PINERY
WATER & WASTEWATER DISTRICT
Quality Water for Life

2020 ANNUAL WATER QUALITY REPORT

For Calendar Year 2019

This water quality report is provided by: DENVER SE SUBURBAN WSD, PINERY/ PWSD CO 0118025

Esta es información importante. Si no la pueden leer, necesitan que alguien se la traduzca.

We are pleased to submit to you this year's Annual Water Quality Report. The United States Environmental Protection Agency (EPA) requires community water systems to prepare and provide to their customers, an Annual Consumer Confidence Report on the quality of the water delivered by their system. Our constant goal is to provide you with a safe and dependable supply of drinking water.

General Information About Drinking Water

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. Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised 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 or by visiting http://water.epa.gov/drink/contaminants.

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.

Our Water Source

The District relies on water from two sources; seven alluvial (shallow) wells along Cherry Creek and eighteen wells drilled in the deeper Denver Basin Aquifers of which six are dedicated irrigation wells. These wells feed a system of pump stations that pump the water to underground storage reservoirs serving homes, parks, schools and other users within the Pinery Water and Wastewater District.

We test the water each year to make sure your tap water meets all EPA and State drinking water health standards. The District safeguards its water supplies and we are proud to deliver quality water for life.

Source Water Assessment Report & Ground Water Protection Plan

The Colorado Department of Public Health and Environment provided us with a Source Water Assessment Report for our water supply. You can obtain a copy of the report by visiting http://wqcdcompliance.com/ccr or by contacting Dan Hammann at 303-841-2797 ext. 213 or DanH@Pinerywater.com.

Potential sources of contamination in our source water area come from, but are not limited to; leaking storage tanks, septic systems, commercial and urban transportation, runoff/leaching of fertilizer used on crops and community lawns and erosion of natural deposits.

The Source Water Assessment Report provides a screening-level evaluation of the potential contamination that **could** occur. It does not mean that the contaminant **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. Our District is concerned about protecting our water source and has developed a Ground Water Protection Plan to help identify potential contaminants and hazards within our ground water protection area. We routinely monitor the water for potential contaminants and enforce the rules and regulations of the Ground Water Protection Plan to ensure that quality finished water is delivered to your homes and businesses.

See Our Water Sources table on page 6

Let's Help Each Other

We encourage public interest and participation in our community's decisions affecting drinking water. The staff of the Pinery Water & Wastewater District is available to answer questions concerning our water system. Once every month the Board meets to discuss the business of the District and the public is welcome. Board meetings are held at our District office at 6:30 p.m. on the third Wednesday of each month. Collaboration is the best kind of teamwork!

GLOSSARY OF TERMS & MEASUREMENTS

TERMS

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

Average of Individual Samples (No Abbreviation): The typical value. Mathematically, it is the sum of values divided by the number of samples.

Below Detectable Limit (BDL): Indicates the compound was analyzed for, but was below the lab method detection limit.

Contaminant: A potentially harmful physical, biological, chemical or radiological substance in water.

Gross Alpha, Including RA, Excluding RN & U (No Abbreviation): This is the gross alpha particle activity compliance value. It includes radium-226, but excludes radon 222 and uranium.

Maximum Contaminant Level Goal (MCLG): The level of contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Contaminant Level (MCL): The highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLG as feasible using the best available treatment technology.

Secondary Maximum Contaminant Level (SMCL): 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. EPA recommends these standards but does not require water systems to comply.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant, below which there is no known or expected risk to health.

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.

Microscopic Particle Analysis (MPA Raw Water Only): An analysis of surface water organisms and indicators in water. This analysis can be used to determine performance of a surface water treatment plant or in our case to determine the existence of surface water influence on a ground water well.

Not Available (na): Standards for these contaminants do not exist.

Non Detectable (ND): Indicates the compound was analyzed for, but was below the lab method detection limit.

Number of Samples (No Abbreviation): The number or count of the values.

Range of Individual Samples (No Abbreviation): The lowest to the highest value.

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

Variances and Exemptions: State or EPA permission not to meet an MCL or treatment technique under certain conditions.

Violation (No Abbreviation): A failure to meet a Colorado Primary Drinking Water Regulation.

UNITS OF MEASUREMENT

Parts Per Million (ppm): Equivalent to milligrams per liter (mg/l). One ppm corresponds to one minute in two years or a single penny in $10,000.

Parts Per Billion (ppb): Equivalent to micrograms per liter (ug/l). One ppb corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

Parts Per Trillion (ppt):): Equivalent to nanograms per liter (ng/l). One ppt corresponds to one minute in 2,000,000 years, or a single penny in $10,000,000,000.

PicoCuries Per Liter (pCi/L): A measure of radioactivity.

Water Quality Data

The tables below list all of the drinking water contaminants that were detected. Unless otherwise noted, the data presented in these tables are from testing done between January 1, 2019 and December 31, 2019. The State permits 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. All other contaminants that we tested for were below the detection limit with current laboratory equipment, so they are not included in this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk.

Regulated at the Customer's Tap

The District completed two sets of Lead and Copper samples from homes within the Pinery. We thank all homeowners that participated in the sampling.

Contaminant Name	90th Percentile Action Level	90th Percentile Value	Unit of Measure	Number of Samples	Sample Sites Above Action Level	Time Period	90th Percentile AL Exceedance Violation	Typical Source of Contaminant
Copper	1.3	1.10	ppm	61	0	02/05/2019 to 2/25/2019	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	15	2.60	ppb	61	1	02/05/2019 to 2/25/2019	No	
Copper	1.3	0.92	ppm	60	0	09/09/2019 to 10/30/2019	No	
Lead	15	0.60	ppb	60	0	09/09/2019 to 10/30/2019	No	

If present, elevated levels of lead can cause serious health problems (especially for pregnant women and young children). It is possible that lead levels at your home may be higher than other homes in the community as a result of materials used in your home's plumbing. If you are concerned about lead in your water, you may wish to have your water tested. 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. Additional 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 http://www.epa.gov/safewater/lead.

Regulated in the Distribution System

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	2019	Lowest period percentage of samples meeting TT requirement: 100%	0	12	No	4.0 ppm

Disinfected Byproducts Sampled Regulated in the Distribution System

Contaminant Name	MCL	MCLG	Average Individual	Units	Range Low—High	Number Of Samples	Time Period	MCL Violation	Typical Source of Contaminant
Organic Disinfection Byproducts (TTHM's) Total Trihalomethanes	80	N/A	15.1	ppb	15 to15.2	2	2019	No	By-product of drinking water chlorination
Total Haloacetic acids (HAA_5)	60	N/A	4.5	ppb	4.4 to 4.6	2	2019	No	By-product of drinking water disinfection

Inorganic Contaminants Sampled at the Entry Point to the Distribution System

Contaminant Name	MCL	MCLG	Average Individual Samples	Units	Range Low—High	Number of Samples	Year	MCL Violation	Typical Source of Contaminant
Arsenic	10	0	2.50	ppb	2 to 3.8	4	2019	No	Erosion of natural deposits; Runoff from orchards: Runoff from glass and electronics production wastes.
Barium	2	2	0.2	ppm	0.13 to 0.24	4	2019	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Fluoride	4	4	0.56	ppm	0.45 to 0.63	4	2019	No	Erosion of natural deposits; water additive that promotes strong teeth; dis- charge from fertilizer and aluminum factories (not added to water).
Nitrate	10	10	0.78	ppm	0 to 1.9	8	2019	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Nitrate-Nitrite	10	10	1.4	ppm	1.4 to 1.4	1	2019	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Selenium	50	50	2.51	ppb	0.65 to 3.5	4	2019	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines

Radionuclides Sampled at the Entry Point to the Distribution System

Contaminant Name	MCL	MCLG	Average Individual Samples	Units	Range Low—High	Number of Samples	Sample Date	Violation	Typical Source of Contaminant
Gross Alpha	15	0	10.2	pCi/L	4.04 to 27.23	8	2019	Yes	Erosion of natural deposits.
Combined Radium	5	0	3.42	pCi/L	1.8 to 5.6	5	2019	No	Erosion of natural deposits.
Combined Uranium	30	0	11.72	ppb	0.53 to 31	8	2019	No	Erosion of natural deposits.

Secondary Contaminants**

Contaminant Name	Secondary Standard	Average	Units	Range Low - High	Number of Samples	Sample Date
Sodium	NA	32.47	ppm	30.9 to 34.8	4	2019
Total Dissolved Solids	500	327.88	ppm	160 - 568	4	2019

** Secondary standards are non-enforceable guidelines for contaminants that may cause cosmetic effects (such as skin and 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.

UnRegulated Contaminants***

EPA has implemented the Unregulated Contaminant Monitoring Rule (UCMR) to collect data for contaminants that are suspected to be present in drinking water and do not have health-based standards set under the Safe Drinking Water Act. EPA uses the results of the UCMR monitoring to learn about the occurrence of unregulated contaminants in drinking water and to decide whether or not these contaminants will be regulated in the future. We performed monitoring and reported the analytical results of the monitoring to EPA in accordance with the Third Unregulated Contaminant Rule (UCMR3). Once EPA reviews the submitted results, the results are made available in the EPA's National Contaminant Occurrence Database (NCOD) https://www.epa.gov/dwucmr/national-contaminant-occurrence-database-ncod Consumers can review UCMR results by accessing the NCOD. Contaminants that were detected during our UCMR3 sampling and the corresponding analytical results are provided below.

Contaminant Name	MCL	MCLG	Average of Individual Samples	Units	Range Low—High	Number of Samples	Sample Date	MCL Violation
Chlorate	NA	NA	176.3	ppb	95 to 280	4	2013	No
Chromium	NA	100	0.3	ppb	0 to 0.32	4	2013	No
Chromium Hexa-valent	NA	NA	0.1	ppb	0.038 to 0.1	4	2013	No
Molybdenum	NA	NA	1.1	ppb	1.0 to 1.3	4	2013	No
Strontium	NA	NA	370	ppb	270 to 440	4	2013	No
Vanadium	NA	NA	1.8	ppb	0 to 3.5	4	2013	No

***More information about the contaminants that were included in UCMR3 monitoring can be found at: http://www.drinktap.org/water-info/whats-in-my-water/unregulated-contaminant-monitoring-rule.aspx. Learn more about the EPA UMCR at: http://www.epa.gov/dwucmr/learn-about-unregulated-contaminant-monitoring-rule or contact the Safe Drinking Water Hotline at (800)426-4791 or http://water.epa.gov/drink/contact.cfm.

Contaminants 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 wild-life.

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.

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 regulation establish limits for contaminants in bottled water that must provide the same protection for public health.

Synthetic Organic Contaminants

Entry Point to the Distribution System									
Contaminant Name	Year	Average	Range Low - High	Sample Size	Unit	MCL	MCLG	MCL Violation	Typical Sources
Di (2 - ethylhexyl) phthalate	2019	0.07	0 to 0.86	12	ppb	6	0	No	Discharge from rubber and chemical factories

Our Water Sources

Source	Source Type	Water Type
SHALLOW WELL 1	WELLS	GROUND-WATER
SHALLOW WELL 2		
SHALLOW WELL 4		
SHALLOW WELL 6		
SHALLOW WELL 7		
SHALLOW WELL 9		
SHALLOW WELL 10		
DEEP WELL A		
DEEP WELL A-14		
DEEP WELL A-16		
DEEP WELL B		
DEEP WELL C2A		
DEEP WELL H		
DEEP WELL AI		
DEEP WELL K		
DEEP WELL LDI		
DEEP WELL N		
DEEP WELL Q		
DEEP WELL V		

Potential sources of contamination

Can occur from EPA Chemical Inventory/Storage Sites, Aboveground, Underground and Leaking Storage Tank Sites, Existing/Abandoned Mine Sites, Other Facilities, Commercial/Industrial/Transportation, Low Intensity Residential, Urban Recreational Grasses, Row Crops, Fallow, Small Grains, Pasture / Hay, Deciduous Forest, Evergreen Forest, Septic Systems, Road Miles

Violation(s) and Formal Enforcement Action(s)

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 the same violation that we told you about in a past notice.

Name	Time Period	Description	Health Effects	Compliance Value	TT Level or MCL
Gross Alpha	10/01/2019 - 12/31/2019	EXCEEDED THE MAXIMUM CONTAMINANT LEVEL	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.	17.79 pCi/L	15 pCi/l

Additional Violation Information

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 the steps taken to resolve the violation.

As you know from previous annual water quality reports we send you, we test our water quality on a regular basis as does every water provider in Colorado. Our annual water quality report can be found on our website, www.pinery.com, under the tab labeled Water Quality. We take pride in serving you high quality water.

After years of tests showing we were in compliance, a recent test showed that we exceeded the limit for one element, Gross Alpha, a form of radiation that naturally occurs and is found and can be found in some drinking water as well as in the air and in soil.

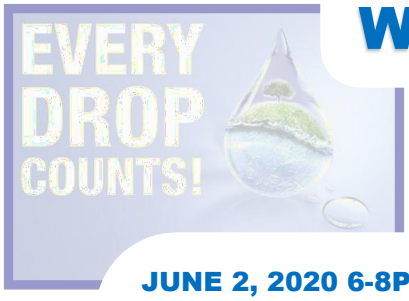
On January 17, 2020 we were notified that one of our new facilities, Chapman Pump Station, exceeded the maximum contaminant level (MCL) for Gross Alpha. The MCL for Gross Alpha is 15 pCi/L and the average level of Gross Alpha at Chapman Pump Station over the last year was 17.79 pCi/L. We have been testing for Gross Alpha since 1992 and have never exceeded the limit, so when we became aware of this issue, we immediately sampled and retested our water supplies. We believe this exceedance to be a sampling issue at one location and not across our entire system.

Certain naturally occurring 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.

We have taken action to correct this situation. We have cleaned and flushed a surge tank in Chapman Pump Station and installing filters to prevent any dust from entering the water supply. We have returned to compliance and we are continuing to provide quality water for life.

WAIVERS

The Colorado Department of Public Health and Environment has issued the District waivers for Cyanide, Nitrite, Glyphosate, Dioxin & Asbestos. This is due to the Colorado Department of Public Health and Environment not expecting to find these contaminants in our water.



Water Conservation News & Events

JUNE 2, 2020 6-8PM - WATER EFFICIENCY SEMINAR

Join us and learn the basics of waterwise landscaping and efficient irrigation best practices to apply to your very own yard! This class will explore the "how to's" of conserving water while creating a functional and attractive outdoor space. We will introduce basic concepts of waterwise landscaping, irrigating your landscape efficiently, cutting edge irrigation technology, and ways to modify existing landscapes to cut back on water use. Whether you are renovating an existing landscape or are starting a new project from scratch this class will focus on practical DIY solutions to everyday challenges in your yard.

"**The Basics of Waterwise Landscaping and Efficient Irrigation"**
Speaker: Alison OConnor, CSU Extension
June 2nd from 6-8pm – Webinar

Event URL: https://resourcecentral.org/event/the-basics-of-waterwise-landscaping-and-efficient-irrigation/

SLOW THE FLOW – SOLVE YOUR SPRINKLERS

The Pinery Water District and Resource Central are teaming up to provide a free sprinkler consultation to our customers. Resource Central technicians will run a few tests to check your sprinklers' efficiency and diagnose any problems your system might have. At the end of your consultation, you will receive a customized watering schedule designed to reduce water usage and keep your lawn healthy and beautiful all summer long! Consultations last about 75 minutes and could help you save thousands of gallons of water each year. Simply call (303) 999-3824 or sign up at ResourceCentral.org/Sprinklers. Conserving water doesn't have to look like a brown lawn!

Stay green, save blue.

2020 WATERING SCHEDULE

PINERY RESIDENTIAL & COMMERCIAL CUSTOMERS

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
EVEN Numbered Addresses	ODD Numbered Addresses	EVEN Numbered Addresses	ODD Numbered Addresses	EVEN Numbered Addresses	NO WATERING	ODD Numbered Addresses

No Watering between 10am & 6pm - Hand Watering Allowed Anytime

If you have any questions or comments please contact us

MAILING ADDRESS: 5242 Old Schoolhouse Road - Parker, CO 80134

WATER QUALITY QUESTIONS? Call Dan Hamman at 303-841-2797 ext. 213 or DanH@Pinerywater.com

BILLING OR OTHER INFORMATION? Call Customer Service at 303-841-2797 ext. 0 or email to information@pinerywater.com