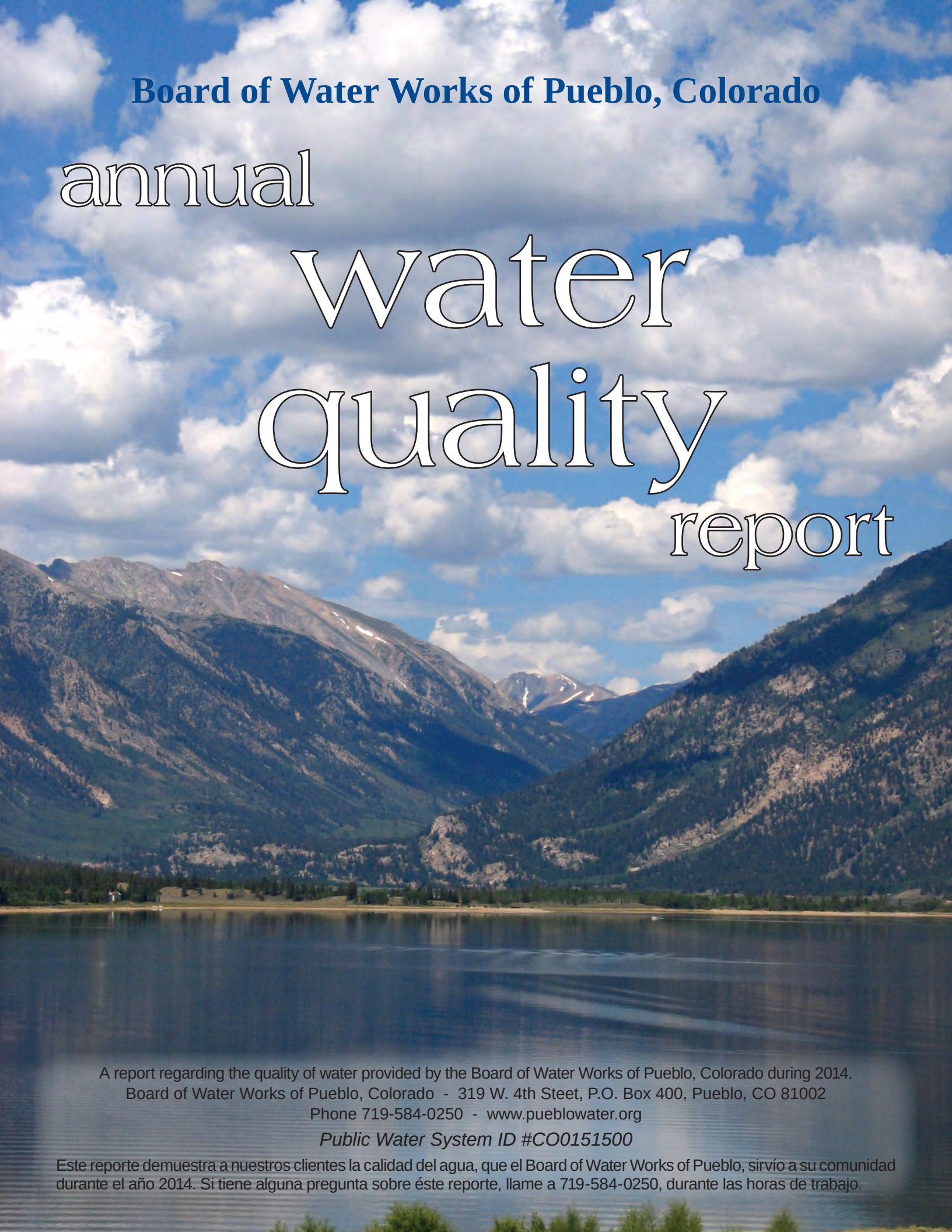


Board of Water Works of Pueblo, Colorado

annual water quality report

A report regarding the quality of water provided by the Board of Water Works of Pueblo, Colorado during 2014.

Board of Water Works of Pueblo, Colorado - 319 W. 4th Steet, P.O. Box 400, Pueblo, CO 81002
Phone 719-584-0250 - www.pueblowater.org

Public Water System ID #CO0151500

Este reporte demuestra a nuestros clientes la calidad del agua, que el Board of Water Works of Pueblo, sirvío a su comunidad durante el año 2014. Si tiene alguna pregunta sobre éste reporte, llame a 719-584-0250, durante las horas de trabajo.

Water - we treat it right!

The Board of Water Works of Pueblo is proud to present our annual report on the quality of the water we deliver to you. Our mission statement says that we are "committed to providing the highest quality of water at the lowest possible cost." So it has been for our 141 years of operation, and so it shall continue to be. We constantly work to produce drinking water that meets or exceeds all state and federal drinking water standards. As these standards continue to become more demanding, we continue to adopt the newest, best methods of treating and delivering the best quality drinking water to you. At the same time, we have managed to keep Pueblo's rates for water well below average for Front Range cities.
For more information about this report, or for any questions relating to your drinking water, please call Don Colalancia, Division Manager, Water Quality, Treating, and Pumping at 584-0265.

Where does our water come from?

Pueblo's drinking water sources are defined as "surface waters." Sources of Pueblo's drinking water include rivers, lakes, streams and reservoirs originating in the mountains of Colorado.

The water travels from the mountains down the Arkansas River to Pueblo Reservoir.

From Pueblo Dam, a pipeline carries the water to the Whitlock Treatment Plant, where it is treated to meet or exceed state and federal standards.

After treatment, the water is piped via pump stations to storage tanks for delivery to Pueblo homes and businesses.

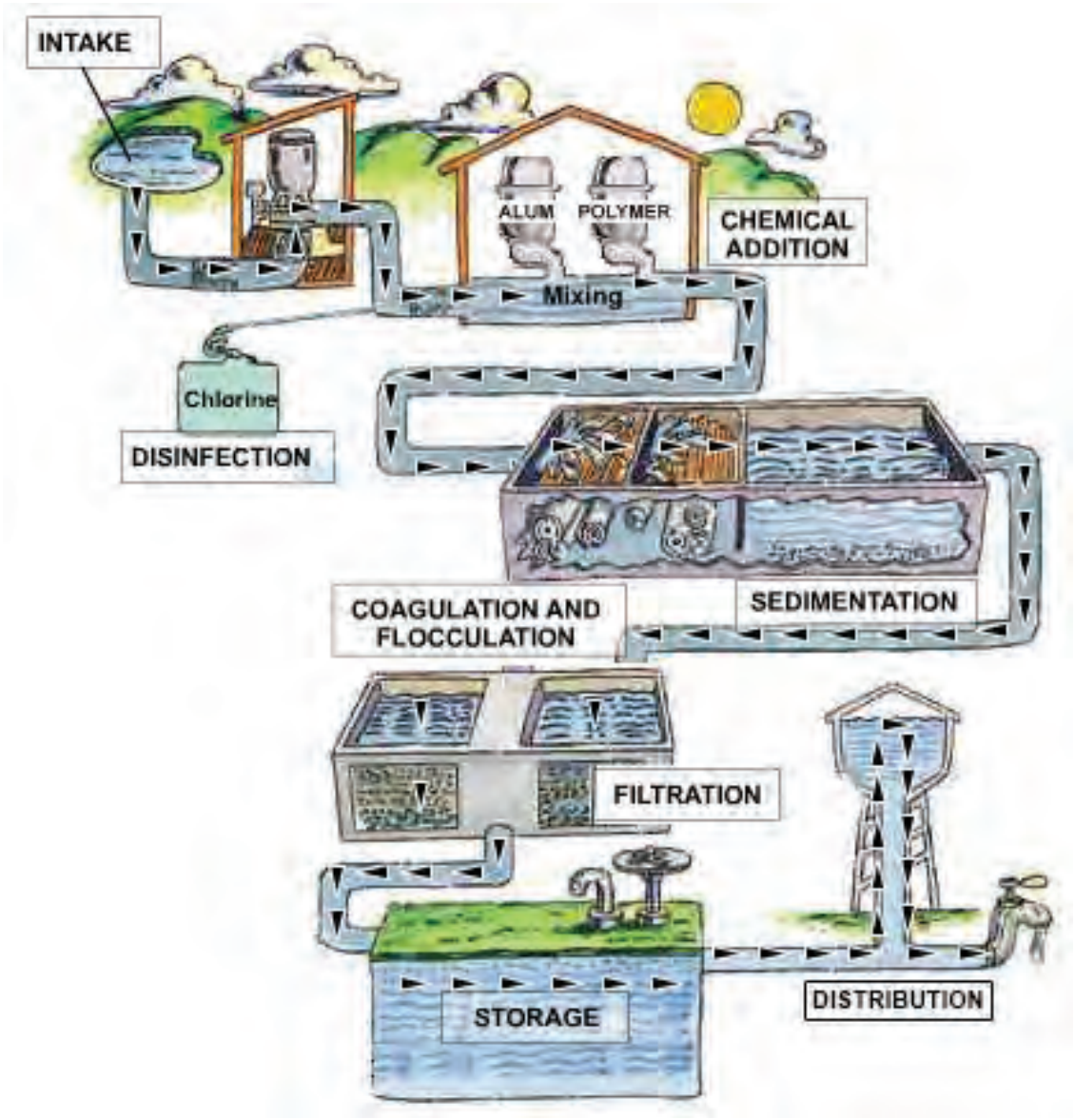
The Source Water Assessment Program

The Colorado Department of Public Health and Environment (CDPHE) has provided us with a **Source Water Assessment Report** for our water supply. You may obtain a copy of the report by visiting www.cdphe.state.co.us/wq/sw/swaphom/html, or by contacting Don Colalancia at 719-584-0265.

Customers should know that the Board of Water Works diligently monitors the sources of your drinking water starting from the mountainous watershed, down the Arkansas River to Pueblo Reservoir, through the Whitlock Treatment Facility and on to your tap to provide the highest quality of drinking water possible.

How is our water treated?

Water is treated using several treatment processes. Untreated water is brought to the Whitlock Treatment Plant via a pipeline from the Pueblo Reservoir. At the treatment plant, chemicals are used to remove objectionable tastes and odors from the raw water. Next, the water is disinfected and clarified to remove particulates and biological contaminants. Finally, the water is filtered and fluoridated to meet state and federal drinking water standards. The high quality drinking water reaches you through the distribution system.



Special Information About Lead

The results of lead and copper testing in the following data table were obtained from testing 50 homes in the distribution system at highest risk for lead and copper contamination in 2014.

Infants and young children are typically more vulnerable to lead in drinking water than the general population. 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.

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. Flushing your tap for 30 seconds to 2 minutes before using tap water for consumption will decrease the amount of lead if it is present.

Additional information is available from the **Safe Drinking Water Hotline (800-426-4791).**

What's In Our Water?

To ensure that tap water is safe to drink, the U.S. Environmental Protection Agency prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

Special Health Issues

Some people may be more vulnerable to contaminants in drinking water than the general population.

Immunocompromised persons such as those with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from 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 EPA/CDC (Centers for Disease Control) guidelines on appropriate means to lessen the risk of infections by cryptosporidium and microbiological contaminants, call the **EPA Safe Drinking Water Hotline at (800) 426-4791**.

Substances sometimes found in drinking water

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 can acquire naturally occurring minerals, and in some cases, radioactive material; and substances resulting from the presence of animals or from human activity.

Substances that may be present in source water include:

- **Microbial contaminants,** such as viruses and bacteria that 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** that 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,** that can be naturally occurring or be the result of oil and gas production and mining activities.

Detected Contaminants

The Board of Water Works of Pueblo, CO routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table shows 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 concentration 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 below will show a single value for those contaminants that were sampled only once to meet State of Colorado compliance requirements. Please note that only detected contaminants appear in this report. If no table appears in this section, then the Board of Water Works of Pueblo, Colorado did not detect any contaminants in the last round of monitoring. Violations and Enforcement Actions if any, will appear in a separate table following the "Definitions" section. ***No violations or enforcement actions occurred in 2014.***

See "Terms and Abbreviations" on following page

Listed in the table below are contaminants ***detected*** in Pueblo's drinking water in 2014. ***All are below allowed levels.*** For a complete list of all analyses and test results completed in 2014 for Pueblo's drinking water, please visit our website at: www.pueblowater.org

To help you better understand the terms used in the table , we have provided the following definitions:

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.

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).

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.

Settling pond and storage tanks at Whitlock Water Treatment Plant

See tables on following pages

Disinfectants Sampled in the Distribution System

Contaminant Name	Monitoring Period	Results	Number of Samples	TT Requirement*	TT Violation?	Typical Sources
Chloramine	9/1/2014 - 9/30/2014	Lowest monthly percentage of samples meeting TT requirement: 97.37%	152	For any two consecutive months, at least 95% of samples (per month) must be detectable*	No	Water Additive used to control microbes

Microorganism Contaminants Sampled in the Distribution System

Contaminant Name	Monitoring Period	Results	Number of Samples	MCL*	MCLG*	MCL Violation?	Typical Sources
Coliform (TCR)	7/1/2014 - 7/31/2014	0.78% Positive Samples	128	No more than 5% positive samples per period	0	No	Naturally present in the environment

Lead and Copper Sampled in the Distribution System

Contaminant Name	Monitoring Period	90th Percentile	Number of Samples	Unit of Measure	Action Level*	Sample Sites Above AL	90th Percentile AL Exceedance	Typical Sources
Copper	6/3/2014 - 8/5/2014	0.27	50	ppm*	1.3	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead		9.3	50	ppb*	15	1	No	

Disinfection By Products (TTHMs, HAA5) Sampled in the Distribution System

Contaminant Name	Year	Average of Individual Samples	Range of Individual Samples (Lowest - Highest)	Number of Samples	Unit of Measure	MCL	MCLG	MCLG Violation	Typical Sources
Total Haloacetic Acids (HAA5)	2014	15.6	4.37 - 37.2	32	ppb	60	N/A	No	By-product of drinking water disinfection
Total Trihalomethanes (TTHMs)	2014	8.44	4.2 - 15.3	32	ppb	80	N/A	No	

Turbidity Sampled at the Entry Point to the Distribution System

Contaminant Name	Sample Date	Level Found	TT Requirement	TT Violation?	Typical Sources
Turbidity	November	Highest single measurement: 0.12 NTU*	Maximum: 1 NTU for any single measurement	No	Soil runoff
Turbidity	December	Lowest monthly percentage of samples meeting TT requirements: 100%	In any month, at least 95% of samples must be less than: 0.3 NTU	No	Soil runoff

Total Organic Carbon (Disinfection By Products Precursor) Percentage Removal Ratio of Raw and Finished Water

Contaminant Name	Year	Average of Individual Ratio Samples	Range of Individual Ratio Samples (Lowest - Highest)	Number of Ratio Samples	Unit of Measure	TT Minimum Ratio	TT Violation?	Typical Sources
Carbon, Total	2014	1.09	0.8 - 1.55	6	Ratio	1.00	No	Naturally present in the environment

Radionuclides Sampled at the Entry Point to the Distribution System

Contaminant Name	Year	Average of Individual Samples	Range of Individual Samples (Lowest - Highest)	Number of Samples	Unit of Measure	MCL	MCLG	MCL Violation?	Typical Source
Gross Alpha	2014	1.23	1.23	1	pCi/L	15	0	No	Erosion of natural deposits
Combined Radium	2012	0.35	0.3 - 0.4	2	pCi/L	5	0	No	Erosion of natural deposits
Combined Uranium	2014	1.9	1.9	1	ppb	30	0	No	Erosion of natural deposits

Regulated Contaminants Sampled at the Entry Point to the Distribution System

Contaminant Name	Year	Average of Individual Samples	Range of Individual Samples (Lowest - Highest)	Number of Samples	Unit of Measure	MCL	MCLG	MCL Violation?	Typical Source
Barium	2014	0.06	0.06	1	ppm	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion from natural deposits
Chromium	2014	1.3	1.3	1	ppb	100	100	No	Discharge from steel and pulp mills; erosion of natural deposits.
Fluoride	2014	0.75	0.75	1	ppm	4	4	No	Erosion of natural deposits; Water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate	2014	0.28	0.28	1	ppm	10	10	No	Runoff from fertilizer use; leaching from septic tanks, sewage; Erosion of natural deposits
Selenium	2014	5.1	5.1	1	ppb	50	50	No	Discharges from petroleum and metal refineries, discharge from mines; Erosion of natural deposits

Unregulated or Secondary Contaminants*

Contaminant Name	Year	Average of Individual Samples	Range of Individual Samples (Lowest - Highest)	Number of Samples	Unit of Measure	Secondary Standard
Total Dissolved Solids	2012	246	242 - 250	2	ppm	500

Violations and Formal Enforcement Actions

No Violations or Formal Enforcement Actions in 2014

System Deficiencies

Pueblo Water currently uses eighteen water storage tanks in the distribution system. All tanks have been continuously monitored since 2001 and no drinking water contamination has ever been confirmed in a water storage tank.

The table below lists deficiencies in eight water storage tanks as determined by a Sanitary Survey conducted in 2014. The tank vents and overflow piping in these tanks had protective screening that did not meet current regulation specifications as of the inspection date. Six of these tanks required exterior safety modifications before the vent screens could be installed. We estimate that the recommended modifications to all eight tanks listed will be completed by June 1, 2015. Two additional tanks, LaVista North and LaVista South Tanks were not included in the table below because they were previously scheduled for overflow and venting improvements. All other water storage tanks were modified before the Sanitary Survey date.

Significant Deficiencies

Date Identified	Deficiency Description	Steps Taking to Correct and Progress to Date	Estimated Completion Date
8/13/2014	F310 - STORAGE CONDITION; Whitlock North Tank The condition of the storage structure may allow potential sources of contamination to enter the tank. DCPWS Appendix I, 1.0.9.	Size 24 mesh screening installed on the Whitlock North Tank vents and overflow piping.	Completed 9/18/2014
8/13/2014	F310 - STORAGE CONDITION; Whitlock South Tank The condition of the storage structure may allow potential sources of contamination to enter the tank. DCPWS Appendix I, 1.0.9.	Size 24 mesh screening installed on the Whitlock South Tank vents and overflow piping.	Completed 9/19/2014
8/13/2014	F310 - STORAGE CONDITION; JO Jones SE Tank The condition of the storage structure may allow potential sources of contamination to enter the tank. DCPWS Appendix I, 1.0.9.	Steepness of tank dome required safety modifications before size 24 mesh screening can be installed on tank vents. Overflow piping has been addressed.	Estimated Completion Date 6/1/15
8/13/2014	F310 - STORAGE CONDITION; JO Jones NW Tank The condition of the storage structure may allow potential sources of contamination to enter the tank. DCPWS Appendix I, 1.0.9.	Steepness of tank dome required safety modifications before size 24 mesh screening can be installed on tank vents. Overflow piping has been addressed.	Estimated Completion Date 6/1/15
8/13/2014	F310 - STORAGE CONDITION; JO Jones N. Middle Tank The condition of the storage structure may allow potential sources of contamination to enter the tank. DCPWS Appendix I, 1.0.9.	Steepness of tank dome required safety modifications before size 24 mesh screening can be installed on tank vents. Overflow piping has been addressed.	Estimated Completion Date 6/1/15
8/13/2014	F310 - STORAGE CONDITION; JO Jones S. Middle Tank The condition of the storage structure may allow potential sources of contamination to enter the tank. DCPWS Appendix I, 1.0.9.	Steepness of tank dome required safety modifications before size 24 mesh screening can be installed on tank vents. Overflow piping has been addressed.	Estimated Completion Date 6/1/15
8/13/2014	F310 - STORAGE CONDITION; Belmont South Tank The condition of the storage structure may allow potential sources of contamination to enter the tank. DCPWS Appendix I, 1.0.9.	Steepness of tank dome required safety modifications before size 24 mesh screening can be installed on tank vents. Overflow piping has been addressed.	Estimated Completion Date 5/1/15
8/13/2014	F310 - STORAGE CONDITION; Belmont North Tank The condition of the storage structure may allow potential sources of contamination to enter the tank. DCPWS Appendix I, 1.0.9.	Steepness of tank dome required safety modifications before size 24 mesh screening can be installed on tank vents. Overflow piping has been addressed.	Estimated Completion Date 5/1/15