City of Trinidad, PWSID CO-0136800
2013 Annual Drinking Water Quality Report
for Calendar Year 2012

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.

General Information about Drinking Water

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.
- ***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:*** 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, the Colorado Department of Public Health and Environment prescribes 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.

Trinidad's Water Source, Source Water Assessment and Protection (SWAP)

The system's source of water is North Lake Reservoir & Monument Lake Reservoir as a secondary source.

The Colorado Department of Public Health and Environment has provided us with a Source Water Assessment Report for our water supply. For general information or to obtain a copy of the report please visit http://wqcdcompliance.com.ccr or http://emaps.dphe.state.co.us/website/SWAP_Summary/Counties/Las_Animas/136800-Trinidad_City_of_SW.pdf or a copy may be obtained by contacting Linda Vigil at (719) 846-9843.

The Source Water Assessment Report provides a screening-level evaluation of potential contamination that <u>could</u> occur. It <u>does not</u> mean that the contamination <u>has or will</u> occur. We can use this information to evaluate the need to improve our current water treatment capabilities and prepare for future contamination threats. This can help us ensure that quality finished water is delivered to your home. In addition, the source water assessment results provide a starting point for developing a source water protection plan. The potential sources of contamination in our source water area come from Existing/Abandoned Mine Sites, Land Use/Land Cover Types such as Row Crops, Pasture, Hay, Mixed Forest, Deciduous Forest, Road Miles, and Septic Systems.

Please contact us to learn more about what you can do to help protect your drinking water sources, any questions about the annual drinking water quality 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.

Terms and Abbreviations

To help you understand the terms and abbreviations used in this report, we have provided the following definitions:

- ***Parts per million (ppm) = Milligrams per liter (mg/L)*** - one part per million corresponds to one minute in two years or a single penny in $10,000.
- ***Parts per billion (ppb) = Micrograms per liter (µg/L)***- one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.
- ***Parts per trillion (ppt) = Nanograms per liter (nanograms/L)*** - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in $10,000,000,000.
- ***Parts per quadrillion (ppq) = Picograms per liter (picograms/L)*** - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in $10,000,000,000,000.
- ***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.
- ***Action Level*** **(AL)** - the concentration of a contaminant, which, if exceeded, triggers treatment or other requirements.
- ***Treatment Technique (TT)*** - A required process intended to reduce the level of a contaminant in drinking water.
- ***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 Contaminant Level*** **(MCL)**- The highest level of a contaminant allowed in drinking water.
- ***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.
- ***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.
- ***Gross Alpha (No Abbreviation):*** Gross alpha particle activity compliance value. It includes radium-226, but excludes radon 222 and uranium.
- ***Violation (No Abbreviation):*** Failure to meet a Colorado Primary Drinking Water Regulations.
- ***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 Exemption (V/E):*** Department permission not to meet a MCL or treatment technique under certain conditions.
- ***Compliance Value (No Abbreviation):*** Single or calculated value used to determine if regulatory contaminant level (e.g. MCL) is met. Examples of calculated values.
- ***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.
- ***Not Applicable (N/A):*** Does not apply or not available.

Detected Contaminants Table

NOTE: The table shows all detections found in the period of January 1, 2012 to December 31, 2012 unless otherwise noted.

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 Source
BARIUM	2008	0.042	0.042 - 0.042	1	Ppm	2	2	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLUORIDE	2012	0.88	0.88 - 0.88	1	Ppm	4	4	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories

Disinfection ByProducts (TTHMs and HAA5) sampled in the Distribution System

Contaminant Name	Year	Average	Range (Low-High)	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Source
TOTAL HALOACETIC ACIDS (HAA5)	2012	6.4	0 to 15.2	4	ppb	60	N/A	No	By-product of drinking water disinfection
TOTAL TRIHALOMETHANES (TTHM)	2012	24.13	17.8 to 33.8	4	ppb	80	N/A	No	By-product of drinking water chlorination

Total Organic Carbon (Disinfection ByProducts Precursor) Removal of Ratios of Raw & Finished Water

Contaminant Name	Year	Average	Range (Low – High)	Sample Size	Unit of Measure	TT Minimum Ratio	TT Violation	Typical Sources
TOTAL ORGANIC CARBON RATIO	2012	1	1 - 1	4	Ratio	1.00	No	Naturally present in the environment.

Lead and Copper sampled in the Distribution System

Contaminant Name	Time Period	90th Percentile	Sample Size	Unite of Measure	90th Percentile AL	Sample Sites Above AL	90th Percentile Exceedance	Typical Sources
COPPER	7/9/2012 - 7/10/2012	0.085	30	ppm	1.3	None	0	Corrosion of household plumbing systems; Erosion of natural deposits
LEAD	7/9/2012 – 7/10/2012	3	30	ppb	15	None	0	Corrosion of household plumbing systems; Erosion of natural deposits

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 2012	Highest single measurement: 0.29 NTU	Maximum 1 NTU for any single measurement	No	Soil Runoff
TURBIDITY	Date/ Month: Dec 2012	Lowest-monthly 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

Detected Contaminants (Page 2)

CITY OF TRINIDAD routinely monitors for contaminants in your drinking water according to Federal and State laws. On Page 2, the table will show all detections found in the period from January 1 to December 31, 2012 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. The "Range" column in the table will show a single value for those contaminants that were sampled only once. Violations, if any, are reported in the next section of this report.

NOTE: Only detected contaminants sampled within the last 5 years appear in the table. If the contaminant name does not appear in the table section, it means that the City of Trinidad did not detect any contaminants in the last round of monitoring.

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 elevated lead levels in your home's water, you may wish to have your water tested at your expense. 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 (800) 426-4791 or at http://www.epa.gov/safewater/lead.

Violations, Significant Deficiencies, and Formal Enforcement Actions

• Total Coliform (TCR) and Residual Disinfectant: In the month of September 2012, our drinking water system violated a drinking water standard which does not require immediate action to be taken but it does require notification to the public through this report. In addition, the City of Trinidad has since taken the required samples and remains in compliance with all drinking water regulations, as well as all samples meeting drinking water standards.

Category: Tier 3, Monitoring and Reporting Requirements
Time Period: 9/1/2012 – 9/30/2012
Health Effects: None or N/A
Violation Requirements: This violation requires the system to provide a Tier 3 public notification within 365 days of the date of violation to the persons served by the water system.

• *There are NO significant deficiencies or formal enforcement actions against the City of Trinidad.*

Please contact James Fernandez/Linda Vigil at 719-846-9843 with any questions concerning the report, the Drinking Consumer Confidence Rule (CCR) or for public participation opportunities that my affect the water quality.

2013 Annual Consumer Confidence Report City of Trinidad PWSID CO-0136800 for 2012 Calendar Year

CITY OF TRINIDAD, COLORADO
1876

City of Trinidad
135 N. Animas Street
Trinidad, CO 81082
719-846-9843
Website: www.trinidad.co.gov