

PENNGROVE WATER COMPANY

Annual Water Quality Report for 2023



PWS ID: CA4910003

July 1, 2024

Dear Community,

This is your annual report about your drinking water quality, also called a Consumer Confidence Report or CCR. Having clean, safe water is one of the most important services we provide, and we want you to be as informed as possible about your drinking water.

This report is intended to provide peace of mind and confidence in your drinking water. Here we explain where your water comes from, the results of sampling that we have performed, and what we are doing to protect you and your family. We are proud to report that the water we provide to you has met all federal and state requirements in 2023.

If upon reading this report, you have any questions, please reach out. You may contact us at 707-539-6397 or office@pkh2o.com.

Sincerely,

Penngrove Water Company

Importance of This Report Statement in Five Non-English Languages (Spanish, Mandarin, Tagalog, Vietnamese, and Hmong)

Language in Spanish: Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse Penngrove Water Company 4982 Sonoma Highway, Santa Rosa, CA 95409 707-539-6397 para asistirlo en español.

Language in Mandarin: 这份报告含有关于您的饮用水的重要讯息。请用以下地址和电话联系Penngrove Water Company 4982 Sonoma Highway, Santa Rosa, CA 95409 707-539-6397 以获得中文的帮助:

Language in Tagalog: Ang pag-uulat na ito ay naglalaman ng mahalagang impormasyon tungkol sa inyong inuming tubig. Mangyaring makipag-ugnayan sa Penngrove Water Company 4982 Sonoma Highway, Santa Rosa, CA 95409 707-539-6397 para matulungan sa wikang Tagalog.

Language in Vietnamese: Báo cáo này chứa thông tin quan trọng về nước uống của bạn. Xin vui lòng liên hệ Penngrove Water Company 4982 Sonoma Highway, Santa Rosa, CA 95409 707-539-6397 để được hỗ trợ giúp bằng tiếng Việt.

Language in Hmong: Tsab ntawv no muaj cov ntsiab lus tseem ceeb txog koj cov dej haus. Thov hu rau Penngrove Water Company 4982 Sonoma Highway, Santa Rosa, CA 95409 707-539-6397 rau kev pab hauv lus Askiv.

About Your Water



Where Your Drinking Water Comes From

Most drinking water in the United States comes from a river, a lake, or from an underground well. The water we provide to you comes from Tank Farms from Petaluma Aqueduct and Russian River.

What Is in Your Drinking Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it 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, 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 stormwater 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, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and 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.



In order to ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminants in water provided by public

water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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 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 at 800-426-4791.

Sampling and Testing

Penngrove Water Company and Sonoma County Water Agency take more than 97 samples across our water system. We're looking for bacteria, metals, and chemicals to make sure the water continues to be safe to drink.

Bacteria

We look for bacteria regularly, as required by law, and there are 2 locations in the water system where we take samples for analysis. More thorough testing, evaluation, and action is required if bacteria is found in even a small percentage of tests.

Disinfection by-products (Trihalomethane (THM) or Haloacetic Acids (HAA))

1 time per year we look for byproducts of the disinfection process. When chlorine, the disinfectant we use to protect against the water of bacteria and viruses, starts to break down in the water, it can form new compounds. These compounds, trihalomethanes (THM) and haloacetic acid (HAA), have been known to cause cancer at high levels. The legal limit for drinking water is 80 parts per billion and 60 parts per billion respectively. We test for these compounds at 2 different locations in the water system.

Lead and Copper

We take water samples from 10 different homes in our system every 3 years to test them for lead and copper.

Lead

Tested throughout the Penn Grove Water Company. Testing is done every 3 years. Most recent tests were done in July 2021.

Amount We Found	<.005 ppb
Ideal Goal (MCLG)	0.2 ppb
90th Percentile	>.005 ppb
Action Level	15 ppb
Highest Amount Detected	<.005 ppb
Source	Kitchen Sink
Violation	No

Copper

Tested throughout the Penn Grove Water Company. Testing is done every 3 years. Most recent tests were done in July 2021.

Amount We Found	. 84 ppm
Ideal Goal (MCLG)	0.3 ppm
90th Percentile	>.84 ppm
Action Level	1.3 ppm
Highest Amount Detected	.31 ppm
Source	Kitchen Sink
Violation	No

Social Media

One way to stay connected with us is by checking out our website, www.pkh2o.com. Here you'll find the latest news about big projects we're working on, fun lessons for students, or opportunities to get involved with water in our community. We also offer helpful tips on conservation, landscaping, and how to protect your pipes.

Projects and Rates

Infrastructure projects and our rates go hand in hand. We can't keep the system in top shape without your help, so we want you to be as informed as possible about what we need and why..

Contact us at 707-539-6397 or www.pkh2o.com

Stay Informed About Your Water

Your Role in Water Quality

Check Your Home or Business' Plumbing for Lead and Copper

We work hard to provide high quality water when it arrives on your property. Once the water we provide passes through the meter on your property however, it is exposed to a whole new environment in your home that we have no control over. But you do.



Some of the things that can change the water quality on your property include your plumbing and pipe material, how long you go without running the water, and whether or how you connect outdoor hoses to your home's water supply. 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. Pennngrove Water Company 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. 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> (opens in a new window).

Run Water After Vacation

Another factor that affects water quality in your home is how "stale" the water is. When you leave your home or business for a long time, as you may when you take a vacation, the water in the pipes and plumbing doesn't move. When water has been sitting in the pipes for days, bacteria can grow, and if you have lead or copper plumbing, those metals can start to seep into the water. The best thing to do when you get back from being away after a long time is to run the water on full blast for 30 seconds to two minutes before using it for drinking or cooking. And always use cold water for cooking, to draw in fresh water from the outside.



Safely Connect Outdoor Hoses

A third factor that can influence water quality in your home are connections to your water outside your home. The outdoor spigot connection to a hose provides a potential way for pollutants to enter your plumbing. If you use the hose to spray chemicals on your yard by connecting the nozzle to a spray bottle, or if you have a sprinkler system connected, there is the potential for chemicals from the bottle or the lawn to be accidentally sucked back into your internal plumbing.

To prevent this from happening, we recommend (and in some states it is the law) that you have a device installed to prevent that from happening.

Look Out for Special Populations

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 from infections. These people should seek advice about drinking water from their health care 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 at 800-426-4791.

Additional Resources

- Information on lead in drinking water: www.epa.gov/safewater/lead (opens in a new window)
- Requirements of the Water Quality Report (also known as the Consumer Confidence Report): http://www.epa.gov/sites/default/files/201405/documents/guide_qrg_ccr_2011.pdf (opens in a new window)
- The Safe Drinking Water Act: www.epa.gov/sdwa (opens in a new window)
- CDC Guide to Understanding your CCR: http://www.cdc.gov/healthywater/drinking/public/understanding_ccr.html (opens in a new window)
- American Water Works Association: <http://www.awwa.org> (opens in a new window)
- Water Environment Federation: <http://www.wef.org> (opens in a new window)
- Groundwater Information: <https://waterdata.usgs.gov/nwis> and <http://www.epa.gov/groundwater-and-drinking-water/> (opens in a new window)

Table of Water Data for 2023

The samples were taken in 2022 unless noted otherwise.

Inorganic Chemicals (IOC) – Penngrove Water Company monitors for IOC more often than required by EPA.

MCL - Maximum Contaminant Level: This is the highest level allowed of a pollutant in drinking water. MCLs are set as close as possible to the goal using the best available technology.

MCLG - Maximum Contaminant Level Goal: The goal level of a pollutant in drinking water. Below this amount, there is no known or expected health effect.

PPB - Part Per Billion = 1 drop of water in an Olympic size swimming pool

PPM - Part Per Million = 1 drop of water in a hot tub

Disinfection By-products

Blank	Highest Level Allowed (MCL) - One Year Average	Maximum Locational Running Annual Average (Year)	Violation	Source
Total Trihalomethanes (TTHMs) 6/2023	80 ppb	22 ppb	no	Disinfection by product
Total Haloacetic Acids (THAAs) 6/2023	60 ppb	3.9 ppb	no	Disinfection by product

Total Chlorine Residual – Continuously Monitored

Sample Location	Minimum Disinfectant Residual Level Allowed	Lowest Level Detected	Sample Dates Monthly	Violation	Source
Davis Lane	1.0	.61	1	No	Chlorine
Palm Ave	1.0	.66	1	No	Chlorine
Old Redwood Highway	1.0	.59	1	No	Chlorine
Woodward Ave.	1.0	.62	1	No	Chlorine
Petaluma Hill Road	1.0	.65	1	No	Chlorine

Sampling Results Showing the Detection of Coliform Bacteria

Microbiological Contaminants	Highest No. of Detections	No. of Months in Violation	Sample Dates Monthly	MCLG	Typical Source of Bacteria
Raw Water	0	0	2	0	
E.Coli	<1.0	0	1	0	Human and animal fecal waste
E.Coli Repeat	N/A	N/A	N/A	N/A	

Sampling Results for Sodium and Hardness

Chemical or Constituent (and report units)	Sample Date	Lowest Level Detected	MCL	Source
Sodium (ppm)	6/23	8.7	None	Salt present in water and generally naturally occurring
Hardness (ppm)	6/23	114	None	Sum of polyvalent cations present in the water, generally magnesium and calcium, and generally naturally occurring

Chemicals Detected	Highest Level Allowed (MCL)	Ideal Goal (MCLG)	Highest Result	Violation	Source
Antimony	6 ppb	0 ppb	<6.0 ppb	no	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Barium	2000 ppm	1000 ppm	<100 ppm	no	Discharge of oil drilling wastes and metal refineries, erosion of natural deposits
Chromium	100 ppb	50 ppb	<10 ppb	no	Discharge from steel and pulp mills, chrome plating, erosion of natural deposits
Fluoride	2 ppm	.15 ppm	<0.10 ppm	no	Erosion of natural deposits, discharge from fertilizer and aluminum factories
Nitrate 6/2023	10 ppm	.40 ppm	<.40 ppm	no	Runoff from fertilizer usage, leaching from septic tanks, sewage
Arsenic	10 ppb	2 ppb	<2.0 ppb	no	Erosion of natural deposits from orchards, glass and electronics production waste
Asbestos	7 ppb	.2 ppb	<2.0 ppb	No	Internal corrosion of asbestos cement in water mains, erosion of natural deposits
Beryllium	4 ppb	1 ppb	<1.0 ppb	No	Discharge from metal refineries, coal burning factories, electrical, aerospace and defense industries
Cadmium	5 ppb	1 ppb	<1.0 ppb	No	Internal corrosion of galvanized pipes, erosion of natural deposits, discharge from electroplating, industrial and chemical factories, metal refineries, runoff from batteries and paint
Mercury	2 ppb	1 ppb	<0.20 ppb	No	Erosion of natural deposits, discharge from refineries and factories, runoff from landfill and croplands
Nickel	100 ppb	10 ppb	<10 ppb	No	Erosion of natural deposits, discharge from metal factories
Perchlorate	6 ppb	4 ppb	<2.0 ppb	No	Industrial byproduct of fertilizers, fireworks
Selenium	50 ppb	5 ppb	<5.0 ppb	No	Erosion from petroleum, glass and metal refineries, erosion from natural deposits, discharge from mines, runoff from livestock lots
Silver	<10 ppb	100 ppb	<10 ppb	No	Industrial discharge
Thallium	2 ppb	1 ppb	<1.0 ppb	No	Leaching from ore processing sites, from electronics, glass, and drug factories
Methylterbutylether MTBE	ND	0.003 ppb	<0.003 ppb	No	Discharge from petroleum refineries and industrial chemical factories

TTHMs - Total Trihalomethanes

THAAs - Total Haloacetic Acids

MCL - Maximum Contaminant Level: This is the highest level allowed of a pollutant in drinking water. MCLs are set as close as possible to the goal using the best available technology.

PPB - Part Per Billion = 1 drop of water in an Olympic size swimming pool

PPM - Part Per Million = 1 drop of water in a hot tub

Detection of Contaminants with a Secondary Drinking Water Standard

Chemicals Detected	Highest Level Allowed (MCL)	Ideal Goal (MCLG)	Highest Result	Violation	Source
Alkalinity	n/a	n/a	230. ppb	No	
Calcium	n/a	n/a	32. ppb	No	Erosion from natural deposits
Chloride	500 ppb	n/a	16. ppb	No	Runoff leaching from natural deposits, seawater influence
Copper	1000 ppb	50 ppb	<50 ppb	No	Internal corrosion of household plumbing systems, erosion of natural deposits, leaching of wood preservatives
Foaming Agents	.5 ppm	n/a	<0.050 ppm	No	Municipal and industrial waste discharge
Iron	300 ppb	n/a	<100.00 ppm	No	Erosion of natural deposits
Magnesium	n/a	n/a	16 ppb	No	Erosion of natural deposits
PH	n/a	n/a	7.5	No	Pure water is close to 7
Turbidity	5	.1	<0.10	No	Measurement of cloudiness of water caused by suspended organic or inorganic particles
Sulfate	500 ppm	.5 ppm	4.0 ppm	No	Runoff leaching from natural deposits and industrial waste
Zinc	5000 ppb	50 ppb	<50 ppb	No	Runoff leaching from natural deposits and industrial waste
Color	5.0 color units	ND	6.0		Naturally occurring organic materials

Unregulated Contaminant Monitoring

Chemical	Testing Period	Level Detected /Highest Detection Allowed	Next Testing Period
HAA5 Total	6/2023	ND / 60 ppb	6/2024
Manganese	6/2023	<20 ppb / 50 ppb	6/2024
2,4,5-T	6/22	ND / 1000 ppb	6/2024

Definitions

ACRONYMS	DEFINITIONS
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.
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.
TT	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
MRDLG	Maximum Residual Disinfectant Level Goal: This is the lowest amount of cleaning chemical drinking water should have, because it is the lowest amount needed to make sure bacteria and viruses can't live.

MRDL	Maximum Residual Disinfectant Level: 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.
Level 1 Assessment	A Level 1 assessment is 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 Level 2 assessment is 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.
mg/L	Number of milligrams in one liter of water
pCi/L	Picocuries per liter (a measure of radioactivity)
NA	Not applicable
ND	Not detected
NR	Monitoring not required, but recommended
NTU	Nephelometric Turbidity Units: Turbidity is measured with an instrument called a nephelometer. Measurements are given in nephelometric turbidity units.
PPM	Part Per Million= 1 drop of water in a hot tub
PPB	Part Per Billion = 1 drop of water in an Olympic size swimming pool
PPT	Part Per Trillion (ppt) = 1 drop of water in a lake that's 6 square acres

Not All Substances in the Water Have Official Health Limits

In this report, we share the data for all the substances we monitor as required by the Safe Drinking Water Act (SDWA). The law doesn't specify a limit for every potential substance that could be found in the water, so the Environmental Protection Agency (EPA) is constantly studying new potential pollutants (they call them unregulated contaminants) to determine what their affects are on our health, and at what levels, to determine where to set limits for them. Dimethoate, for example, is a chemical used to kill bugs and is usually used on farms. There is no limit for it in water now, but it is one of the chemicals EPA is looking at closely. We are helping EPA by looking for Dimethoate in our water to help them learn more about where it occurs and whether it needs to be regulated.

VIOLATIONS

Required information on specific contaminants Cryptosporidium, Radon, Arsenic, Nitrate and TTHMs

Cryptosporidium

Cryptosporidiosis or "Crypto" is a disease that causes mild to severe diarrhea. It comes from a microscopic parasite, *Cryptosporidium*, that can live in the intestine of humans and animals and be passed in the stool of an infected person or animal. The parasite is protected by an outer shell, an oocyst, that allows it to survive outside the body for long periods of time. This makes it very resistant to the type of disinfectant we use to clean the water. During the past two decades, Crypto has become recognized as one of the most common causes of waterborne disease (recreational water and drinking water) in humans in the United States. The parasite is found in every region of the United States and throughout the world.

There are currently no accurate ways for detecting Crypto in the water supply at the very low levels that cause sickness. Therefore, EPA does not require testing for the Crypto parasite unless concentrations in the water before treatment exceed 10 oocysts per liter.

Symptoms of a Crypto infection include nausea, diarrhea, and stomach cramps. Most healthy people are able to recover from the disease within a few weeks. However, some immuno-compromised people (such as those with AIDS, undergoing chemotherapy or recent organ transplant recipients) are at a greater risk of developing a severe, life-threatening illness. Immuno-compromised persons should contact their doctor to learn about appropriate precautions to prevent infection.

Radon

Radon is a naturally occurring gas present in some groundwater. Radon may pose a risk to your health if you inhale it once it is released from water into the air. This could occur during showering, bathing, washing dishes, or washing clothes. The radon gas released from drinking water is a relatively small part of the total radon naturally found in air. One major source of radon gas is from the soil, where the gas can seep through the foundations of homes. It is not clear whether ingested (i.e., taken through the mouth) radon contributes to cancer or other adverse health conditions. If you are concerned about radon in your home, tests are available to determine the total exposure level.

If systems with arsenic sample over 0.005 mg/L

Arsenic is a mineral known to cause cancer in humans at high concentrations and is linked to other health issues, such as skin damage and circulatory problems. 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.

If systems with nitrate samples above 5 mg/L

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

If systems with TTHM (total trihalomethanes) samples above 0.080 mg/L and less than MCL

Trihalomethanes are compounds that can form in water over time when the chlorine used for disinfectant breaks down. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

If a turbidity measurement is included, the report should include an explanation of the reasons for measuring turbidity such as the following:

Turbidity is the measure of cloudiness of the water and has no health effects. However, too much turbidity can interfere with the disinfection process, making it easier for bacteria to grow. High

turbidity may therefore indicate the presence of bacteria or other disease-causing organisms, such as viruses and parasites that can cause symptoms like nausea, cramps, diarrhea, and headaches.

For systems that have failed to install adequate filtration or disinfection equipment or processes, or have had a failure of such equipment or processes which constitutes a violation, the CCR must contain the following language as part of the explanation of the potential adverse health effects:

When the water has not been treated well enough, due to a failure of the filtration or disinfection process, it may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms of illness such as nausea, cramps, diarrhea, and headaches.

Penngrove Water Company did not experience a violation.