Water Quality

IS OUR TOP PRIORITY

The Public Works Agency of Alameda County is pleased to distribute this report to the Castlewood CSA customers. It provides information about where your water comes from and the work we perform each day to assure the water is delivered to your tap is safe to drink. It also provides data about what is in your water and how water quality tests on your drinking water compare to federal and state drinking water standards during calendar year 2021.

2021 Annual Water Quality Report

FOR THE CASTLEWOOD WATER SYSTEM

Public Works Agency
Alameda County

COLEMAN
ENGINEERING

1. YOUR WATER MEETS ALL SAFE DRINKING WATER STANDARDS

The technical and analytical water quality information presented in this report is required by State health regulations. These regulations require water suppliers to inform customers about where their water comes from; what is in their water; and any violation of safe drinking water standards that may have occurred during this past reporting period. This report provides results of all tests required to be performed on Castlewood's water supplies during 2021. We are happy to report that all 2021 water quality tests confirmed that water delivered to your tap met all applicable federal and state drinking water standards without any violations.

This report contains important information about your drinking water. Translate it or speak with someone who understands it.

Este informe contiene informacion muy importante sobre su agua beber. Traduzcalo o hable con alguien que lo entienda bien.

此份有關你的食水報告,內有重要資料和訊息,請找
他人為你翻譯及解釋清楚。

यह सूचना महत्वपूर्ण है ।
कृपा करके किसी से :सका अनुवाद करायें ।

Mahalaga ang impormasyong ito. Mangyaring ipasalin ito.

이 안내는 매우 중요합니다.
본인을 위해 번역인을 사용하십시요.

Included in this report:

1. Your Water Meets All Safe Drinking Water Standards
2. Sources of Drinking Water for Castlewood
3. Definition of Terms
4. Understanding the Summary
5. Chemicals & Minerals in Water
6. 2021 Water Quality Results
7. A Reminder to Always Use Water Wisely
8. Contact Information

2. SOURCES OF DRINKING WATER FOR CASTLEWOOD

Castlewood customers receive groundwater produced by the San Francisco Public Utilities Commission (SFPUC) which is delivered through a single connection at the Castlewood Reservoir. The Castlewood water distribution system consists of two pressure zones, three water storage tanks and four water booster pumps.

All groundwater sources comply with State Water Resources Control Board (SWRCB) testing regulations. In addition, there are two sampling points located within the Castlewood water distribution system that are monitored and tested monthly, to ensure your drinking water continuously complies with all Federal and State drinking water standards. If you have questions regarding the quality of the water supplied to you by the San Francisco Public Utilities Commission (SFPUC), this report should provide most of the answers. We appreciate the time you take to read this report and welcome any additional questions or comments you may have regarding your water supply. For questions related to your water supply, you may contact Alameda County Public Works at 510-670-5480.

3. DEFINITION OF TERMS

The following terms are used in the water industry to define contaminant levels.

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

MCL – Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water.

MCLG – Maximum Contaminant Level Goal: The level of contaminant below which there is no known or expected risk to health—set by the USEPA.

MRDL – Maximum Residual Disinfectant Level: The highest level of a disinfectant that is allowed in drinking water.

MRL – Minimum Reporting Level: The minimum level of contaminate that is allowed in drinking water.

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

NA – Not Applicable

ND – Not Detected: Concentration not found above Minimum Reporting Limit (MRL) or Detection Limit for Purpose of Reporting (DLR) set by the State Board.

PHG – Public Health Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California EPA.

TT – Treatment Technique: A required process for reducing contaminant levels.

Turbidity – A measure of the cloudiness of the water. Turbidity levels are a good indicator of the effectiveness of the treatment plant's filtration system.

Table Units

mg/L	Milligrams per Liter or parts per million
µg/L	Micrograms per Liter or parts per billion
µS/cm	Microsiemens per Centimeter
NTU	Nephelometric Turbidity Unit
pCi/L	Picocuries per Liter

The following contaminants may also be found in drinking water:

TTHMs (Total Trihalomethanes): TTHMs are by-products of drinking water disinfected with chlorine compounds. Some people who use water containing TTHMs in excess of the MCL, over many years, may experience liver, kidney, or central nervous system problems and may have an increased risk of getting cancer.

Nitrate: If found in drinking water at levels above 10 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 10 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

4. UNDERSTANDING THE SUMMARY

Primary Drinking Water Standards (PDWS) are set after considerable research and data has been analyzed by health experts. These standards, called Maximum Contaminant Levels (MCLs) are set by the United States Environmental Protection Agency (USEPA) and strictly enforced by the State Water Resources Control Board (SWRCB). Primary MCLs are set as close to the Public Health Goals (PHGs) (or Maximum Contaminant Level Goals–MCLGs) as is economically and technologically feasible.

Secondary Standards are based upon qualities of water such as taste, odor, color or clarity of the water. These standards, called Secondary Maximum Contaminant Levels (SMCLs) set limits on substances that may influence customer acceptance of the water and are established by the SWRCB.

Detected Contaminants: The table on page 7 shows the level of each detected regulated contaminant, the average level of each detected contaminant (Average), and, if more than one sample was collected, the range of levels found during the 2021 calendar year (Range).

In order to ensure that tap water is safe to drink, USEPA and the SWRCB prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The limits for contaminants in bottled water provide the same level of protection.

Contaminants that may be present in source water include the following: microbial contaminants, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, 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.

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

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

To view the Water Quality Report online, please visit: https://bit.ly/CastlewoodCCR2021

5. CHEMICALS AND MINERALS IN WATER

The sources of drinking water (both tap 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. Drinking water, including bottled waters, 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 EPA Safe Drinking Water Hotline at 800-426-4791. The disinfectant chlorine is used by SFPUC to disinfect Castlewood's water. This disinfectant is utilized to protect public health by destroying disease-causing organisms that may be present in water supplies. The SFPUC has submitted to the SWRCB a Drinking Water Source Assessment and Protection Program (DWSAPP) for each water source in their system. The DWSAPP report identifies possible sources of contamination to aid in prioritizing cleanup and pollution prevention efforts. Please contact SFPUC if you would like to view or make a copy of this report.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised people 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. The Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the EPA Safe Drinking Water Hotline at 800-426-4791 or www.cdc.gov/healthywater/drinking.

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.

1. The Public Works Agency of Alameda County 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 EPA Safe Drinking Water Hotline, 800-426-4791, or at www.epa.gov/lead

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The coreopsis, a member of the sunflower family, is a low-maintenance, long-blooming flower that is very tolerant to drought and neglect. A favorite of butterflies and bees, coreopsis is an exceptional garden plant that continues to produce flowers well into fall with regular dead-heading and brilliantly adapts to most well-draining soils.

6. 2021 WATER QUALITY RESULTS

The following is a list of contaminants that may be found in drinking water and their sources. Also included in the table below is a summary of all chemicals analyses required by the USEPA and the State Board for Castlewood's water supply during calendar year 2021.[1]

Pleasanton Well Field/Castlewood Reservoir—Water Quality Data for Year [1]

SFPUC supplied Castlewood with groundwater from their Pleasanton Well Field.

DETECTED CONTAMINANTS	Unit	MCL	PHG or (MCLG)	Range or Level Found	Average or Max	Major Sources in Drinking Water
DISINFECTION BYPRODUCTS						
Total Trihalomethanes	ppb	80	N/A	2.0	2.0[2]	Byproduct of drinking water disinfection
Haloacetic Acids	ppb	60	N/A	2.3	2.7[2]	Byproduct of drinking water disinfection
INORGANICS						
Barium	ppb	1000	2000	176	176	Erosion of natural deposits
Fluoride (Source Water)	ppm	2.0	1	0.1	0.1	Erosion of natural deposits
Nitrate (as N)	ppm	10	10	2.5	2.5	Erosion of natural deposits
Chlorine	ppm	MRDL=4.0	MRDLG=4	0.60-1.41	1.01[3]	Drinking water disinfectant added for treatment
RADIONUCLIDES [4]						
Gross Alpha Particle	pCi/L	15	(0)	3.4-4.3	3.9	Erosion of natural deposits
Uranium	pCi/L	20	0.43	4.2	4.2	Erosion of natural deposits

CONSTITUENTS WITH SECONDARY STANDARDS	Unit	SMCL	PHG	Range or Level Found	Average	Major Sources of Contaminant
Chloride	ppm	500	N/A	110-111	111	Runoff/leaching from natural deposits
Copper	ppb	1000[8]	300	ND-59	ND	Internal corrosion of water plumbing system
Specific Conductance	µS/cm	1600	N/A	1300-1310	1305	Substances that form ions when in water
Sulfate	ppm	500	N/A	99.5-101	100	Runoff/leaching from natural deposits
Total Dissolved Solids	ppm	1000	N/A	711-719	715	Runoff/leaching from natural deposits

LEAD AND COPPER	Unit	AL	PHG	Range	90th Percentile	Major Sources in Drinking Water
Copper [5]	ppb	1300	300	ND-410[5]	110	Internal corrosion of household water plumbing systems
Lead [5]	ppb	15	0.2	ND–38[5]	11	Internal corrosion of household water plumbing systems

OTHER WATER QUALITY PARAMETERS	Unit	ORL	Range or Level Found	Average
Alkalinity (as $CaCO_3$)	ppm	N/A	382–417	400
Boron	ppb	1000 (NL)	474-476	475
Bromide[9]	ppm	N/A	<0.05–0.6	0.3
Calcium (as Ca)	ppm	N/A	123-124	124
Chlorate[6]	ppb	800 (NL)	45	45
Chromium[7]	ppb	N/A	3.8	3.8
Hardness (as $CaCO_3$)	ppm	N/A	538-559	549
Magnesium	ppm	N/A	63	63
pH	–	N/A	7.2–7.5	7.3
Potassium	ppm	N/A	2.5–2.6	2.5
Silica	ppm	N/A	22.8-23	22.9
Sodium	ppm	N/A	55.5-56.4	56
Strontium	ppb	N/A	1400	1400
Total Organic Carbon	ppm	N/A	1.6	1.6

KEY		
≤	=	less than or equal to
AL	=	Action Level
Max	=	Maximum
N/A	=	Not Available
ND	=	Non-Detect
NL	=	Notification Level
NTU	=	Nephelometric Turbidity Unit
ORL	=	Other Regulatory Level
pCi/L	=	picocurie per liter
ppb	=	part per billion
ppm	=	part per million
µS/cm	=	microSiemens/centimeter

(1) All results met State and Federal drinking water health standards.

(2) This is the highest locational running annual average value.

(3) This is the highest running annual average value.

(4) These results were from the latest raw water monitoring at the Well B in 2021.

(5) The most recent Lead and Copper Rule monitoring was in 2020. No samples collected had copper concentrations above the AL. 1 of 6 samples sites along the golf course had lead concentrations above the AL. The next monitoring period is 2023.

(6) The detected chlorate in the treated water is a degradation product of sodium hypochlorite used by the SFPUC for water disinfection.

(7) Chromium (VI) is currently regulated by the SWRCB-DDW under a MCL of 50 ppb for total chromium, of which the sampling results were below the DLR in 2021.

(8) Copper also has a secondary MCL of 1,000 ppb.

(9) Results from 2020

(10) The SFPUC completed quarterly monitoring of PFAS at Well B in accord with SWRCB General Order No. DW2020-0003-DDW. PFAS monitoring at Well B is now annual, per SWRCB's approval upon all quarterly results being below Consumer Confidence Report Detection Limits. Due to a pump failure, quarterly PFAS monitoring at Well A was suspended after quarter 1 in 2021. PFAS monitoring at Well A will resume upon pump repairs. For the 18 PFAS analytes monitored, none were detected above the Consumer Confidence Report Detection Level (CCRDL—the minimum concentration at which an analyte requires reporting in the Consumer Confidence Report). For additional information on PFAS and/or water quality data, please contact 916-548-0001.

7. A REMINDER TO ALWAYS USE WATER WISELY

We encourage you to be aware of your water use and make Conservation a Way of Life! Please continue to make every effort to conserve our limited water resources.

One of the most significant areas of water use for most homes and businesses is water used outside for landscape irrigation.

There are many simple and cost-effective measures that water customers can apply to help reduce their outside irrigation water use. Turn your landscape irrigation controller off during the cold and rainy winter months. Keep lawn mowed to a height between 2 ½- to 3-inches tall helps lower evaporation and promotes lawn root growth. Lawn can usually do fine when watered every second or third day during hot weather, rather than every day. Water your garden between the hours of 10:00 p.m. and 6:00 a.m. Replacing leaking, bent and poorly spraying sprinkler heads, valves, and drip irrigation emitters can help. Also, consider replacing some of your lawn area with drought-tolerant plants. Recent designs of sprinkler heads have also made these much more efficient and can help deliver water to your landscaping without overspray or misting. A small investment in changing the high water emitting spray heads or bubblers in plant and shrub areas with an efficient drip irrigation system could also save water and deliver water only to the plants' roots. Utilizing mulch and bark around plants, shrubs and trees can significantly help reduce the evaporation of water, help mitigate weed growth, and result in healthier plants. More advanced irrigation controllers are now equipped with moisture sensor modules to help adjust the amount and duration of water being applied to plants and turf. Knowing how to operate an irrigation controller and effectively maintaining your sprinkler system can make a big difference in your outdoor water use and greatly improve your water conservation results.

8.

CONTACT INFORMATION

For questions regarding this report or for further assistance, please refer to the contact information below:

Water Quality Information 916-548-0001

Para informacion en español, llamar al telefono

Emergency Water Service 916-622-6095

M-F 8:00 a.m.–5:00 p.m.

After hours and weekends, call 916-622-6095

San Francisco Public Utilities Commission 415-551-3000

www.sf311.org

Alameda Public Works Agency—Castlewood CSA Information 510-670-5480

www.acpwa.org

Coleman Engineering 916-548-0001

Alameda County Household Hazardous Waste Collection Sites 800-606-6606

M-F 8:30 a.m.–5:00 p.m.

www.household-hazwaste.org

EPA Safe Drinking Water Hotline 800-426-4791

www.epa.gov/ground-water-and-drinking-water/safe-drinking-water-hotline

EPA National Radon Hotline 800-767-7236

www.sosradon.org

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For any further questions you may have regarding the Castlewood's water supplies or quality, please visit the Alameda County Public Works Website at www.acpwa.org or call 510-670-5480. For general questions on Castlewood CSA, contact Alameda County Public Works Agency at 510-670-5480.

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