



2025 Water Quality Report

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PFAS FAQS

PFAS (aka forever chemicals) have been in the news quite often in the past few years and are understandably on many minds. Just the idea that these chemicals are around forever and can build up in living beings (including humans) is very concerning to most people. Here are a few explanations that you may find useful.

What are PFAS? Per- and polyfluoroalkyl substances (PFAS) are a class of emerging contaminants that may be detected in drinking water. PFAS include thousands of unique chemical compounds that were developed in the 1930s but came into widespread use in the 1950s. The U.S. Environmental Protection Agency (EPA) first became aware of the health effects associated with PFAS in 1998.

Where do PFAS come from? PFAS have been used in a lot of consumer and commercial products such as firefighting foams, stain repellants for clothing and carpets, and more. Because of this, these compounds are being found in drinking water, groundwater, surface water, landfills and in the air.

Why are PFAS a problem? Studies in animals and humans suggest links between PFAS exposure and effects on the thyroid, the kidneys, the immune system, the cardiovascular system, the reproductive system, human development and cancer. Because PFAS generally break down very slowly, these compounds can accumulate over time in both humans and animals. They are being called forever chemicals in the media.

Are PFAS regulated in drinking water? PFAS in drinking water regulations are finalized. EPA released a final National Primary Drinking Water Regulation establishing legally enforceable levels, called Maximum Contaminant Levels (MCLs), for six PFAS in drinking water. Public water systems must comply with the initial monitoring regulation by June 25, 2027. Public water systems then have five years (2029) to implement solutions to reduce PFAS to below the MCLs.

What is Carson City Water System doing about PFAS? The fifth Unregulated Contaminant Monitoring Rule requires sampling for 29 PFAS substances and Lithium at selected sites in Carson City that are representative of the various aquifers that supply Carson City. We began this sampling in October of 2024, and expect to have completed it by September of 2025. As of the publication of this water quality report we have not detected any PFAS in our water sources.

In addition, Carson City will begin sampling for the regulated PFAS compounds at all our water sources in 2026 per the new EPA drinking water regulation. Initial sampling will be performed quarterly, with the future sampling schedules based on results from the quarterly testing of each source.

Where can I find more information about PFAS in my drinking water? You can contact Carson City Public Works Water System at 775-887-2355. The EPA has a website regarding PFAS at <https://www.epa.gov/pfas> which has a lot of resources for consumers.

Carson City Unregulated Contaminant Monitoring Rule 5 2024-2025

The 1996 Safe Drinking Water Act (SDWA) amendments require that once every five years EPA issue a new list of no more than 30 unregulated contaminants to be monitored by Public Water Systems (PWSs). The Unregulated Contaminant Monitoring Rule (UCMR) program was developed in coordination with the Contaminant Candidate List (CCL). The CCL is a list of contaminants that are not regulated by the National Primary Drinking Water Regulations, are known or anticipated to occur at public water systems, and may warrant regulation under the Safe Drinking Water Act. The data set from samples collected under the UCMR program are some of the primary sources of occurrence and exposure information the Agency uses to develop regulatory decisions for emerging contaminants.

The detection of a UCMR 5 contaminant above the MRL (minimum reporting levels) does not represent cause for concern, in and of itself. Rather, the implications of the detection should be judged considering health effects information (which is often still under development or being refined for unregulated contaminants).

Carson City’s sampling for the Fifth Unregulated Contaminant Monitoring Regulation (UCMR 5) was started in October of 2024 and will conclude in September of 2025. Below is a summary of the results of the sampling performed in October and December of 2024. We are sampling for 29 PFAS compounds and Lithium.

DETECTIONS

Unregulated Contaminant	MRL (µg/L)	Range found (µg/L)	Average Level found	Major Sources
Lithium	10	10 – 59.2	26.9	Lithium is a naturally occurring metal which is found in many soils especially in the western United States and is found in a variety of foods. It has numerous commercial uses including as a main component of batteries. Lithium is also used as a pharmaceutical to treat certain medical conditions.

**If you have questions about this testing or the results
please contact Kelly Hale,
Carson City Public Works Environmental Control Foreman,
at 775-283-7376 or email khale@carson.org.**

Level 1 Assessment performed in 2024

Coliforms are bacteria that occur naturally in the environment and are used as an indicator that other, potentially harmful, waterborne organisms may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. During our Revised Total Coliform Rule required sampling in August of 2024 we found coliforms at one site, indicating the need to look for potential problems in water treatment or distribution systems.

Carson City Water System conducted an assessment of the water system, also known as a Level 1 Assessment, as required by the Revised Total Coliform Rule. This assessment is used to identify possible sources of contamination. The Level 1 assessment was completed in August of 2024. We utilized the Level 1 Assessment Form from the NDEP Bureau of Safe Drinking Water website to guide and record our investigation. The conclusion of the investigation was that the site faucet is likely vulnerable to cross connection from a nearby irrigation system. No other likely cause for the total coliform positive results were found, nor were coliforms found in any other sample in the system. The coliform detected results were isolated to the one faucet at the one site. Since the site was a private residence and not under city control, and we cannot dig up the irrigation system or further investigate or repair the site itself, it was decided that the site is no longer appropriate for sampling under the RTCR. We installed a dedicated, city-owned sample tap nearby in the system.

Overall Picture of Carson City Water System at population of 60,266

3 Groundwater Basins:

Carson Valley Dayton Valley Eagle Valley

4 Surface Water Sources:

Ash Canyon 0.99 - 15.5 NTU
Kings Canyon 0.53 - 3.95 NTU
Marlette-Hobart 0.67 - 5.15 NTU

21 active and 9 inactive Municipal Production Wells, 1 Surface Water Treatment Plant that uses 3 surface water sources, and 1 inter-tie to utilize purchased ground water

2024 — Total Storage Capacity

25,700,000 gallons in 14 above ground tanks

Average Water Demands (MGD = Million Gallons per Day)

Average Winter Demand 5.03 MGD
Average Summer Demand 13.9 MGD
Peak Day Summer Demand 18.8 MGD

Carson City currently owns 18,648 Acre-Feet (Ac-Ft) of water which, to date 17,602 are “usable” water rights. The City used approximately 9,700 Ac-Ft in 2024. At a population of 75,000 it is predicted that the City’s water usage will be approximately 16,500 Ac-Ft. The Water Utility also has available 3,200 Ac-Ft of drought storage water rights, which cannot be assigned to new development, but can only be used for emergency purposes and system safety factors, such as in times of severe drought (State Engineer Order 1140).

Source Water Protection

Carson City’s Source Water Protection Plan was updated in 2023. It was endorsed by NDEP and adopted by the Board of Supervisors in December 2023. The plan’s goal is to establish a partnership between the public, private and community interests to protect the watershed, public health and the environment through an aggressive all-inclusive protection program. The program will focus on a preventative rather than reactive response to protecting our vital water resources.

Other Monitoring

In addition to the testing we are required to perform, our water system voluntarily tests for many additional substances and microscopic organisms to make certain the water is safe and of high quality.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

INORGANIC CONTAMINANTS									
Analyte	Year Tested	Units	Ave	Min	Max	MCL	MCLG	Notes and Major Sources	Violation
Apparent Color	2024	ACU	5.00	2.00	10.00	15.00		Secondary MCL	No
Arsenic, Total ¹	2024	ppb	6.70	1.00	13*	10.00		Erosion of natural deposits, compliance based on locational running annual average for some sources, all averages were below the MCL	No*
Barium	2024	ppb	18.00	15.00	29.00	2000.00		Secondary MCL, erosion of natural deposits	No
Calcium	2024	ppm	21.00	9.00	37.00			Provided as information only	
Chloride	2024	ppm	4.58	0.95	15.00	250.00		Secondary MCL-	No
Fluoride	2024	ppm	0.11	0.05	0.42	2.00	4.00	Natural Deposits, 4.00is the Federal standard, Nv has the lower 2.00 standard	No
Iron, Total	2024	ppm	0.17	0.00	0.39 **	0.30		Secondary MCL	Yes**
Magnesium, Total	2024	ppm	4.40	2.30	8.30			Provided as information only	No
Manganese, Total	2024	ppm	0.02	0.00	0.08	0.10		Secondary MCL	No
Nitrate as Nitrogen	2024	ppm	1.91	0.00	5.30	10.00		Runoff from fertilizer, leaching from septic tanks, sewage, natural deposits	No
Nitrite	2024	ppm	0.00	0.00	0.00	1.00		Runoff from fertilizer, leaching from septic tanks, sewage, natural deposits	No
Odor at 60 C (TON)	2024	TON	2.00	2.00	2.00	3.00		Secondary MCL	No
PH	2024	Units	7.80	7.60	8.20	6.5 to 8.5		Secondary MCL	No
Sodium	2024	ppm	13.20	5.10	24.00			Provided as information only	No
Sulfate	2024	ppm	4.10	1.00	7.90	500.00		Secondary MCL	No
Total Dissolved Solids (TDS)	2024	ppm	131.00	75.00	180.00	1000.00		Secondary MCL	No
* Compliance with MCL was based on annual average which was always below the MCL.									
** Violation of Secondary Contaminant Levels in July of 2024, monthly repeat sampling results at the well in question are all less than secondary MCL.									
LEAD & COPPER ²									
Analyte	Year Tested	Units	90th percentile	AL**	Sites over AL	Major Sources			Violation
Copper, Total	2023	ppm	0.340	1.300	0	Corrosion of household plumbing, erosion of natural deposits			No
Lead, Total	2023	ppm	0.002	0.02	0	Corrosion of household plumbing, erosion of natural deposits			No
** AL is the Action Level; if the 90th percentile sample is over the AL the system must take action to make the water less corrosive.									
The next lead and copper samples will be taken in the summer of 2026 with the assistance of some of our customers.									
MICROBIOLOGICAL CONTAMINANTS									
Analyte	Year Tested	Units	Ave	Min	Max	MCL	MCLG	Major Sources	Violation
Turbidity ³	2024	NTU	1.05	0.10	0.70	5.00	1.00	Decay of natural and manmade deposits. Turbidity is a measure of the cloudiness of water. It is used to indicate water quality and filtration effectiveness (e.g., whether disease-causing organisms are present). Higher turbidity levels are often associated with higher levels of disease-causing microorganisms such as viruses, parasites and some bacteria. These organisms can cause symptoms such as nausea, cramps, diarrhea and associated headaches.	No
Total Coliform ⁴	2024	present or absent	0	0	0	4 samples or repeat samples confirmed pres-ent/month	0	Naturally present in the environment. Not a health threat in itself; it is used to indicate whether other potentially harmful bacteria may be present. A single sample site had total coliform 4 present results, which triggered a Level 1 Assessment. See the section of this report titled Level 1 Assessment Performed in 2024 for details. Call Kelly Hale at 775-283-7376 or email questions to khale@carson.org.	No
Chlorine Residual ⁵	2024	ppm	0.47	0.05	2.07	4		Additive for disinfection of water	No
RADIOACTIVE CONTAMINANTS ⁶									
Analyte	Year Tested	Units	Ave	Min	Max	MCL	MCLG	Major Sources	Violation
Alpha, Gross, Adjusted *	2024	pCi/L	0.5	-25.4	14.0	15	0	Erosion of natural deposits	No
Beta, Gross **	2024	pCi/L	7.0	2.3	16.3	50 ***	0	Erosion of natural deposits	No
Radium 226	2024	pCi/L	0.61	0.21	2.37		0	Erosion of natural deposits	No
Radium 228	2024	pCi/L	0.77	0.21	2.43		0	Erosion of natural deposits	No
Uranium ICAP/MS	2024	ppb	15.25	4.50	48 ****	30****	0	Erosion of natural deposits	No
* Compliance with MCL for Gross Alpha is based on Alpha Gross minus Uranium, and compliance with MCL is based on the annual average which was always below the MCL.									
** Because the beta particle results were below 50 pCi/L, no testing for individual beta particle constituents was required.									
*** The MCL for beta particles is 4 mrem/year. EPA considers 50 pCi/L to be the level of concern.									
**** Compliance with MCL based on site-specific running annual average which was always below the MCL.									
DISINFECTION BYPRODUCTS ⁷									
Analyte	Year Tested	Units	Ave	Min	Max	MCL	MCLG	Major Sources	Violation
Total Haloacetic Acids (HAA5)	2024	ppb	32.93	0.00	71 *	60		Byproducts of drinking water chlorination for disinfection	No
Total Trihalomethanes (TTHM)	2024	ppb	17.83	0.00	54.00	80		Byproducts of drinking water chlorination for disinfection	No
* Compliance with MCL based on site-specific running annual average which was always below the MCL.									
INORGANIC CONTAMINANTS									
Analyte	Year Tested	Units	Ave	Min	Max	MCL	MCLG	Major Sources	Violation
Hexachlorocyclopentadiene	2024	ppb	0.11	0.00	0.11	50		Discharge from chemical factories, flame retardants	No

An Explanation of the Water Quality Data Table

The table above shows the results of our water quality analysis for 2024. The table contains the name of each substance, the highest level allowed by regulation [the Maximum Contaminant Level (MCL), the ideal goals for public health], Maximum Contaminant Level Goal (MCLG), the amount detected, the usual sources of such contamination, footnotes explaining our findings, and a key to the abbreviations used.

ARSENIC¹ — Arsenic is known to cause cancer in humans. Arsenic also may cause other health effects such as skin damage and circulatory problems. Carson City Water System meets the EPA arsenic drinking water standard, also known as a Maximum Contaminant Level (MCL). However, you should know that EPA's MCL for arsenic balances the scientific community's understanding of arsenic-related health effects and the cost of removing arsenic from drinking water. The highest concentration of arsenic found in 2024 was 7.8 ppb, based on LRAA at the site.

LEAD & COPPER² — Compliance with the Action Level for lead and copper is based on the 90th percentile level, meaning if the level at the 90th percentile is over the Action Level the system must take actions to reduce lead and / or copper in the system. The results of the 90th percentile in the 2023 round of sampling were below the Action Levels for both lead and copper. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Carson City is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. 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. If you are concerned about lead in your water, you may wish to have your water tested. 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 www.epa.gov/safewater/lead.

TURBIDITY³ — The MCL allowable for turbidity is dependent on the treatment used. Carson City uses Diatomaceous Earth filtration, so the MCL for turbidity in our treated water is 1.0 NTU. Turbidity has no health effects; however, turbidity can interfere with the disinfection of the water as well as provide a medium for microbial growth.

TOTAL COLIFORM⁴ — Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present. A single sample site had total coliform 4 present results, which triggered a Level 1 Assessment. See the section of this report titled **Level 1 Assessment Performed in 2024** for details. Call Kelly Hale at 775-283-7376 or email khale@carson.org with questions.

CHLORINE RESIDUAL⁵ — Chlorine residual is measured at the Quill Water Treatment Plant under the Surface Water Treatment Rule, and throughout the system weekly under the Total Coliform Rule. Under the Surface Water Treatment Rule the water leaving the Quill Water Treatment Plant cannot be less than 0.2 mg/L chlorine for more than 4 hours, and cannot exceed 4 mg/L. The water in the distribution system must have a minimum of 0.05 mg/L chlorine for greater than 97% of the samples taken each month.

RADIOACTIVE CONTAMINANTS⁶ — Compliance with the standard is based on a running annual average from specific sample sites where samples are taken monthly. All of the water reaching our customers in 2024 was in compliance with the Radionuclide Rule standards.

- Certain minerals are radioactive and may emit forms of radiation known as *photons and beta radiation*. Some people who drink water containing beta and photon emitters in excess of the MCL over many years may have an increased risk of getting cancer.
- Certain minerals are radioactive and may emit a form of radiation known as *alpha radiation*. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.
- Some people who drink water containing uranium in excess of the MCL over many years may have an increased risk of getting cancer and kidney toxicity.

DISINFECTION BYPRODUCTS⁷ — Carson City began sampling for the Disinfection Byproduct Rule 2 in October of 2012. Compliance is based on a locational running annual average of 60 µg/L for Haloacetic Acids and 80 µg/L for Total Trihalomethanes. In 2024, 9 quarterly samples were taken from around Carson City and the average at each site was calculated. Results remained well below the MCL. Some people who drink water containing Haloacetic Acids and Trihalomethanes in excess of the MCL over prolonged periods may be at a higher risk for developing cancer, with Trihalomethanes also putting them at greater risk for developing problems with the kidneys, liver or central nervous system.

Key Abbreviations

LRAA – Locational Running Annual Average

MCL – Maximum Contaminant Level. The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology. The MCLs are set by the Environmental Protection Agency (EPA) and Nevada Department of Environmental Protection Bureau of Safe Drinking Water (NDEP BSDW).

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.

NTU – Nephelometric Turbidity Units. This unit is a measure of the turbidity of the water as scattering of light, using an instrument and method approved by EPA and NDEP BSDW.

pCi/L – Picocuries per Liter. Picocuries is a measure of radioactivity.

ppm = mg/L = parts per million, or milligrams per liter

ppb = µg/L = parts per billion, or micrograms per liter

2024 – 2025 Public Works Water Projects

- The Quill Water Treatment Plant Upgrade Project began construction in January of 2025. Site earthwork and demolition is under way while new process equipment is being procured. This project is expected to be completed in mid-2026. Modernization of the treatment technology at this critical treatment facility will expand our usage of surface water sources from Ash and Kings creeks and the Marlette / Hobart Lake Water System.
- Carson City Public Works had three tanks inspected and cleaned in 2024. These were the Quill Tank, and the Quill chlorine contact tank (in preparation for the old Quill Plant being shut down), and Goni Tank. We have a rotating five-year cycle of tank care so that each tank is inspected and cleaned approximately every five years.
- Carson City Public Works is preparing to rehabilitate the Tanstaaf Tank (a 500,000-gallon water storage tank) in the fall of 2025 as part of its recently completed Tank Rehabilitation Plan. This work includes a new interior and exterior coating and access safety improvements.
- Water line replacement projects that have been completed or are under way in this past year include:
 - Menlo Drive Reconstruction Project including replacement of water main from Lompa to Airport Road is under construction in spring of 2025.
 - William Street Complete Street Project water main replacement from Carson Street to Saliman Road is bidding in spring of 2025 to begin construction in summer of 2025.
- This past winter Carson City completed well rehabilitation at Well 5 to replace faulty equipment and restore pumping capacity.
- Other water system improvements and studies that have been completed or are in the works recently include:
 - Modeling and planning reviews of the northwest and northeast areas of Carson City are being performed to ascertain development impacts and related infrastructure improvements required.
 - A Lead and Copper Service Line Survey was completed to supplement the City's Inventory and Database project for compliance with the EPA issued Revised Lead and Copper Rule. The completed customer accessible Lead Service Line Dashboard can be found on the city's website at <https://www.carson.org/government/departments-g-z/public-works/divisions/water>.
 - The Carson City Source Water Protection Plan update was completed and adopted by the Board of Supervisors. This important document can be found on the City's Public Works - Water Division website <https://www.carson.org/government/departments-g-z/public-works/divisions/water> in the Water Conservation Plan dropdown (blue bar) below the Spring Flushing info.



We'll be happy to answer any questions about Carson City Water and our water quality. For more information contact Kelly Hale at 775-283-7376 or Joe Reyna at 775-283-7356. Learn more about the Carson City Public Works at www.carson.org

MEMBER: Nevada Rural Water Association, American Water Works Association, Water Environment Federation, American Public Works Association, University of Southern California - Foundation for Cross Connection Control, Re-Use Nevada, The Groundwater Foundation, Carson City Subconservancy District, California Water Environment Association, Nevada Water Environment Association

El informe contiene información importante sobre la calidad del agua en su comunidad. Tradúzcalo o hable con alguien que lo entienda bien.

Nevada Source Water Assessment Integrated Source Water Protection Plan Program Nevada Division of Environmental Protection, Bureau of Safe Drinking Water (NDEP BSDW)

The Federal Safe Drinking Water Act was amended in 1996 to include a requirement for Source Water Assessment, which NDEP BSDW completed in 2005. A summary of the initial assessment can be viewed in person at NDEP BSDW offices at 901 S. Stewart Street, Carson City NV 89701. Appointments are suggested; please call 775-687-9503.

NDEP BSDW created the Integrated Source Water Protection Plan Program (ISWPP) in 2010. Carson City completed and adopted the Community Source Water Protection Plan (CSWPP) under this program in 2014. Carson City Public Works, along with our partners in source water protection, updated the CSWPP in 2023. The CSWPP can be viewed on-line at www.Carson.org. Please call 775-887-2355 for more information or if you have questions.

Water System Contact Information

- Water System Name: Carson City Public Works - Water System
- County: Carson City
- BSDW System ID Number: NV0000015
- Number of Connections: 20,835
- Population Served: 60,266
- Address: Carson City Public Works - Water System, 3505 Butti Way, Carson City NV 89701
- Owners Rep: Andy Hummel, Utility Manager
- Phone 775-283-7357; Fax 775-887-2164
- Email: ahummel@carson.org
- Operator: Joe Reyna, Water Operations Supervisor
- Phone 775-283-7356; Fax 775-887-2164
- Email: jreyna@carson.org

ADDITIONAL HEALTH INFORMATION

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 EPA's Safe Drinking Water Hotline (1-800-426-4791). In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

It is also important that residents have their private wells tested to ensure safe drinking water.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which 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 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 agriculture, storm-water runoff and residential uses.
- Organic chemical contaminants, including synthetic and volatile organics, which are byproducts of industrial processes, petroleum production and can also come from gas stations, urban stormwater runoff and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

AT-RISK POPULATION

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 from infections. These people should seek advice about drinking water from their healthcare providers. EPA / CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791) or on EPA's website epa.gov/safewater.

Concerning Arsenic in Our Water: Carson City has seven wells whose output has arsenic levels in excess of the 10 parts per billion standard set on January 23, 2006. The arsenic level in the water supplying our customers has been successfully managed through well management and blending with other sources. All water supplied to our customers in 2024 was in compliance with the arsenic standard. While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems [40 CFR141.154(b)(1)].

Concerning Fluoride: The State of Nevada has set forth a more stringent MCL of 2.0 mg/L for fluoride than the federal limit of 4.0 mg/L assigned nationally. Some people who drink water containing fluoride in excess of the MCL over many years could develop bone disease, including pain and tenderness of the bones. Fluoride in drinking water at half the MCL or more may cause mottling of the teeth of children, usually in children younger than 9 years old. Mottling, also known as dental fluorosis, may include brown staining and/or pitting of the teeth, and occurs only in developing teeth before they erupt from the gums.

Concerning Lead in Our Water: Carson City Public Works Water Department conducted the required tap sampling for lead and copper in August and September of 2023, with the help of 30 of our customers. The sampling was accomplished through the cooperation of the homeowners and residents, who were asked to sample their water from a kitchen or bathroom faucet. We thank these customers for their help in meeting our regulatory obligations. These samples were taken to determine the contribution of distribution system pipes, faucets, fixtures and household plumbing and/or solder to the lead and copper levels in the water. All the sites sampled had results below the action limit for lead and copper in 2023. Compliance with the standards for lead and copper sampling is based on the 90th percentile sample results coming in under the action level for both lead and copper. The samples taken in 2023 indicated continued compliance with the standards for lead and copper. Our next lead and copper sampling will be in 2026.

Lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Carson City Water System is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact the Carson City Water System at 775-887-2355. 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>.

Concerning Nitrate in Our Water: Even though Carson City Water System meets the EPA nitrate drinking water standard, also known as a Maximum Contaminant Level (MCL), if you are caring for an infant and using tap water to prepare formula, you may want to use alternate sources of water or ask for advice from your healthcare provider. Nitrate levels above 10 ppm pose a particularly high health concern for infants under 6 months of age and can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness. Symptoms of serious illness include shortness of breath and blueness of the skin, known as "blue baby syndrome." Nitrate levels in drinking water can increase for short periods of time due to high levels of rainfall or agricultural activity; therefore we test for nitrate at least annually and monthly at sources determined to be vulnerable. The highest level for nitrate found during 2024 was 5.3 ppm.