic Acids (HAA5) | 2017 | 55.6 | 41.4 to 69.8 | 2 | ppb | 60 | N/A | | No | Byproduct of drinking water disinfection |
| Total Trihalomethanes (TTHM) | 2017 | 60.6 | 51.4 to 69.8 | 2 | ppb | 80 | N/A | | No | Byproduct of drinking water disinfection |

Disinfectants Sampled at the Entry Point to the Distribution System

| Contaminant Name | Year | Number of Samples Above or Below Level | Sample Size | TT/MRDL Requirement | TT/MRDL Violation | Typical Sources |
|---------------------|------|--|-------------|---|-------------------|---|
| Chlorine/Chloramine | 2017 | 0 | 367 | TT = No more than 4 hours with a sample below 1 RATIO | No | Water additive used to control microbes |

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

| Contaminant Name | Sample Date | Level Found | TT Requirement | TT Violation | Typical Sources |
|------------------|--------------------|---|---|--------------|-----------------|
| Turbidity | Date/Month: Jul | <u>Highest single</u> measurement: 2.16 NTU | Maximum 5 NTU for any single measurement | Yes | Soil Runoff |
| Turbidity | Month: Jun | <u>Lowest monthly</u> percentage of samples meeting TT requirement for our technology: 64 % | In any month, at least 95% of samples must be less than 1 NTU | Yes | 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 |
|------------------|------|---------|------------------|-------------|-----------------|-----|------|---------------|-----------------------------|
| Gross Alpha | 2015 | 0.36 | 0 to 1.17 | 6 | pCi/L | 15 | 0 | No | Erosion of natural deposits |
| Combined Radium | 2015 | 0.27 | 0.1 to 0.5 | 6 | pCi/L | 5 | 0 | No | Erosion of natural deposits |

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 |
|------------------------------|------|---------|------------------|-------------|-----------------|-----|------|---------------|--|
| Combined Uranium | 2015 | 0.22 | 0 to 0.7 | 4 | ppb | 30 | 0 | No | Erosion of natural deposits |
| Gross Beta Particle Activity | 2015 | 1 | 1 to 1 | 2 | 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 |
|------------------|------|---------|------------------|-------------|-----------------|-----|------|---------------|---|
| Barium | 2017 | 0.02 | 0.02 to 0.02 | 1 | ppm | 2 | 2 | No | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits |
| Fluoride | 2017 | 0.13 | 0.13 to 0.13 | 1 | ppm | 4 | 4 | No | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories |
| Nitrate | 2017 | 0.2 | 0.2 to 0.2 | 1 | ppm | 10 | 10 | No | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |

Cryptosporidium and Raw Source Water E. coli

| Contaminant Name | Year | Number of Positives | Sample Size |
|------------------|------|---------------------|-------------|
| E. Coli | 2017 | 2 | 5 |

| Name | Category | Time Period | Health Effects | Compliance Value | TT Level or MCL |
|---|---|-------------------------|--|------------------|-----------------|
| TURBIDITY | FAILURE TO MAINTAIN LOW TURBIDITY (CLOUDINESS) LEVELS FOR SURFACE WATER FILTRATION - HEALTH-BASED | 07/01/2017 - 07/31/2017 | 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. | N/A | N/A |
| TURBIDITY | FAILURE TO MAINTAIN LOW TURBIDITY (CLOUDINESS) LEVELS FOR SURFACE WATER FILTRATION - HEALTH-BASED | 06/01/2017 - 06/30/2017 | 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. | N/A | N/A |
| | | | | | |
| TOTAL COLIFORM | FAILURE TO MONITOR AND/OR REPORT - NON-HEALTH-BASED | 01/01/2017 - 01/31/2017 | N/A | N/A | N/A |
| | | | | | |
| | | | | | |
| CHLORINE/CHLORAMINE | FAILURE TO MONITOR AND/OR REPORT - NON-HEALTH-BASED | 01/01/2017 - 01/31/2017 | N/A | N/A | N/A |
| | | | | | |
| Additional Violation Information | | | | | |

| Violations | | | | | |
|--|----------|-------------|----------------|------------------|-----------------|
| Name | Category | Time Period | Health Effects | Compliance Value | TT Level or MCL |
| <p>Note: Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites, which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.</p> | | | | | |
| <p>*Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.*</p> | | | | | |
| <p>Explanation of the violation(s), the steps taken to resolve them, and the anticipated resolved date:</p> | | | | | |

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Town of Jamestown

Reporting Requirements Not Met

Our water system recently violated a drinking water requirement. Although this situation is not a public health risk, as our customers you have a right to know what happened, what you should do, and what we are doing to correct this situation.

We failed to report two LT2 samples to the State for November and December 2017.. We were required to report information to the state drinking water program by 6/30/2018, but failed to do so. We realize the importance of reporting information to the state to demonstrate whether or not your drinking water meets health standards.

What does this mean? What should I do?

There is nothing you need to do at this time. If a situation arises where the water is no longer safe to drink, you will be notified within 24 hours.

What is being done?

- LT2 (Long Term 2 Enhanced Surface Water Treatment) samples being collected.

The problem has been **resolved**. For more information, please contact **Jon Ashton** at **jon@jimtown.org** or **720-310-8258**, or **P.O. Box 297**, Jamestown, CO 80455

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

| Violations | | | | | |
|------------|----------|-------------|----------------|------------------|-----------------|
| Name | Category | Time Period | Health Effects | Compliance Value | TT Level or MCL |
| | | | | | |

| Significant Deficiencies | | | |
|--------------------------|--|--|---------------------------|
| Date Identified | Deficiency Description | Steps Taking to Correct and Progress To Date | Estimated Completion Date |
| 06/17/2016 | T119 - PROPER OPERATION; Surface water or ground water under the direct influence (GWUDI) of surface water treatment operational practices. Regulation 11, Section 11.8(1)(b) and CDPHE-WQCD Policy 4.; | | |

| Additional Deficiency Information |
|--|
| Explanation of the deficiencies and the steps taken to correct them: |
| |
| |
| |
| |