



City of  
*Cheyenne*

## Board of Public Utilities

### 2024 Consumer Confidence Report

The City of Cheyenne Board of Public Utilities (BOPU) is proud to provide this 2024 Consumer Confidence Report (CCR), also known as an annual drinking water quality report. This CCR summarizes water quality from January 1 through December 31, 2024.

The BOPU prepares this report each year in accordance with the [Safe Drinking Water Act](http://www.epa.gov/sdwa) ([www.epa.gov/sdwa](http://www.epa.gov/sdwa)). The CCR includes a summary of source water information, detected contaminants, compliance with Federal, State, and local regulations and standards, and educational information about Cheyenne's water system. The purpose of the CCR is to improve public health by providing information that assists consumers with making educated decisions regarding any potential health risks pertaining to the quality, treatment, and management of their drinking water. If you have any questions about this CCR, call the Water and Wastewater Quality Control Supervisor at (307) 635-7693.

Este reporte contiene información importante acerca de su agua potable. Por asistencia traduciendo este reporte en español o si tiene unas preguntas de acerca al reporte por favor de llamar a nuestro representante de servicio al cliente. El número de teléfono es: (307) 637-6460.

### How does Cheyenne's water compare to drinking water standards?

The BOPU is proud to report that Cheyenne's drinking water meets or exceeds (is better than) federal requirements.

The BOPU's Water Treatment Division monitors water quality 24 hours a day, 7 days a week using in-line instruments. Operators also confirm instrument readings with daily sampling and lab analyses. Lab staff monitor water quality throughout Cheyenne weekly. While some parameters were detected in water samples, there were no violations of [National Primary Drinking Water Regulations](http://www.epa.gov/ground-water-and-drinking-water/national-primary-drinking-water-regulations) ([www.epa.gov/ground-water-and-drinking-water/national-primary-drinking-water-regulations](http://www.epa.gov/ground-water-and-drinking-water/national-primary-drinking-water-regulations)) or [Secondary Drinking Water Standards](http://www.epa.gov/sdwa/secondary-drinking-water-standards-guidance-nuisance-chemicals) ([www.epa.gov/sdwa/secondary-drinking-water-standards-guidance-nuisance-chemicals](http://www.epa.gov/sdwa/secondary-drinking-water-standards-guidance-nuisance-chemicals)). The tables below show the most recent water quality data (through December 31, 2024).

## Where does Cheyenne's water come from?

Cheyenne's water comes from both surface water and groundwater sources. A [Source Water Assessment and Protection](https://cheyennebopu.org/files/assets/bopu/divisions-documents/admin/water-conservation/2004-source-water-assessments_final-report.pdf) (https://cheyennebopu.org/files/assets/bopu/divisions-documents/admin/water-conservation/2004-source-water-assessments\_final-report.pdf) report was completed in 2004.

### Douglas Creek

Surface water is collected from the Douglas Creek Watershed located about 75 miles west of Cheyenne in the Medicine Bow Mountains (also called the Snowy Range). Water from Douglas Creek is stored in Rob Roy Reservoir. Two pipelines deliver the water from Rob Roy Reservoir to Granite and Crystal Reservoirs.



When the BOPU collects water from Douglas Creek, a tributary to the North Platte River, the BOPU replaces the water with water from another source. The BOPU replaces the water with water from the west of the Continental Divide in the Little Snake River Watershed.

The Little Snake River is in the Sierra Madre Mountains, approximately 110 miles west of Cheyenne. A series of collection structures and pipelines collect water from tributaries to the Little Snake River and transport the water under the Continental Divide to Hog Park Reservoir. Water from Hog Park Reservoir can be released into the North Platte River and can be recaptured in Seminoe Reservoir. The BOPU uses water from both Hog Park and Seminoe Reservoirs as trade water. When the BOPU collects water at Rob Roy Reservoir, the BOPU releases the same amount of water from either Hog Park Reservoir or Seminoe Reservoir. This way, the BOPU can use the water stored in Rob Roy Reservoir for drinking water in Cheyenne without affecting other water users along the North Platte River.

The Little Snake River is a tributary to the Colorado River. Interstate agreements between Wyoming, Arizona, California, Colorado, New Mexico, Nevada, and Utah determine how much water gets used in each state. These agreements rely on water stored in reservoirs to distribute water between the states. After decades of drought, reservoir storage in the Colorado River is declining and may reach critically low levels. If reservoir storage continues to decline, some water users in Wyoming (including the City of Cheyenne) may not be able to collect water from sources that are in the Colorado River system. This would reduce Cheyenne's water supply by approximately half. For more information, see the [Wyoming State Engineer's Colorado River Working Group](http://seo.wyo.gov/interstate-streams/Colorado-river-working-group) (seo.wyo.gov/interstate-streams/Colorado-river-working-group).

### Crow Creek

Surface water is also collected from the Crow Creek Watershed. Crow Creek Watershed is located about 30 miles west of Cheyenne in the Laramie Mountains near the Vedauwoo Recreation Area. Water from Crow Creek is stored in North Crow Reservoir (North Crow Creek),

Granite and Crystal Reservoirs (Middle Crow Creek) and South Crow Diversion Structure (South Crow Creek).

Water stored in Crystal Reservoir, Lower North Crow Reservoir, and South Crow Diversion Structure can be delivered to the R.L. Sherard Water Treatment Plant by pipelines.



## Groundwater

Cheyenne owns and operates about 36 wells in four well fields (Bell, Borie, Federal and Happy Jack). These wellfields are located west and northwest of Cheyenne. The wells pump from the High Plains (Ogallala and White River) Aquifers.

In 2020, the BOPU completed a study on the ratio of surface water to groundwater in Cheyenne's drinking water. The study concluded that because of the treatment capabilities at the water treatment plant, operators can reduce the amount of groundwater in the blend from 25 percent to 15 percent and still maintain water quality. This allows operators to use local aquifers more sustainably.

## Learn more about Cheyenne's water.

We encourage our customers to learn about Cheyenne's water system and the [Safe Drinking Water Act](http://www.epa.gov/sdwa) ([www.epa.gov/sdwa](http://www.epa.gov/sdwa)). Our water protects our health, provides fire protection, provides a natural resource for businesses, and provides for our way of life. Our water is vital to our future. Visit our website at [www.cheyennebopu.org](http://www.cheyennebopu.org) for additional information about our water system. For example:

- This link [www.cheyennebopu.org/Your-Water/Water-Supply/Source-Water](http://www.cheyennebopu.org/Your-Water/Water-Supply/Source-Water) contains a description of where Cheyenne's water comes from including a map of water resources.
- This link [www.cheyennebopu.org/Your-Water/Water-Supply/Reservoir-Levels](http://www.cheyennebopu.org/Your-Water/Water-Supply/Reservoir-Levels) shows current reservoir storage levels.
- This link [www.cheyennebopu.org/Your-Water/Water-Quality](http://www.cheyennebopu.org/Your-Water/Water-Quality) contains information about water quality such as hardness, clarity, fluoride, and other water quality parameters.
- The City of Cheyenne Planning and Development Department and the BOPU prepared a map and storyboard about where Cheyenne gets its water. Use this link to access the storyboard, <https://www.cheyennecity.org/News-articles/Where-Does-Cheyenne-Get-Its-Water> (<https://storymaps.arcgis.com/stories/14c2541d82f54f67a8611ae576965605>).

## What is the BOPU doing to manage water sustainably?

Cheyenne is in the high plains. We are surrounded by short-grass prairie with vegetation that is adapted to long periods without water. In Southeast Wyoming, water is a limited resource. Here are some ways the BOPU is managing water resources sustainably.

- **Water Conservation Program** – Cheyenne operates a water conservation program that sets watering schedules and rules, assists customers in identifying leaks, and determines bill structures that encourage efficient water use. Additionally, the BOPU runs the OUR Water (Outreach for Upgrades and Repairs) program that provides customers with high efficiency indoor fixtures and other water saving tools, including toilet components to eradicate leaks. For more information, visit [www.cheyennebopu.org/Cheyennes-Water/Water-Conservation](http://www.cheyennebopu.org/Cheyennes-Water/Water-Conservation).
- **Water Reuse** – Once water goes down the drain, it will be used again. The BOPU reclaims wastewater at Cheyenne's water reclamation facilities. The BOPU renamed the wastewater treatment plants to water reclamation facilities because the treatment processes used at the facilities reclaim water making it safe to use again. Some of this water is recycled and piped back into Cheyenne to water parks and athletic fields. Water that isn't recycled is returned to Crow Creek where it is used by livestock, wildlife, aquatic species, and other users downstream.
- **Hydroelectric Generation** – In 2023, the BOPU completed construction on a hydroelectric generation facility. The hydroelectric generator produces power from water flowing to the water treatment plant. Water flowing to the treatment plant comes from Crystal Reservoir which is over 500 feet higher in elevation than the treatment plant. Because of this elevation change, water enters that plant at pressures around 210 pounds per square inch. The generator uses water to spin a turbine that produces electricity. In 2024, the hydroelectric generator produced an average of 300 kilowatts (kW) during winter months and up to 815 kW during summer months. Of this amount, the water treatment plant used around 158 kW. The rest is sold to Black Hills Energy and used by electrical customers in the Cheyenne area.
- **Additional Water Resources** – The BOPU is actively investigating and pursuing additional surface and groundwater sources to prepare for possible reductions in water supply due to Colorado River curtailment.

## A Note from the EPA About Drinking Water Sources and Regulations

All 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.

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. To ensure tap water is safe to drink, the EPA regulates the amount of certain contaminants in water from public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Contaminants that may be present in source water include:

Microbial contaminants, such as viruses and bacteria, 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, which may come from a variety of sources such as agricultural, urban storm water runoff, and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals which are by-products of industrial process and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (800) 426-4791 or by visiting <https://www.epa.gov/sdwa>.

## Definitions

In the tables below, you will find many terms and abbreviations which might not be familiar. To help you better understand these terms, we've provided the following definitions.

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

**Maximum Contaminant Level (MCL)** - The "maximum allowed" is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the Maximum Contaminant Level Goals as feasible using the best available treatment technology.

**Maximum Contaminant Level Goal (MCLG)** - The "Goal" is 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 (MRDL)** – The highest level of disinfectant allowed in drinking water. The addition of disinfectant is necessary for control of microbial contaminants.

**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.

**National Primary Drinking Water Regulations (NPDWR)** – Standards including AL, MCL, MRDL, and TT that are established under the Safe Drinking Water Act.

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

**Parts per billion (ppb) or microgram per liter (µg/L)** - One part per billion is one drop in a billion drops. Using time, it is equal to one second in 31.71 years. In finance, it is equal to one penny in \$10,000,000.

**Parts per million (ppm) or milligram per liter (mg/L)** - One part per million is one drop in a million drops. Using time as a scale, it is equal to one second in 11.57 days. In finance, it is equal to one penny in \$10,000.

**Picocurie per Liter (pCi/L)** - Picocurie per liter is a measure of radiation.

**RTST** - Sample was taken at the Round Top Storage Tank.

**SWTP** - Sample was taken at the Sherard Water Treatment Plant.

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

**Non-detect (ND)** – Contaminant was not detected in the sample above the analytical method's reporting limit. This means the amount of the contaminant is below the analytical method's ability to detect it.

## Microbial Contaminants and Turbidity

Contaminant	Violation Yes/No	Level Detected	MCLG	MCL	Likely Source of Contamination/ Comments
Total Coliform Bacteria	No	Presence/ Absence Testing	0	Presence of coliform in $\geq 5\%$ of monthly samples	Naturally present in the environment.  720 samples were required for regulatory compliance. The BOPU collected 1,014 samples. Of that number, no samples tested positive for total coliform.
Turbidity	No	100% $\leq$ 0.062 NTU  95% $\leq$ 0.043 NTU	N/A	TT 95% $<$ 0.3 NTU	Soil runoff. Maximum allowable filtered water turbidity is 0.3 NTU in 95% of all samples. Cheyenne's water was much lower with 100% of samples less than 0.062 NTU and 95% of samples were less than 0.043 NTU. Turbidity values are recorded every 4 hours from all filters in operation and values reported monthly to the EPA. Turbidity is a measurement of the cloudiness of water caused by suspended particles and is a good indicator of general water quality and the effectiveness of water treatment processes.

Name	Violation Yes/No	Level Detected	MRDLG	MRDL	Likely Source of Contamination/ Comments
Chlorine	No	0.2 to 1.4ppm	4	4	Drinking water disinfectant is used to control microbial growth.

The BOPU tested raw (untreated) water from Crystal Reservoir for *Giardia* and *Cryptosporidium* in 2017 but found less than one per liter of sample.

## Inorganic Contaminants

Contaminant	Violation Yes/No	Level Detected	Unit	MCLG	MCL	Likely Source of Contamination/ Comments
Copper	No	90 percent of results were less than 0.31. No analysis results exceeded the MCL. Results ranged from ND to 0.80.	ppm	1.3	AL=90%<1.3	Corrosion of household plumbing systems; naturally present in the environment; leaching from wood preservatives. This sample was taken from a private residence.
Fluoride	No	RTST: 0.5 SWTP: 0.5	ppm	4	4	Erosion of natural deposits; water additive that promotes strong teeth.  The samples reported here were collected as part of inorganic contaminant monitoring required under the Safe Drinking Water Act. Operators also monitor fluoride daily as part of treatment process control. Fluoride concentrations from these analyses averaged a 0.6.
Lead	No	90 percent of results were less than 9.0. Results ranged from ND to 27. Five of the 62 samples taken exceeded the AL.	ppb	0	AL=90%<15	Corrosion of household plumbing systems These samples were taken from private residences. The highest result was 27 $\mu\text{g/L}$ or ppb. This home was later confirmed to be empty, undergoing remodeling, and was not a representative sample of normal water quality.
Nitrate + Nitrite (as Nitrogen)	No	RTST: 0.47 SWTP: 0.32	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks; sewage; naturally present in the environment.

Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cyanide, Mercury, Nickel, Selenium and Thallium were analyzed for but not detected by certified laboratory analysis.

Asbestos was analyzed in 2022 but not detected by certified laboratory analysis.



Sodium was detected in laboratory analysis (SWTP: 14.6 ppm, RTST: 14.9 ppm). Sodium does not have National Primary Drinking Water Regulation or Secondary Drinking Water Regulation. Sodium comes primarily from water treatment chemicals used to adjust water pH and from the erosion of natural deposits.

## Organic Contaminants

Contaminant	Violation Yes/No	Level Detected RTST	Level Detected SWTP	Unit	MCLG	MCL	Likely Source of Contamination/ Comments
Total Trihalomethanes (sum of the 4 compounds: Chloroform, Bromoform, Bromodichloromethane, Dibromochloromethane)	No	Min=30 Max=30 Avg=30	Min=25.5 Max=47.3 Avg=34.4	ppb	0	80	By-product of drinking water chlorination. The values reported are from the highest locational running average of 8 sites.
Haloacetic Acid (Sum of the 5 compounds: Monochloroacetic Acid, Dichloroacetic Acid, Trichloroacetic Acid, Monobromoacetic Acid, Dibromoacetic Acid)	No	Min=20.8 Max=20.8 Avg=20.8	Min=18.3 Max=25.3 Avg=20.6	ppb	0	60	By-product of drinking water chlorination. The values reported are from the highest locational running average of 8 sites.
Total Organic Carbon (TOC)	No	N/A	Raw Water Avg. = 4.1  Treated Water Avg = <2	ppm	N/A	TT	Natural organic matter present in the environment. TOC was measured each month and removal requirements were met. TOC has no health effects. TOC provides a medium for the formation of disinfection byproducts such as trihalomethanes and haloacetic acids. Detection limit for TOC determined by independent lab is 2 mg/L

The following semi-volatile organic compounds were analyzed for but not detected by certified independent laboratory analysis:

Alachlor; Aldrin; Aroclor 1016; Aroclor 1221; Aroclor 1232; Aroclor 1242; Aroclor 1248; Aroclor 1254; Aroclor 1260; Atrazine; Benzo(a)pyrene; bis(2-ethylhexyl)Adipate; bis(2-ethylhexyl)Phthalate; Butachlor; Chlordane; Dieldrin; Endrin; gamma-BHC (Lindane); Heptachlor; Heptachlor

epoxide; Hexachlorobenzene; Hexachlorocyclopentadiene; Methoxychlor; Metolachlor; Metribuzin; Propachlor; Simazine; Toxaphene, Total PCBs, Endothall. The following volatile organic compounds were analyzed for but not detected by certified independent laboratory analysis:

Benzene; Bromobenzene; Bromochloromethane; Bromodichloromethane; Bromoform; Bromomethane; n-Butylbenzene; sec-Butylbenzene; tert-Butylbenzene; Carbon tetrachloride; 1,2-Dichloroethane; Chlorobenzene; Chlorodibromomethane; Chloroethane; Chloroform; Chloromethane; 2-Chlorotoluene; 4-Chlorotoluene; Dibromomethane; 1,2-Dichlorobenzene; 1,3-Dichlorobenzene; 1,4-Dichlorobenzene; Dichlorodifluoromethane; 1,1-Dichloroethane; 1,1-Dichloroethene; cis-1,2-Dichloroethene; trans-1,2-Dichloroethene; 1,2-Dichloropropane; 1,3-Dichloropropane; 2,2-Dichloropropane; 1,1-Dichloropropene; cis-1,3-Dichloropropene; trans-1,3-Dichloropropene; Ethylbenzene; Hexachlorobutadiene; Isopropylbenzene; p-Isopropyltoluene; Methyl tert-butyl ether (MTBE); Methylene chloride; Naphthalene; n-Propylbenzene; Styrene; 1,1,1,2-Tetrachloroethane; 1,1,2,2-Tetrachloroethane; Tetrachloroethene; Toluene; 1,2,3-Trichlorobenzene; 1,2,4-Trichlorobenzene; 1,1,1-Trichloroethane; 1,1,2-Trichloroethane; Trichloroethene; Trichlorofluoromethane; 1,2,3-Trichloropropane; 1,2,4-Trimethylbenzene; 1,3,5-Trimethylbenzene; Vinyl chloride; m+p-Xylenes; o-Xylene; Trihalomethanes, Total Xylenes, 1,2-Dibromo-3-Chloropropane, 1,2-Dibromoethane.

The following pesticide and herbicides were analyzed for but not detected by certified independent laboratory analysis:

Aldicarb; Aldicarb sulfone; Aldicarb sulfoxide; Carbaryl; 3-Hydroxycarbofuran; Carbofuran; Methiocarb; Methomyl; Oxamyl; Baygon; Glyphosate; Diquat; 2,4,5-TP (Silvex); 2,4-D; 2,4-DB; Dalapon; Dicamba; Dichloroprop; Dinoseb; Pentachlorophenol; Picloram.

## Radionuclides

Contaminant	Violation Yes/No	Level Detected RTST	Level Detected SWTP	Unit	MCLG	MCL	Likely Source of Contamination/ Comments
Gross Alpha	No	-0.1±1.5 (2021)	1.9±1.4 (2022)	pCi/L	None	15	Naturally occurring in the environment
Radium 226	No	0.07±0.30 (2021)	0.01±0.30 (2022)	pCi/L	None	15	Naturally occurring in the environment
Radium 228	No	0.60±0.70 (2021)	0.6±0.7 (2022)	pCi/L	None	15	Naturally occurring in the environment
Uranium	No	0.5 (2021)	0.7 (2022)	ppb	None	30	Naturally occurring in the environment

## How do drinking water regulations apply to immunocompromised people?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons, such as people with cancer undergoing chemotherapy, persons who have undergone organ transplants, persons with HIV/AIDS or other immune system disorders, some elderly, and infants can be at particular risk from infection. These people should seek advice about drinking water from their health care provider. EPA/Centers for Disease Control and Prevention guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium*, and other microbiological contaminants, are available by calling the Safe Drinking Water Hotline at (800) 426-4791, or online at <http://www.epa.gov/safewater>.

## Should I be concerned about lead in my drinking water?

The EPA has determined that no level of lead in drinking water is safe. Exposure to lead can have serious health effects across all age groups, with pregnant individuals, infants (both formula and breastfed), and young children being particularly vulnerable. In children, lead exposure can decrease IQ and attention span, contribute to learning and behavior problems, or exacerbate existing conditions. Additionally, children born to individuals exposed to lead before or during pregnancy may face increased health risks. For adults, prolonged exposure increases the likelihood of heart disease, high blood pressure, kidney issues, and nervous system complications. Contact your healthcare provider for more information on your risk factors.

### Sources of Lead in Drinking Water

The primary source of lead in drinking water is from lead-containing service lines and home plumbing. Homes built before 1960 are the most likely to have these lines, with approximately 10% confirmed to contain lead during excavations. After 1960, lead service lines were rarely used, and their installation was completely banned in 1986. Additional sources of lead in drinking water include:

- **Copper pipes with lead solder** – Common in homes built before 1987. Solder can be found throughout household plumbing, including fixtures and service lines.
- **Brass faucets and fittings** – Many fixtures manufactured before 2014 contain some level of brass, even those with chrome finishes.

### Lead Prevention and Water Treatment Efforts

In the early 1990s, Cheyenne conducted studies and implemented programs to adjust water pH and alkalinity, preventing lead and copper leaching from pipes into drinking water. Today, the R.L. Sherard Water Treatment Plant employs dedicated systems to regulate pH and alkalinity. Operators blend treated surface water with groundwater to maintain stability and minimize the risk of lead dissolving from older pipes. The BOPU provides high quality drinking water and is working to remove lead service lines but cannot control the variety of materials used in plumbing components used in private homes. Customers share the responsibility for protecting themselves and their families from lead in home plumbing.

## Lead Service Line Inventory and Investigation

To comply with the Lead and Copper Rule Revisions (LCRR) and Lead and Copper Rule Improvements (LCRI), BOPU is implementing a structured approach to accurately identify and inventory all service lines within our system. This approach included an initial inventory that is available online at

<https://experience.arcgis.com/experience/98cc0f0b77f147df89fae212a43c0726>. Staff continue to research and validate historical records and tap permits to confirm the material composition of service lines installed after July 19, 1988.

For service lines that cannot be validated through historical data, BOPU will conduct targeted inspections using methods such as excavating small sections near curb stops to examine both utility and customer-side materials, assessing meter pits for signs of galvanized pipes requiring replacement, and inspecting internal plumbing at points of entry into buildings. These efforts ensure compliance with EPA guidelines while accurately identifying and documenting all service lines in the system.

## Lead Monitoring Efforts

BOPU monitors lead levels in selected older homes through annual water sampling. These homes were chosen based on historical lead service line use or construction periods when lead plumbing was prevalent.

Recent lab results indicate that most homes remain below the EPA's action level for lead. However, a sample collected in 2024 from a vacant home undergoing remodeling showed a lead level of 27 µg/L (ppb), and is not representative of Cheyenne's normal water quality. The remaining 61 samples ranged between non-detectable (ND) and 26 µg/L (ppb). Of which, 5 samples exceeded the action level of 15 µg/L (ppb). The 90th percentile of all samples measured 9.0 µg/L (ppb), remaining below the EPA's 15 µg/L (ppb) action level.

## Steps to Reduce Lead Exposure in Drinking Water

If you are concerned about lead in your drinking water, consider the following actions to minimize exposure:

- **Use a certified water filter.** Ensure your filter is certified to remove lead by the American National Standards Institute. Follow the manufacturer's instructions on installation, maintenance, and replacement schedules. Do not use hot water with the filter. More information on home water filtration can be found at: <https://www.epa.gov/water-research/consumer-tool-identifying-point-use-and-pitcher-filters-certified-reduce-lead>.
- **Clean faucet aerators regularly.** Sediment, debris, and lead particles can collect in the aerator, potentially introducing lead into your water.
- **Use cold water for consumption.** Lead dissolves more easily in hot water. Always use cold water for drinking, cooking, and preparing baby formula. Boiling water does not remove lead.
- **Flush pipes before use.** Water sitting in pipes for extended periods may contain higher lead levels. Run your tap, take a shower, do laundry, or wash dishes before using water

for drinking or cooking. Customers who have a lead service line or galvanized requiring replacement service line may need to flush pipes for a longer period.

- **Be aware of nearby construction.** Construction or maintenance can disturb lead service lines, increasing lead levels in drinking water. Contact your local water utility for information on nearby projects.
- **Replace in home fixtures and plumbing that contain lead.** Customers can identify and remove lead materials within the home's plumbing and reduce the risk of exposure.
- **Customers who are concerned about lead in drinking water and wish to have water tested may contact the BOPU.** Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <http://www.epa.gov/safewater/lead>.
- **Have the water tested.** Certified laboratories can test water for lead. A list of certified testing facilities is available at: <https://www.epa.gov/region8-waterops/certified-drinking-water-laboratories-systems-wyoming-and-tribal-lands-epa-region>. Note that a single sample may not capture all potential sources of lead in your plumbing. Lead levels may vary over time. Lead exposure is still possible after tap sampling results do not detect lead in a particular sample. More information on lead sources is available at: <https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water#getinto>.

### Additional Resources

For more information on reducing lead exposure in drinking water, visit: the EPA's website on lead at <http://www.epa.gov/lead> or visit the BOPU's website on lead at <https://www.cheyennebopu.org/Water/Lead-Service-Line>.

Stay informed by checking our website and social media for updates. For questions or to submit an inquiry, visit: <https://cheyennebopu.org/leadfree>.

## What are perfluoroalkyl and polyfluoroalkyl substances?

Perfluoroalkyl and polyfluoroalkyl substances (PFAS) are chemical compounds manufactured and used for decades to repel water, grease, and oil. They are commonly found in products such as firefighting foam, carpets, clothing, nonstick cookware, food packaging, plastic coatings, and dental floss.

The chemicals are known as "forever chemicals" because they don't break down over time. Research by the Centers for Disease Control and Prevention show most people in the United States have been exposed to some PFAS. Research suggests that exposure to high levels of certain PFAS may lead to health impacts.

As part of a nationwide effort to better understand PFAS contamination in water, the BOPU is working with the US EPA to monitor PFAS in water. The monitoring is being conducted under the Safe Drinking Water Act's Fifth Unregulated Contaminant Monitoring Rule (UCMR5). Unregulated Contaminant Monitoring Rules are used to collect data for contaminants that are

suspected of being present in drinking water but have not yet had health-based standards set under the Safe Drinking Water Act. For more information about the Fifth Unregulated Contaminant Monitoring Rule, visit <https://www.epa.gov/dwucmr/fifth-unregulated-contaminant-monitoring-rule>.

During Calendar Year 2024, the BOPU sampled three times for PFAS and Lithium at water entry points to Cheyenne's water distribution system in compliance with UCMR5. The results were non-detects for the 29 PFAS compounds. Lithium was not detected during two of those sampling events but was detected on one sample at 9.56  $\mu\text{g/L}$  or ppb. The approved analytical methods for these compounds have detection limits for each of the 29 PFAS compounds that range between 0.002 and 0.0198  $\mu\text{g/L}$  or ppb and a detection limit of 9.00  $\mu\text{g/L}$  or ppb for lithium.

## Trichloroethylene and the Atlas "D" Missile Site

Some wells in the Borie Wellfield pump from aquifers contaminated with trichloroethylene (TCE). The TCE comes from the Atlas "D" Missile Site located on the Belvoir Ranch southwest of Cheyenne. TCE was used at the missile site to clean missiles during the early 1960's. Since then, a plume of TCE has spread underground reaching municipal wells. The U.S. Army Corps of Engineers (ACOE) constructed a groundwater treatment plant located near Cheyenne's water treatment plant. This groundwater treatment plant removes TCE from the water produced at the Borie Wellfield. Both the ACOE and the BOPU monitor water quality from the Borie Wellfield before and after treatment. Results from water quality samples in 2024 were non-detects for TCE. This means the amount of TCE in the water was below the analytical method's ability to detect it. The method has a reporting limit for TCE of 0.5 micrograms per liter ( $\mu\text{g/L}$ ) or parts per billion (ppb). The maximum contaminant level for TCE in drinking water is 5  $\mu\text{g/L}$ . See the Definitions section for more information on  $\mu\text{g/L}$  and ppb. To learn more about the Atlas "D" Missile Site or the TCE contamination, visit the [Atlas "D" Missile Site 4](http://www.atlassite4.com) website (www.atlassite4.com).

## How is the water system funded?

In the BOPU's ongoing effort to provide a safe and dependable water supply, it is necessary to make improvements to Cheyenne's water system. Water system improvements and maintenance are paid for through water rates charged to BOPU customers. In fiscal year 2024, total operating expenses for the water and sewer departments were approximately \$37.4 million.

## BOPU Mission Statement

Sustain Cheyenne's essential water resources to realize our community's potential.





## BOPU Vision Statement

We will set the standard of excellence in the water and wastewater industry. We will be a leader in service to our customers. We will be responsible stewards in managing and protecting our water resources, the environment, the health and safety of our employees and community.

## Contact Us

Questions about this report or concerning your water utility should be directed to:

Water and Wastewater Quality Control Supervisor: (307) 635-7693

Water Treatment Division Manager: (307) 632-9890

BOPU Director: (307) 637-6460

We want customers to be informed about their water. To learn more about Cheyenne's water system, please attend any of our regularly scheduled BOPU Board Meetings. Board Meetings are held at 3:00 pm on the third Monday of each month and are open to the public. If the third Monday of the month is a holiday, Board Meetings are held on the following Tuesday. More information is available on our website at: <https://www.cheyennebopu.org/About-Us/Board-Meetings>.