

**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 2013.  
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*Public Water System ID #CO0151500*

Este reporte demuestra a nuestros clientes la calidad del agua, que el Board of Water Works of Pueblo, sirvió a su comunidad durante el año 2013. 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 140 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 and Treatment, 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.



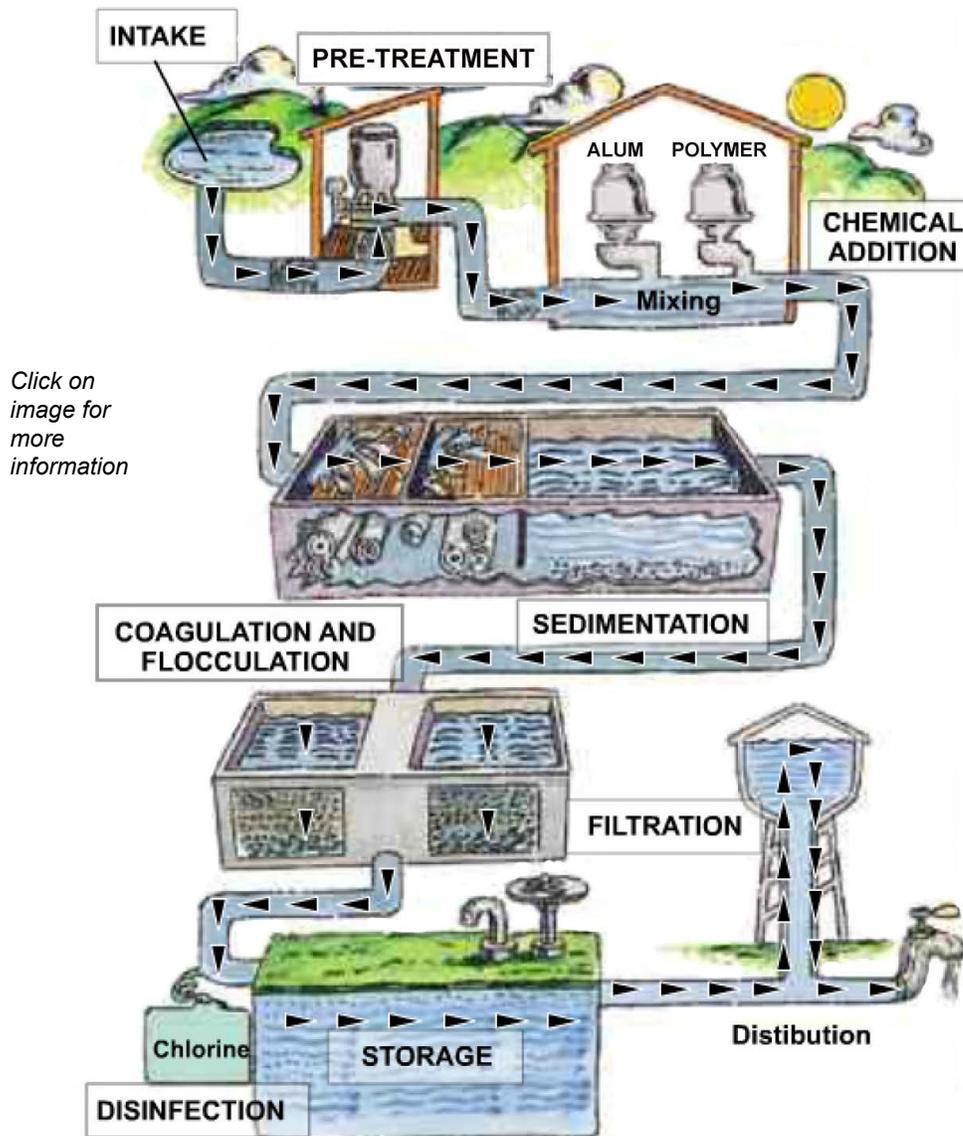
## The Source Water Assessment Program

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](http://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 data table on page 5 were obtained from testing 50 homes in the distribution system at highest risk for lead and copper contamination in 2011.

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 table on the following pages shows all detections found in the period of January 1 to December 31, 2013 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 2013.

**See table on following pages**



### Disinfectants Sampled in the Distribution System

Contaminant Name	Monitoring Period	Results	Number of Samples	TT Requirement*	TT Violation?	Typical Sources
Chloramine	11/01/2013 to 11/30/2013	Lowest monthly percentage of samples meeting TT requirement: 97.4%	115	For any two consecutive months, at least 95% of samples (per month) must be greater than 0.001 ppm*	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)	11/01/2012 to 11/30/2012	0.79% Positive Samples	126	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 Action Level	Typical Sources
Copper	06/21/2011 to 08/16/2011	0.206	50	ppm*	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits
Lead		7	50	ppb*	15	0	

### 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)	2013	7.55	2.4 - 15.1	32	ppb	60	N/A	No	By-product of drinking water disinfection
Total Trihalomethanes (TTHMs)	2013	9.88	2.85 - 17.3	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	10/1/2013	Highest single measurement: 0.17 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	2013	1.14	1.00 - 1.59	10	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	2012	1.49	0.29 - 2.69	2	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	2012	3.45	3.3 - 3.6	2	pCi/L	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	2013	0.06	0.06	1	ppm	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion from natural deposits
Fluoride	2013	0.47	0.47	1	ppm	4	4	No	Erosion of natural deposits; Water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate	2013	0.24	0.24	1	ppm	10	10	No	Runoff from fertilizer use; leaching from septic tanks, sewage; Erosion of natural deposits
Selenium	2013	5	5	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 2013

Listed in the table above are contaminants ***detected*** in Pueblo's drinking water in 2013. ***All are below allowed levels.*** For a ***complete list of all analyses and test results completed in 2013 for Pueblo's drinking water, please visit our web site at [www.pueblowater.org](http://www.pueblowater.org)***.

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

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

MCL - Maximum Contaminant Level - The highest level of a contaminant allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

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.

N/A - Not Applicable - No regulatory value assigned for this field.

NTU - Nephelometric Turbidity Unit - Turbidity is a measure of the cloudiness of water. We monitor it because it is a good indicator of the effectiveness of a water plant's filtration system.

ppm - parts per million - One part per million corresponds to one minute in two years.

ppb - part per billion - One part per billion corresponds to one minute in 2000 years.

\*Secondary Contaminants - 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. EPA recommends these standards, but does not require water systems to comply.

TT - Treatment Technique - A required process intended to reduce the level of a contaminant in drinking water.