

Coastside County Water District

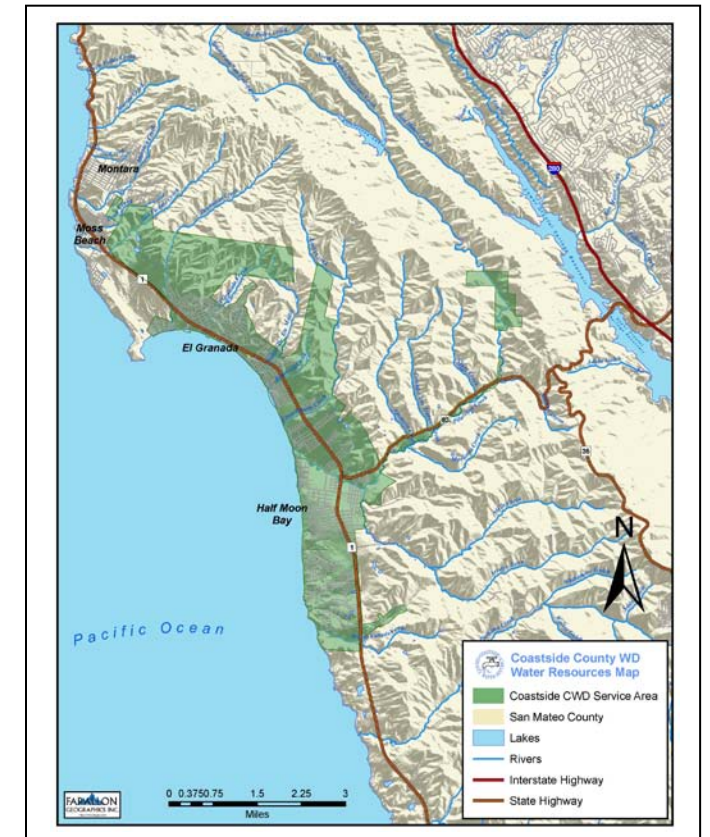
2010 Annual Water Quality Report Consumer Confidence Report



Bill Payment Options

The District offers several payment options for your convenience.

- ◆ **Online Bill Payment:** Make a one-time payment or recurring payments by credit card and debit card (Visa or MasterCard). With Online Bill Payment Services, you can review your current bill, print a copy for your records and make a payment online. To sign up, go to www.coastsidewater.org or call the District for more information at (650) 726-4405.
- ◆ **Credit Card:** Payments can be made using VISA and MasterCard.
- ◆ **Pay by Mail:** Use the return envelope provided by the District (credit card, money order and check).
- ◆ **Pay in Person:** Visit the District Office to pay in person (cash, check, money order and credit card).
- ◆ **Drop Box:** Visit the District Office and drop off your payment before, during and after business hours, using the drop box located at the front door (credit card, money order and check).
- ◆ **Direct Debit:** Pay your water bill automatically by having the total amount of your bill deducted from your checking or savings accounts. To get the form, go to www.coastsidewater.org or call the District at (650) 726-4405.
- ◆ **Online Banking:** Check with your bank to see if they offer the online banking service.



Service Areas: City of Half Moon Bay, El Granada, Princeton, and Miramar

Coastside County Water District 2010 Annual Water Quality Report

Introduction

Coastside County Water District is pleased to present our 2010 Annual Water Quality Report in accordance with state and federal requirements. **The treated drinking water delivered to your home or business met all drinking water quality standards set by the state and federal governments.**

The spirit of this requirement is to provide valuable information about your water, including its source, chemical characteristics, and other important facts. With the knowledge contained in this report, you will be able to make health decisions concerning water use for you and your family.

For our customers that require information in Spanish: ***Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien. Si le gustaría recibir una copia de este reporte en Español, favor de llamar al Coastside County Water District, y le enviaremos una por correo.***

Report Format

Coastside County Water District's Annual Water Quality Report contains water quality data tables that show the results of treated water from the Nunes and Denniston Water Treatment Plants. Over 2,000 water tests were performed during the year by certified laboratories and over 7,000 tests were completed by the treatment and distribution operators for water quality process control. In addition, the District monitors the treatment process 24 hours a day.

Commitment to Quality

Coastside County Water District is committed to providing our customers with high quality drinking water and responsive customer service in the most efficient manner possible. Coastside County Water District's mission is to develop and provide District customers with high quality water and service at the lowest possible price.

Source Water Assessment – Watershed Sanitary Survey

The District completed a source water assessment in 2006 for the San Vicente Creek watershed and the Denniston Creek watershed. The Upper Pilarcitos Creek watershed and Upper Crystal Springs Reservoir watershed source water assessments were completed by the San Francisco Public Utilities Commission (SFPUC) and can be found at SFPUC's website <http://sfwater.org>.

The District will be updating the current source water assessment in 2011 and should be made available to the public for review by December 31, 2011.

Water Sources

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

The District owns and operates the Denniston Project (surface and groundwater) and the Pilarcitos Well Field, both of which receive water originating from the local coastal range (Santa Cruz Mountains). The District purchases raw water from the San Francisco Public Utilities Commission (SFPUC). Raw water from the 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 the SFPUC's Hetch Hetchy Regional Water System.

Water delivered to the District's 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 of water per day. Water from this plant comes from the Pilarcitos Reservoir, wells in Pilarcitos Creek Canyon, and the Upper Crystal Springs Reservoir. The Denniston Water Treatment Plant is capable of treating up to 1.5 million gallons of water per day. Water from this plant comes from a diversion on Denniston Creek and from the Denniston Well Field.

Contact Information

If you have any questions or desire additional information regarding this report, please contact Joe Guistino, Superintendent of Operations or Cathleen Brennan, Water Resource Analyst with the Coastside County Water District at (650) 726-4405. To find out more about the District, you can visit our website at www.coastsidewater.org.

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

Protecting Your Drinking Water From Cross Connections

A cross connection is any condition that allows non-potable water or contaminants to flow into the District's water distribution system. This can happen if the pressure of the water in the pipes of a business or residence becomes greater than the pressure in the District's water distribution system. Water pressure in the District's water distribution system can fluctuate for a number of reasons; including, fire fighting activities, damage to fire hydrants, large leaks and repair activities.

A well pump, a booster pump or pressurized equipment connected to a water source can create a cross connection condition that allows water and contaminants from private property to flow back (backflow) into the District's water distribution system. A cross connection can also happen if a garden hose is submerged in a pond or tank during a period of time when the pressure drops in the water distribution system allowing the non-potable water to be conveyed through the garden hose back into the District's water distribution system. This is why there are federal, state and local regulations governing backflow prevention requirements on private properties with a water connection to a public water system.

The District assesses residential and business customers to determine if a water service connection is required to have a backflow prevention device. The following are examples of customers required to have approved backflow prevention devices: properties with wells, properties with boilers, restaurants, medical clinics, dental clinics, veterinary clinics, agriculture, irrigation, and dry cleaners. Backflow prevention devices are required to be tested and certified on an annual basis.

The image to the right is of a typical backflow device installed in the District's service area. If you have any questions regarding cross connections and backflow prevention devices or if you believe that you have activities that require a backflow prevention device, please contact Joe Guistino, Superintendent of Operations at (650) 726-4405.



EPA WaterSense

The District has partnered with EPA WaterSense to promote water efficient products and to support efforts to use water more efficiently by providing incentives and information on water efficient products. Currently, the District offers high efficiency toilet rebates, high efficiency clothes washer rebates and water efficient landscape information.

For more information about becoming more water efficient, visit the District's office or go to www.coastsidewater.org or www.epa.gov/watersense/



Abbreviations and Units of Measure			
NA	Not Applicable	ppm	Parts per Million (mg/L)
ND	Not Detected	Pci/L	PicoCuries/Liter
NS	No Standard Established	TON	Threshold Odor Number
NTU	Nephelometric Turbidity Units	µS/cm	MicroSiemens per centimeter
ppb	Parts per Billion (µg/L)		

General Water Quality Information

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.

- **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 storm 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, stormwater runoff, and residential uses.
- **ORGANIC CHEMICAL CONTAMINANTS**, including synthetic and volatile organics, 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**, that can be naturally occurring or be the result of oil and gas production and mining activities.

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and/or flush your tap for 3 seconds to 2 minutes before drinking tap water. Additional information is available from the EPA Safe Drinking Water Act Hotline (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

Coastside County Water District does not fluoridate its drinking water. For information about fluoridation, oral health and current issues go to www.cdph.ca.gov/certlic/drinkingwater/Pages/Flouridation.aspx.

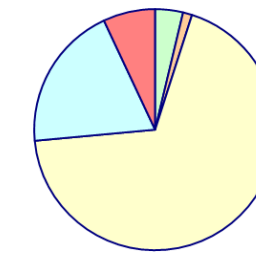
Water Quality Tests

All water utilities must test for the presence of over 118 compounds that can possibly enter water supplies. These compounds are naturally occurring such as arsenic and radioactivity, or man-made such as gasoline additives, pesticides and herbicides. The state allows us to monitor for some contaminants less than once per year because the concentrations do not change frequently.

The District's water quality monitoring program also 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 following are compounds that were tested for, but not found in your water supply: Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cyanide, MBAS (surfactants), Mercury, Selenium, Thallium, Nickel, Silver and Zinc. In addition, we tested for and did not detect 117 Synthetic Organic Chemicals (pesticides and herbicides) and Volatile Organic Chemicals (solvents and other industrial compounds). A complete list is available at the District's office.

The data presented in this report are from the most recent testing done in accordance with Safe Drinking Water Act regulations.

2010 Water Supply Sources



- Denniston Creek 4%
- Denniston Groundwater 1%
- Pilarcitos Lake 69%
- Crystal Springs Reservoir 19%
- Pilarcitos Wells 7%

Protecting Public Health

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the California State Department of Public Health prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that 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 **USEPA's Safe Drinking Water Hotline at 1-800-426-4791**.

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. Some people who drink water that contains Trihalomethanes in excess of the maximum contaminant level (MCL) over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

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 **Safe Drinking Water Hotline 1-800-426-4791**. The main source of Cryptosporidium in water supplies is from cattle activities, including feedlots, grazing, and wildlife. Customers of the District enjoy water from sources where these potential sources of contamination are minimal.

Important Definitions

The report lists compounds and contaminants detected by water quality analyses on treated water. The table contains the name of each substance, the highest level allowed by regulation (MCL), the ideal goals for public health (MCLG/PHG), the amount detected, and the usual sources of such contamination. To help you understand these tables, we have included the following definitions:

- **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.
- **Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLs and MCLGs are set by the U.S. Environmental Protection Agency.
- **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.
- **Maximum Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water. There is increasing 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.
- **Regulatory Action Level (RAL):** The concentration of a contaminant that triggers treatment or other requirements that a water system must follow.
- **Running Annual Average (RAA):** The average of the most recent 12 months of data.
- **Primary Drinking Water Standards (PDWS):** The MCLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.
- **Secondary Drinking Water Standards (SDWS):** MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWS's do not affect the health at the MCL levels.
- **Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.
- **Variances and Exemptions:** Permission to exceed an MCL or not comply with a treatment technique under certain conditions.

Primary Drinking Water Standards – Health Related Standards									
Contaminant	Source Tested	Date Tested	Unit	MCL	PHG	Detected Level	Range	Major Source	Violation
					(MCLG)				
Aluminum	Nunes Water Treatment Plant	Weekly	ppm	1	0.6	ND	ND - 0.67	Treatment process and erosion of natural deposits	NO
	Denniston Water Treatment Plant	Monthly				ND	NA		NO
Fluoride	Nunes Water Treatment Plant	1/25/2010	ppm	2	1	0.58	NA	Erosion of natural deposits and pretreatment of imported water supply into Upper Crystal Springs Reservoir	NO
	Denniston Water Treatment Plant	4/27/2010				0.25	NA		NO
Nitrate	Nunes Water Treatment Plant	1/25/2010	ppm	45	45	ND	NA	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	NO
	Denniston Water Treatment Plant	4/27/2010				ND	NA		NO
Total Coliform Bacteria (Total Coliform Rule)	Distribution System	Weekly	Samples Positive	One Positive per Month	0	0	NA	Naturally present in the environment	NO
Total Haloacetic Acids (THA)	Distribution System	Quarterly	ppb	60	NS	22 ⁽¹⁾	14 - 43	Chlorine by-product	NO
Total Trihalomethanes (THM)	Distribution System	Quarterly	ppb	80	NS	50 ⁽¹⁾	14 - 91	Chlorine by-product	NO
Turbidity	Nunes Water Treatment Plant	Daily	NTU	Maximum 1.0 and 95% <0.3	TT	0.03	0.02 - 0.08	Soil runoff	NO
	Denniston Water Treatment Plant					0.05	0.02 - 0.19		NO

(1) Running Annual Average (RAA)

Contaminant	Source Tested	Date Tested	Unit	MRDL	PHG	Detected Level	Range	Major Source	Violation
Chlorine	Distribution System	Weekly	ppm	4	4	0.83	0.21 - 1.61	Drinking water disinfectant added for treatment	NO

Contaminant	Source Tested	Date Tested	Unit	RAL	PHG	90 th Percentile	Range	Major Source	# Samples Above RAL
Copper	Distribution System 30 Sample Sites	July 2008	ppm	1.3	0.3	0.15	ND - 0.53	Corrosion of household plumbing system	None
Lead	Distribution System 30 Sample Sites	July 2008	ppb	15	0.2	5.4	ND - 27	Corrosion of household plumbing system	1

Copper and Lead samples are taken from residential customers' plumbing (at the tap) to determine if the District's water is contributing to the corrosion of private plumbing systems. The District carefully monitors and adjusts the pH of treated water to lower its corrosivity.

90th percentile: 90% of the results were less than or equal to the value listed in this column.

Contaminant	Source Water Tested	Year Tested	Unit	MCL	PHG	Detected Level	Range	Major Source	Violation
					(MCLG)				
Gross Alpha Measure of Radioactivity	Crystal Springs Reservoir	2006	pCi/L	5	NA	0.74	0.47 - 1.0	Erosion from natural deposits	NO
	Pilarcitos Well Field	2006				0.89	0.55 - 1.37		NO
	Denniston Well Field	2006				0.67	0.32 - 1.04		NO
	Stone Dam	2006				0.10	ND - 0.36		NO

Secondary Standards - Aesthetic Standards									
Constituent	Source Tested	Date Tested	Unit	MCL	PHG	Detected Level	Range	Major Source	Violation
					(MCLG)				
Chloride	Nunes Water Treatment Plant	Monthly	ppm	500	NS	22	12-27	Leaching from natural deposits; seawater influence; treatment residuals	NO
	Denniston Water Treatment Plant					47	41-50		NO
Color	Nunes Water Treatment Plant	Monthly	Color Units	15	NS	< 2	< 2-5	Natural organic materials	NO
	Denniston Water Treatment Plant					3	< 2-15		NO
Iron	Nunes Water Treatment Plant	Monthly	ppb	300	NS	ND	NA	Leaching from natural deposits	NO
	Denniston Water Treatment Plant	Weekly				ND	NA		NO
Manganese	Nunes Water Treatment Plant	Monthly	ppb	50	NS	13	ND - 49	Leaching from natural deposits	NO
	Denniston Water Treatment Plant	Weekly				ND	ND - 46		NO
Odor	Nunes Water Treatment Plant	Monthly	TON	3	NS	ND	ND - 1	Organic matter and minerals	NO
	Denniston Water Treatment Plant					ND	ND - 2		NO
Specific Conductance (Conductivity)	Nunes Water Treatment Plant	Monthly	µS/cm	1,600	NS	255	166 - 314	Substances that form ions when in water: seawater influence	NO
	Denniston Water Treatment Plant					400	353 - 443		NO
Sulfate	Nunes Water Treatment Plant	Monthly	ppm	500	NS	21	16 - 23	Runoff/leaching from natural deposits; industrial wastes	NO
	Denniston Water Treatment Plant					23	20 - 27		NO
Total Dissolved Solids (TDS)	Nunes Water Treatment Plant	Monthly	ppm	1,000	NS	152	110 - 190	Runoff/leaching from natural deposits	NO
	Denniston Water Treatment Plant					241	216 - 148		NO

Other Water Quality Parameters									
pH	Distribution System	Weekly	pH	NS	NS	8.1	7.5 - 8.5	Watershed rock and soil and treatment process	NO
		NO							
Alkalinity	Nunes Water Treatment Plant	Monthly	ppm	NS	NS	71	31 - 94	Naturally occurring minerals	NO
						Denniston Water Treatment Plant	111		90 - 134
Boron	Nunes Water Treatment Plant	Monthly	ppm	NS	NS	0.26	0.13 - 0.45	Naturally occurring minerals	NO
		Denniston Water Treatment Plant				5/12/2010	0.26		
Calcium	Nunes Water Treatment Plant	Monthly	ppm	NS	NS	20	7.7 - 26	Erosion of natural deposits	NO
						Denniston Water Treatment Plant	24		20 - 26
Hardness	Nunes Water Treatment Plant	Monthly	ppm	NS	NS	72	28 - 97	Leaching from natural deposits	NO
						Denniston Water Treatment Plant	92		85 - 100
Magnesium	Nunes Water Treatment Plant	Monthly	ppm	NS	NS	5.7	2.1 - 7.8	Erosion of natural deposits	NO
						Denniston Water Treatment Plant	8.3		6.4 - 9.4
Potassium	Nunes Water Treatment Plant	Monthly	ppm	NS	NS	0.5	0.4 - 0.6	Erosion of natural deposits	NO
						Denniston Water Treatment Plant	0.9		0.5 - 1.6
Sodium	Nunes Water Treatment Plant	Monthly	ppm	NS	NS	20	18 - 23	Erosion of natural deposits	NO
						Denniston Water Treatment Plant	44		34 - 51
Total Organic Carbon	Nunes Treatment Plant	Monthly	ppm	NS	NS	1.6	1.3 - 2.0	Naturally decaying matter	NO
						Denniston Water Treatment Plant	1.4		1.1 - 1.7