CASTLE PINES NORTH

METROPOLITAN DISTRICT

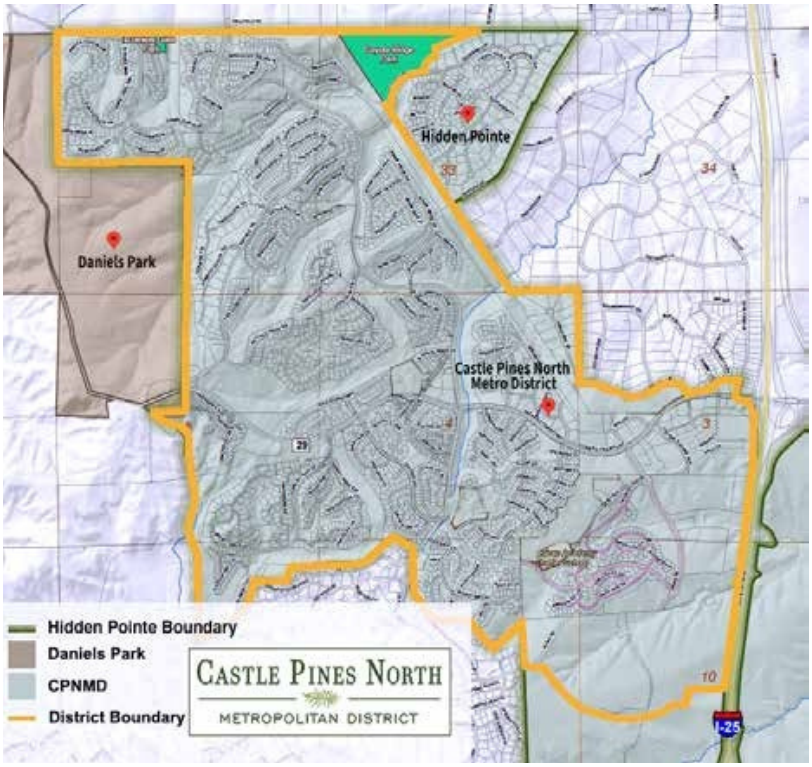
2024 WATER QUALITY REPORT

COVERING WATER QUALITY DATA FROM 2023

Mission Statement

To provide high-quality, clean, safe, reliable, on-demand drinking water, and wastewater, services to our community at the lowest possible cost.

Established in 1984, the Castle Pines North Metropolitan District (CPNMD) is a Title 32 Special District. We serve residents of the City of Castle Pines, west of I-25, in Douglas County, Colorado. We provide water & wastewater services to approximately 12,000 residents, as well as a number commercial customers, via roughly **4,000 service connections**. Our customers include those that live within our boundaries, as well as residents of Hidden Pointe. We also provide service to Daniels Park, ensuring that the buffalo herd and caretakers have sufficient, safe water. This is done through an agreement with the City and County of Denver.



We provide high-quality water to our residents through two sources:

May-September: We utilize our wells drawing from the Arapahoe, Denver, and Lower Dawson Aquifers. This water is treated at our own water treatment facility.

October-April: We take full advantage of our renewable water resources. This is accomplished through an agreement with Centennial Water and Sanitation District. CWSD treats our stored renewable water in Chatfield Reservoir. We then use our Interconnect Pump Station to deliver their high-quality drinking water directly to our residents. Because of this, we include Centennial Water and Sanitation District's Consumer Confidence Report in addition to our own. Our wastewater is treated by the Plum Creek Water Reclamation Authority (PCWRA), located south of Castle Rock, discharging into Plum Creek. This facility primarily serves CPNMD, the Town of Castle Rock and Castle Pines Metropolitan District (The Village at Castle Pines). Treated wastewater return flows are captured, and utilized as the primary source of irrigation water for The Ridge Golf Course. This annual report is produced each spring. The document is a requirement of the Environmental Protection Agency to provide water quality data to our customers.

This report covers data from 2023. We recognize many residents have questions about the May 2024 Boil Water Advisory.

Scan the QR code below for information related to the 2024 Boil Advisory.

https://www.cpnmd.org/may-boil-water-incident-faq-and-overview

2024 Drinking Water Quality Report

Covering Data For Calendar Year 2023

Public Water System ID: CO0118006
Esta es información importante. Si no la pueden leer, necesitan que alguien se la traduzca.
We are pleased to present to you this year's water quality report. Our constant goal is to provide you with a safe and dependable supply of drinking water.
Please contact **NATHAN J TRAVIS at 303-688-8550** with any questions or for public participation opportunities that may affect water quality.
Please see the water quality data from our wholesale system(s) (either attached or included in this report) for additional information about your drinking water.

General Information

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791) or by visiting epa.gov/ground- water-and-drinking-water. Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV-AIDS

or other immune system disorders, some elderly, and infants can be particularly at risk of infections. These people should seek advice about drinking water from their health care providers. For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and microbiological contaminants call the EPA Safe Drinking Water Hotline at (1-800-426-4791). The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- **Microbial contaminants:** viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants**: salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and herbicides**: may come from a variety of sources, such as agriculture, urban storm water runoff, and residential uses.
- **Radioactive contaminants:** can be naturally occurring or be the result of oil and gas production and mining activities.
- **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.

In order to ensure that tap water is safe to drink, the Colorado Department of Public Health and Environment prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Lead in Drinking Water

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. We are 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 District Manager, Nathan Travis, at 303-688-8550. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at epa.gov/safewater/lead.

Source Water Assessment and Protection (SWAP)

The Colorado Department of Public Health and Environment may have provided us with a Source Water Assessment Report for our water supply. For general information or to obtain a copy of the report please visit wqcdcompliance.com/ccr. The report is located under "Guidance: Source Water Assessment Reports". Search the table using our system name or ID, or by contacting NATHAN J TRAVIS at 303-688-8550.
The Source Water Assessment Report provides a screening-level evaluation of potential contamination that could occur. It does not mean that the contamination has or will occur. We can use this information to evaluate the need to improve our current water treatment capabilities and prepare for future contamination threats. This can help us ensure that quality finished water is delivered to your homes. In addition, the source water assessment results provide a starting point for developing a source water protection plan. Potential sources of contamination in our source water area are listed on the next page. Please contact us to learn more about what you can do to help protect your drinking water sources, any questions about the Drinking Water Quality Report, to learn more about our system, or to attend scheduled public meetings. We want you, our valued customers, to be informed about the services we provide and the quality water we deliver to you every day.

Our Water Sources

(Water Type - Source Type)

A7 WELL (Groundwater-Well)
DE7 WELL (Groundwater-Well)
A6 WELL (Groundwater-Well)
DE6 WELL (Groundwater-Well)
A5 WELL (Groundwater-Well)
PURCHASED WATER FROM CO0118015 (Surface Water-Consecutive Connection)
A1 WELL (Groundwater-Well)
A2 WELL (Groundwater-Well)
A3 WELL (Groundwater-Well)
A4 WELL (Groundwater-Well)
LDA1 WELL (Groundwater-Well)

Potential Source(s) of Contamination

Aboveground, Underground and Leaking Storage Tank Sites, Other Facilities, Low Intensity Residential, Urban Recreational Grasses, Fallow, Evergreen Forest, Septic Systems, Road Miles

TERMS AND ABBREVIATIONS

- **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.
- **Health-Based:** A violation of either a MCL or TT.
- **Non-Health-Based:** A violation that is not a MCL or TT.
- **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).
- **Average (x-bar):** Typical value.
- **Range (R):** Lowest value to the highest value.
- **Sample Size (n):** Number or count of values (i.e. number of water samples collected).
- **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.
- **Level 1 Assessment:** A study of the water
- system to identify potential problems and
- determine (if possible) why total coliform bacteria have been found in our water system.
- **Level 2 Assessment:** A very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

Detected Contaminants

CASTLE PINES NORTH MD routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table(s) show all detections found in the period of January 1 to December 31, 2023 unless otherwise noted. The State of Colorado requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Therefore, some of our data, though representative, may be more than one-year-old. Violations and Formal Enforcement Actions, if any, are reported in the next section of this report.

Note: Only detected contaminants sampled within the last 5 years appear in this report. If no tables appear in this section, then no contaminants were detected in the last round of monitoring.

Disinfectants Sampled in the Distribution System
TT Requirement: At least 95% of samples per period (month or quarter) must be at least 0.2 ppm *OR*
If sample size is less than 40 no more than 1 sample is below 0.2 ppm
Typical Sources: Water additive used to control microbes

Disinfectant Name	Time Period	Results	Number of Samples Below Level	Sample Size	TT Violation	MRDL
Chloramine	December, 2023	Lowest period percentage of samples meeting TT requirement: 100%	0	10	No	4.0 ppm

Lead and Copper Sampled in the Distribution System

Contaminant Name	Time Period	90th Percentile	Sample Size	Unit of Measure	90th Percentile AL	Sample Sites Above AL	90th Percentile AL Exceedance	Typical Sources
Copper	09/30/2021 to 09/30/2021	0.39	20	ppm	1.3	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	09/30/2021 to 09/30/2021	1	20	ppb	15	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

Disinfection Byproducts Sampled in the Distribution System									
Name	**Year**	**Average**	**Range Low – High**	**Sample Size**	**Unit of Measure**	**MCL**	**MCLG**	**MCL Violation**	**Typical Sources**
Total Trihalometh-anes (TTHM)	2023	0.6	0.6 to 0.6	1	ppb	80	N/A	No	Byproduct of drinking water disinfection

Radionuclides Sampled at the Entry Point to the Distribution System									
Contaminant Name	**Year**	**Average**	**Range Low – High**	**Sample Size**	**Unit of Measure**	**MCL**	**MCLG**	**MCL Violation**	**Typical Sources**
Combined Radium	2022	4.7	4.3 to 5.1	2	pCi/L	5	0	No	Erosion of natural deposits

Secondary Contaminants**

Secondary standards are 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.

Contaminant Name	**Year**	**Average**	**Range Low – High**	**Sample Size**	**Unit of Measure**	**Secondary Standard**
Sodium	2021	18.2	18.2 to 18.2	1	ppm	N/A

Inorganic Contaminants Sampled at the Entry Point to the Distribution System									
Contaminant Name	**Year**	**Average**	**Range Low – High**	**Sample Size**	**Unit of Measure**	**MCL**	**MCLG**	**MCL Violation**	**Typical Sources**
Barium	2021	0.1	0.1 to 0.1	1	ppm	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	2021	2	2 to 2	1	ppb	100	100	No	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride	2020	0.73	0.73 to 0.73	1	ppm	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate	2023	0.15	0 to 0.3	2	ppm	10	10	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Violations, Significant Deficiencies, and Formal Enforcement Actions

Health-Based Violations

Maximum contaminant level (MCL) violations:
Test results for this contaminant show that the level was too high for the time period shown. Please read the information shown below about potential health effects for vulnerable populations. This is likely the same violation that we told you about in a past notice. We are evaluating, or we already completed an evaluation, to find the best way to reduce or remove the contaminant. If the solution will take an extended period of time, we will keep you updated with quarterly notices.

Treatment technique (TT) violations:
We failed to complete an action that could affect water quality. Please read the information shown below about potential health effects for vulnerable populations. This is likely the same violation that we told you about in a past notice. We were required to meet a minimum operation/treatment standard, we were required to make upgrades to our system, or we were required to evaluate our system for potential sanitary defects, and we failed to do so in the time period shown below.
If the solution will take an extended period of time, we will keep you updated with quarterly notices.

Name	Description	Time Period	Health Effects	Compliance Value	TT Level or MCL
STORAGE TANK RULE	FAILURE TO INSPECT STORAGE TANK(S) AND/OR FAILURE TO CORRECT STORAGE TANK DEFECTS - F326	04/29/2022 - 05/01/2023	May pose a risk to public health.	N/A	N/A

Additional Violation Information

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

FAILURE TO INSPECT STORAGE TANK(S) AND/OR FAILURE TO CORRECT STORAGE TANK DEFECTS - F326
This violation was caused by inappropriately plumbed floor drains that protruded into a tank at our interconnect pump station. These drains were installed per the original approved design, and while all appropriate repairs have been completed for over a year now this violation was still active during the 2023 water year and is required to be reported here.

Violations, Significant Deficiencies, and Formal Enforcement Actions

Non-Health-Based Violations

These violations do not usually mean that there was a problem with the water quality. If there had been, we would have notified you immediately. We missed collecting a sample (water quality is unknown), we reported the sample result after the due date, or we did not complete a report/notice by the required date.

Name	Description	Time Period
REVISED TOTAL COLIFORM RULE (RTCR)	FAILURE TO HAVE ADEQUATE COLIFORM BACTERIA SAMPLE SITES - R518	04/29/2022 - 05/09/2023
PUBLIC NOTICE	FAILURE TO NOTIFY THE PUBLIC/CONSUMERS	03/01/2023 - Open

Additional Violation Information

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

FAILURE TO HAVE ADEQUATE COLIFORM BACTERIA SAMPLE SITES - R518

This violation was due to one of the identified sample sites not meeting the requirements of a routine coliform sampling site. A new sampling plan has since been submitted to CDPHE, bringing the district into compliance over a year ago.

PUBLIC NOTICE

This violation was due to a miscommunication between our district and CDPHE and is associated with F326 violation listed above. While the storage tank in question was out of service at the time that the violation was issued and remained so until the proper repairs were completed, and a public notice was sent out on 10/7/22 following that violation, CDPHE required the district to distribute a public notice every three months until the repairs had been completed. We apologize for this oversite and will be sending out a public notice shortly explaining the situation which should clear this violation.