## A Message to Customers Regarding COVID-19

Coastside County Water District's water is safe for drinking, cooking, and maintaining personal hygiene during the COVID-19 pandemic. Until a vaccine is approved and the local population has built up immunity, this virus is expected to continue to impact public health.

The District's water treatment processes at its two treatment plants include filtration and disinfection. These treatment processes are effective in removing and inactivating viruses. According to the U.S. EPA, there is no evidence that COVID-19 survives the disinfection process.

For disinfection, the District uses chlorine in the form of liquid sodium hypochlorite (NaOCI). Chlorine is a well understood and established disinfectant used for treating drinking water. It is used for the inactivation of pathogens and has made a significant contribution toward advancing public health by preventing the spread of waterborne disease.

WaterSmart 000

Coastside County Water District recently partnered with WaterSmart Software to offer customers access to a free web portal.

- View hourly and daily water usage.
- Set up high usage alerts.
- Compare your water usage with similar homes in your neighborhood.

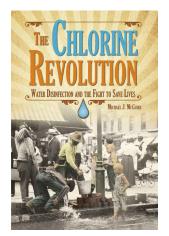
To register for the free web portal, go to the WaterSmart sign up page. Make sure you have your water account, email, and zip code.

https://coastsidewater.watersmart.com

Questions? email watersmart@coastsidewater.org or call (650) 726-4405.

The District is committed to delivering safe and reliable water service for all our customers to support the public health of the Coastside community.

To learn more about the use of chlorine in drinking water treatment, District staff recommend a book titled *The Chlorine Revolution: Water Disinfection and the Fight to Save Lives* by Michael J. McGuire. The book was published by the American Water Works Association (AWWA) on October 16, 2013.



## Connect With Us!

The District encourages participation in the decisions affecting the community's drinking water. Regular Board meetings occur at 7:00 p.m. on the second Tuesday of each month in the District's Board Room at 766 Main Street, Half Moon Bay, CA 94019.



If you have any questions or desire additional information about this report or water quality, contact James Derbin, Superintendent, at (650) 276-0129.

To receive communications from the District about current events and news, sign up for our E-newsletter at www.coastsidewater.org

To communicate with Customer Service and Utility Billing (650) 726-4405 | customerservice@coastsidewater.org



# Coastside County Water District WATER QUALITY REPORT 2019

Coastside County Water District (District) is pleased to present the 2019 Annual Water Quality Report in accordance with state and federal regulations. The data presented are from sampling and testing done in accordance with Safe Drinking Water Act regulations.

#### What's Inside

Important information about your water Where your water comes from Ways to contact the District



## Where Your Water Comes From

The District receives water originating from pristine and highly protected watersheds in California's Sierra Nevada Mountain Range and San Mateo County's Coastal Mountain Range.

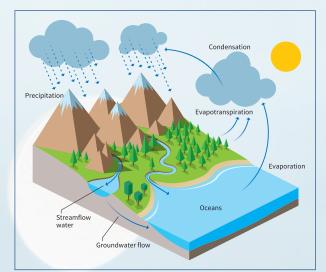
The District owns and operates the Denniston Project (surface and groundwater) and the Pilarcitos Creek Infiltration Well Field, both of which receive water originating from the local coastal range.

The District purchases raw water from the San Francisco Public Utilities Commission (SFPUC). Raw water from SFPUC originates from Pilarcitos Reservoir, which is supplied by local runoff from the coastal range, and from Upper Crystal Springs Reservoir, which is supplied by imported water from SFPUC's Regional Water System, including the Hetch-Hetchy watershed.

Water delivered to District customers receives full treatment at our two water treatment facilities in accordance with federal and state standards. The Nunes Water Treatment Plant is capable of treating up to 4.5 million gallons per day (mgd) of water from Pilarcitos Reservoir, infiltration wells in Pilarcitos Creek Canyon and Upper Crystal Springs Reservoir. The Denniston Water Treatment Plant treats up to 1.4 mgd of water from Denniston Creek and Denniston Well Field.

Coastside County Water District does not fluoridate its drinking water. For information about fluoridation, go to waterboards.ca.gov/drinking\_water/certlic/ drinkingwater/Fluoridation.html

Calendar Year 2019



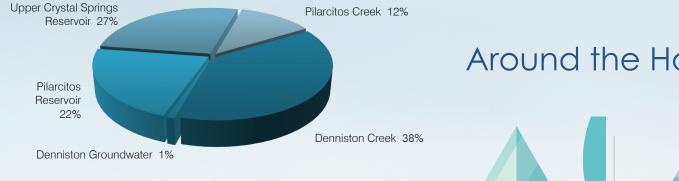
## Health and Education Information

To ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the State Water Resources Control Board (State Water Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health.

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, that may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- **Inorganic Contaminants** such as salts and metals, that can be naturallyoccurring or result from urban stormwater 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 stormwater runoff and residential uses.
- **Organic Chemical Contaminants** including synthetic and volatile organic chemicals that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application and septic systems.
- **Radioactive Contaminants** that can be naturally-occurring or be the result of oil and gas production and mining activities.

USEPA Safe Drinking Water Hotline ► (800) 426-4791



#### SOURCE WATER ASSESSMENT – WATERSHED SANITARY SURVEY

The District completed a source water assessment in 2016 for the San Vicente Creek and the Denniston Creek watersheds. The Upper Pilarcitos Creek watershed and Upper Crystal Springs Reservoir watershed source water assessments were completed by SFPUC. The assessments are available for review at the Division of Drinking Water (DDW) – San Francisco District Office.

#### **DDW–San Francisco District** ► (510) 620-3474

Around the House and Yard



## Wash Full Loads of Clothes & Dishes

Washer: saves 15–45 gallons per load Dishwasher: saves 5–15 gallons per load



Install A High-Efficiency Toilet Saves 19 gallons per person/day



Fix Leaks A leak about as small as the tip of a ballpoint pen can waste about 6,300 gallons of water per month!



Adjust Sprinkler Heads Saves 12–15 gallons each time you water

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 USEPA Safe Drinking Water Hotline.

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 from their health care providers.

USEPA/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 USEPA Safe Drinking Water Hotline.





Use Mulch Saves 20–30 gallons per 1000 sq. ft. each time



Drought Resistant Trees & Plants Saves 30-60 gallons per 1000 sg. ft. each time

## 2019 WATER QUALITY TEST RESULTS

The Annual Water Quality Report contains water quality data tables that show the results of treated water from the Nunes and Denniston Water Treatment Plants as well as the distribution system. In addition, the District monitors the treatment process 24 hours a day. The District's water quality monitoring program includes many compounds or water quality parameters that are not regulated or harmful, such as Hardness, Alkalinity, Magnesium and many

others. Knowledge of these parameters allows us to provide you with the best treatment available.

The table contains the name of each substance, the highest level allowed by regulation (MCL), the ideal goals for public health (MCLG/PHG), the range of samples detected from lowest to highest, and the usual sources of the constituent. To help you understand these tables, we have included the following definitions listed on the bottom of this page.

Some data—although representative—were collected prior to 2019, as the State Water Board requires monitoring for some constituents less than once per year since the concentrations of these constituents do not vary frequently or significantly.



More information **>** 

For more information about this report or the District's water quality monitoring program contact: James Derbin, Superintendent, at (650) 726-4405.

#### DEFINITIONS OF KEY TERMS

Maximum Contaminant Level (MCL). The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water. MCLs are established by USEPA and the State Water Board.

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 are set by the USEPA.

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 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.

Notification Level (NL). Notification levels are health-based advisory levels established by the State Water Board for chemicals in drinking water that lack MCLs. When chemicals are found at concentrations greater than their notification levels, certain requirements and recommendations apply.

Primary Drinking Water Standard (PDWS). MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Public Health Goal (PHG). 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 Environmental Protection Agency.

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

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

Total Organic Carbon (TOC). TOC has no health effects. However, TOC provides a medium for the formation of disinfection byproducts including trihalomethanes and haloacetic acids. Drinking water containing disinfection byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of cancer

Turbidity. Turbidity has no health effects. It is a measure of the clarity of the water and is monitored because it is a good indicator of water quality and the effectiveness of a filtration system. The MCL for turbidity is based on the TT. For unfiltered water, the MCL is 5.0 NTU. For filtered water, the MCL is  $\leq$  0.3 NTU 95% of the time.

Waiver. State permission to decrease the monitoring frequency for a particular contaminant.

		MCL,	PHG,	Nunes WTP		Denniston WTP				about your water qua			
PARAMETER	Unit	(AL), or [MRDL]	(MCLG), or [MRDLG]	Average	Range	Average	Range	Typical S	ourooc*	· · · ·			
				Average		Average		Typical C	ources	Lead			
INORGANIC CHEMICALS	_	_	_	_		_			_			ead can cause se children. Lead in d	
Aluminum	ppm	1	0.6	ND	ND-0.066	ND	ND	3,	4			with service lines	
Fluoride	ppm	2	1	ND	ND	0.13	0.13	3, 5		responsible for providing high quality dr materials used in plumbing components hours, you can minimize the potential fo		1 , 0	
Turbidity	NTU	TT	NA	0.02	0.02-0.06	0.04	0.03-0.20					•	
Nitrate (NO <sub>2</sub> ) as Nitrogen (N)	ppm	10	10	0.8	0.8	0.4	0.4	3, 18	3, 19			e using water for	
DISINFECTION BYPRODUCT PRECURS	OR											d water and reuse	
Total Organic Carbon	ppm	TT	NA	1.2	0.9–1.5	1.2	0.9–2.2	8	3	as watering plants. If you are concerned at your water tested. Information on lead in dr			
DISTRIBUTION SYSTEM SAMPLIN	IG											on lead in drinkli e is available from	
DISINFECTION RESIDUAL				Highe	est RAA	Ra	nge	Typical S	Sources*		•	d-drinking-water/b	
Disinfectant Residual as Chlorine (Cl <sub>2</sub> )	ppm	om [4] [4]		0.8		0.21–1.53		1		Cryptosporic			
DISINFECTION BYPRODUCTS				Highest Location RAA		Range		Typical Sources*		Cryptosporic		l pothogon	
Total Trihalomethanes (THMs)	ppb	80	NA		71		28–80		7		Cryptosporidium is a microbial pathogen comr the U.S. Monitoring of source water prior to treat		
Total Haloacetic Acids (HAAs)	ppb	60	NA		26	10	-27	-	7	low presence of these organisms. Althou		•	
LEAD AND COPPER (2018 AT-THE-TAP	SAMPLING)			90th Percentile		Samples Above AL		Typical Sources*		filtration methods do not guarantee 100% rem			
Lead (47 Sample Sites) <sub>bc</sub>	ppb	(15) 0.2		1.4		0		3, 15, 17			0	ms are dead or if	
Copper (47 Sample Sites) <sub>b</sub>	ppm	(1.3) 0.3		0.06		0		3, 15, 16		0		n cause abdomina ps. Most healthy	
SECONDARY DRINKING WATER STAI	NDARDS (AES	THETIC STANE	DARDS)									immuno-compro	
PARAMETER	Unit	М	CL	Average	Range	Average	Range	Typical S	ources*	and the elderly are at greater risk of develo			
Aluminum	ppb	2	00	ND	ND-66	ND	ND	3,	4	<ul> <li>compromised individuals to consult the take to avoid infection. Cryptosporidium</li> </ul>			
Chloride	ppm	5	00	24	17–37	39	3–52	9, 10	), 12	spread through means other than drir			
Vanganese	ppb	5	50	ND	ND-24	ND	ND	1	0			in an ann an ig mar	
Odor - Threshold	T.O.N.	:	3	1	1	1	1	1	1	Hardness			
Silver	ppb	1	00	ND	ND-11	ND	ND	1	7	Water hardness is determined mainly b Although hard water does not pose a h		, , ,	
Specific Conductance	μS/cm	1600		285	207–359	317	274–376	12, 14		other reasons. Some benefits of water softening life for water heaters and a decrease in encrust			
Sulfate	ppm	5	00	22 22		11	11	9, 10, 13					
Total Dissolved Solids	ppm	10	000	167	120–212	191	160–220	9,	10	Hardness	Grains per		
UNREGULATED PARAMETERS										Classification	Gallon	mg/L or ppm	
				Nune	es WTP	Dennis	ton WTP	Distributio	on System	Soft	less than 1.0	less than 17.1	
PARAMETER	Unit	N	۱L	Average	Range	Average	Range	Average	Range	Slightly hard	1.0–3.5	17.1–60	
Boron	ppb	10	000	ND	ND	ND	ND	NA	NA	Moderately hard	3.5–7.0	60–120	
Chlorate <sub>b</sub>	ppb	8	00	213	180–230	380	380	387	290–660	Hard	7.0–10.5	120–180	
Molybdenum <sub>b</sub>	ppb	Ν	IS	NA	NA	2	2	0.3	ND-1.1	Very hard	over 10.5	over 180	
Strontium <sub>b</sub>	ppb	N	IS	43	30–50	57	57	49	37–71	·			
OTHER WATER QUALITY PARAMETER	RS												
PARAMETER	Unit	М	CL	Average	Range	Average	Range	Average	Range			S.A	
Alkalinity	ppm	Ν	IS	76	46–113	87	56–113	NA	NA				
Calcium	ppm	Ν	IS	22	13–32	20	16–23	NA	NA		A		
Hardness (as Calcium Carbonate)	ppm	Ν	IS	82	49–119	76	61–90	NA	NA				
Magnesium	ppm	Ν	IS	7	4–10	6	5–8	NA	NA		5		
Ha	no unit	Ν	IS	8.0	7.5–8.6	8.0	7.5–8.5	8.3	7.7–9.2				
Potassium	ppm	Ν	IS	0.7	0.5–1.0	0.8	0.5–1.6	NA	NA				
Sodium	ppm	Ν	IS	24	20–31	35	29–43	NA	NA				

### HOW TO READ THIS CHART

ABBREVIATIONS

#pos	Number of positive results						
DDW	Division of Drinking Water						
NA	Not applicable						
ND	Not detected						
NS	No standard established						
NTU	Nephelometric turbidity unit						
ppb	parts per billion (micrograms per liter)						
ppm	parts per million (milligrams per liter)						
uS/cm	microSiemens per centimeter						
RAA	Running annual average						
SFPUC	San Francisco Public Utilities Commission						
TON	Threshold odor number						
тт	Treatment technique						
USEPA	United States Environmental Protection Agency						

NOTES a For filtered water, the MCL is  $\leq$  0.3 NTU 95% of the time b Data collected prior to 2019 c In 2019, there were no requests for lead testing in schools

### n uality

serious health problems, especially for in drinking water is primarily from materials es and home plumbing. The District is ng water, but cannot control the variety of hen your water has been sitting for several d exposure by flushing your tap for 30 for drinking or cooking. If you do so, you use it for another beneficial purpose, such out lead in your water, you may wish to have nking water, testing methods, and steps you rom the Safe Drinking Water Hotline or at: er/basic-information-about-lead-drinking-water

mmonly found in surface water throughout treatment by the District in 2019 indicated a filtration removes Cryptosporidium, common moval. Current test methods do not allow r if they are capable of causing disease. ninal infection. Symptoms include nausea, hy individuals can overcome the illness promised people, infants, and small children ing serious illness. We encourage immunoctor regarding appropriate precautions to st be ingested to cause illness and can be vater.

presence of calcium and magnesium salts risk, it may be considered undesirable for ning are reductions in soap usage, longer ustation of pipes. Some disadvantages

> of water softening are an increase in sodium intake (depending on type of water softener used), an increase in maintenance and servicing requirements and potential adverse effects on saltsensitive plants and landscaping. To convert hardness from ppm to grains per gallon, divide by 17.1. A hardness scale is provided for your reference.



SERVICE AREA MAP

Photo credit: Barbara Mase

### \* TYPICAL SOURCES IN DRINKING WATER

- **1** Drinking water disinfectant added for treatment
- 2 Soil runoff
- 3 Erosion of natural deposits
- 4 Residue from some surface water treatment processes
- **5** Water additive that promotes strong teeth
- 6 Discharge from fertilizer and aluminum factories
- 7 By-product of drinking water disinfection
- 8 Various natural and man-made sources
- 9 Runoff from natural deposits **10** Leaching from natural deposits
- **11** Naturally-occurring organic materials
- **12** Seawater influence
- **13** Industrial wastes
- 14 Substances that form ions when in water
- **15** Internal corrosion of household plumbing systems
- **16** Leaching from wood preservatives
- **17** Discharges from industrial manufacturers
- 18 Runoff and leaching from fertilizer use 19 Leaching from septic tanks and sewage

San Mateo County El Granada Pacific Ocean Half Moon Bay

District service areas (designated in green) include the City of Half Moon Bay and unincorporated areas of San Mateo County including: El Granada, Miramar and Princeton by the Sea.