



Coastside County Water District Water Quality Report 2022

Coastside County Water District (District) is pleased to present the 2022 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.

The treated drinking water delivered to your home or business met all drinking water quality standards set by the state and federal governments.

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

Este informe contiene información muy importante sobre su agua para beber. Tradúzcalo o hable con alguien que lo entienda bien. Si le gustarîa recibir una copia de este reporte en Español, favor de llamar al Coastside County Water District, y le enviaremos una copia por correo.

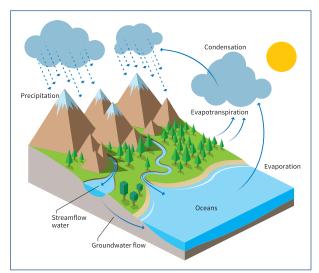
Where Your Water Comes From

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.

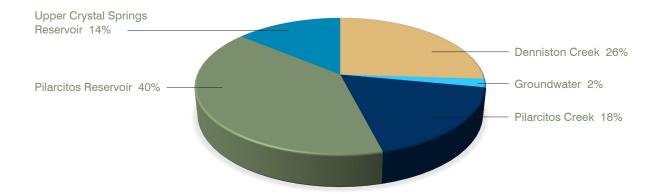
The District purchases raw water from the San Francisco Public Utilities Commission (SFPUC). Raw water from SFPUC originates from Pilarcitos Reservoir, which is supplied by local runoff from the coastal range, and from Upper Crystal Springs Reservoir, which is supplied by imported water from SFPUC's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

Water delivered to 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 https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.html

District Water Sources for Calendar Year 2022



Source Water Assessment -**Watershed Sanitary Survey**

The District updated the source water assessment in 2021 for the San Vicente Creek and the Denniston Creek watersheds. This assessment can be found on the District's website under Resources. 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



Conserving Water Around the House and Yard

Implementing changes in our daily water use can make a big impact toward ensuring we have enough water supply to meet current and future needs. We all need to do our part to conserve water and use it as efficiently as possible. Here are ways you can do your part to save water:

- Consider replacing your lawn with water wise plants, and add hardscaping elements to your yard, like pavers, decomposed granite, or bark, to create year-round spaces that eliminate the need to weed, mow, and irrigate regularly.
- Install drip irrigation for your trees, shrubs, and flowers.
- Adjust sprinkler heads to make sure your sprinklers water the plants, not your driveway.
- Use mulch to help the soil retain more moisture.

- · Use a broom instead of a hose to clean outdoor areas and save up to six gallons of water every minute.
- Instead of letting cold water go down the drain, place a bucket under the showerhead while you wait for the water to warm up, then use it to water your outdoor garden.
- Reduce your shower time to five minutes or less to save up to 12.5 gallons of water.

More information ▶ https://coastsidewater.org/save-water

Let's make every drop count!



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

Even a small leak can waste up to 6,300 gallons of water per month!



Adjust Sprinkler Heads

Saves 12–15 gallons each time you water



Use Mulch

Saves 20-30 gallons per 1000 sq. ft. each time



Drought Resistant Trees & Plants

Saves 30-60 gallons per 1000 sq. ft. each time

Water Reuse: Transforming Water, **Sustaining Our Future**

The District is pursuing grant funds from the state for completing a water reuse feasibility study. The study will consider water reuse opportunities. The District has a duty to identify potential beneficial uses of recycled water and to consider the benefits to its customers by having diverse and reliable water resources.

Communities across the country are incorporating water reuse into their water management strategies as a proven method for ensuring a safe, reliable, locally controlled water supply—essential for livable communities with healthy environments, robust economies, and a high quality of life. By 2027, the volume of recycled water produced in the United States is projected to increase 37% from 4.8 billion gallons per day to 6.6 billion gallons per day, according to a recent survey by Bluefield Research.

Water Reuse Association | www.watereuse.org

Service Area Map

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



2022

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 definitions and notes on the following page.

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.

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



More information ▶ For more information about this report or the District's water quality monitoring program contact: James Derbin, Superintendent, at (650) 276-0129.

| PRIMARY DRINKING WATER STANDA | ARDS (PUBLIC I | | | RDS) | | | | | |
|--|---------------------------------------|-------------------------------|-----------------|--------------|------------------|---------------|---------------|---------------------|----------|
| | | MCL, PHG, (AL), or (MCLG), or | | Nune | Nunes WTP | | Denniston WTP | | |
| PARAMETER | Unit | [MRDL] | [MRDLG] | Average | Range | Average | Range | Typical S | Sources* |
| SOURCE WATER SAMPLING | | | | | | | | | |
| INORGANIC CHEMICALS | | | | | | | | | |
| Aluminum | ppm | 1 0.6 | | ND | ND-0.331 | ND | ND | 3, 4 | |
| Fluoride | ppm | 2 | 1 | 0.13 | ND-0.5 | 0.2 | 0.2 | 3, 5, 6 | |
| Turbidity | NTU | TTa | NA | 0.02 | 0.015-0.083 | 0.03 | 0.018-0.134 | 2 | |
| Nitrate (NO ₃) as Nitrogen (N) | ppm | 10 | 10 | 0.4 | 0.4 | ND | ND | 3, 18 | 3, 19 |
| DISINFECTION BYPRODUCT PRECURS | OR | | | | | | | | |
| Total Organic Carbon | ppm | TT | NA | 1.4 | 0.8–1.9 | 1.3 | 1.1–1.9 | 8 | 3 |
| DISTRIBUTION SYSTEM SAMPLII | NG | | | | | | | Typical S | Sources* |
| DISINFECTION RESIDUAL | | | Average | | Ra | Range | | | |
| Disinfectant Residual as Chlorine (Cl ₂) | ppm | [4] | [4] | 0.74 | | 0.20–1.62 | | - | 1 |
| DISINFECTION BYPRODUCTS | | | | Highest LRAA | | Range | | | |
| Total Trihalomethanes (THMs) | ppb | 80 | NA | 75 | | 26–90 | | 7 | |
| Total Haloacetic Acids (HAAs) | ppb | 60 | NA | 35 | | 14–42 | | 7 | |
| LEAD AND COPPER (2021 AT-THE-TAP | AND COPPER (2021 AT-THE-TAP SAMPLING) | | 90th percentile | | Samples above AL | | | | |
| Lead (35 Sample Sites) _b | ppb | (15) | 0.2 | 2.7 | | None | | 3, 15, 17 | |
| Copper (35 Sample Sites) _b | ppm | (1.3) | 0.3 | 0.086 | | None | | 3, 15, 16 | |
| SECONDARY DRINKING WATER STA | NDARDS (AEST | HETIC STAN | DARDS) | | | | | | |
| PARAMETER | Unit | N | 1CL | Average | Range | Average | Range | Typical S | Sources* |
| Aluminum | ppb | 200 | | ND | ND-331 | ND | ND | 3, 4 | |
| Chloride | ppm | 500 | | 30 | 15–37 | 42 | 36–45 | 9, 10, 12 | |
| Color | Color Units | 15 | | 1.6 | ND-7 | ND | ND | 3, 15, 16 | |
| Manganese | ppb | | 50 | ND | ND-100 | ND | ND | 1 | 0 |
| Iron | ppb | 300 | | 1.0 | ND-67 | ND | ND | 10 | |
| Odor – Threshold | T.O.N. | 3 | | ND | ND-2 | ND | ND-2 | 11 | |
| Specific Conductance | μS/cm | 1600 | | 288 | 147–375 | 335 | 291–381 | 12, 14 | |
| Sulfate | ppm | 500 | | 25 | 18–33 | 11 | 8–19 | 9, 10, 13 | |
| Total Dissolved Solids | ppm | 1000 | | 164 | 82–226 | 192 | 160–214 | 9, 10 | |
| UNREGULATED PARAMETERS | | | | | | | | | |
| | | | | Nunes WTP | | Denniston WTP | | Distribution System | |
| PARAMETER | Unit | 1 | NL | Average | Range | Average | Range | Average | Range |
| Boron | ppb | 1 | 000 | ND | ND | ND | ND | NA | NA |
| OTHER WATER QUALITY PARAMETE | RS | | | | | | | | |
| PARAMETER | Unit | N | 1CL | Average | Range | Average | Range | Average | Range |
| Alkalinity | ppm | NS | | 63 | 12–106 | 86 | 61–111 | NA | NA |
| Calcium | ppm | NS | | 21 | 5–36 | 22 | 18–25 | NA | NA |
| Hardness (as Calcium Carbonate) | ppm | NS | | 78 | 18–132 | 85 | 70–94 | NA | NA |
| Magnesium | ppm | NS | | 6.4 | 1.2–10.4 | 7.6 | 6.2–8.6 | NA | NA |
| Potassium | ppm | 1 | NS | 0.8 | ND-1.2 | 1 | 0.8–1.3 | NA | NA |
| рН | no unit | I | NS | 8 | 7.3–8.7 | 8 | 7.7–8.5 | 8.3 | 7.6–9. |
| Sodium | ppm | I | NS | 26 | 21–31 | 34 | 29–40 | NA | NA |
| Hexavalent Chromium | ppm | (0 | 0.02) | ND | ND | ND | ND | NA | NA |

Reading the Water Quality Test Results Chart

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 ≤0.3 NTU 95% of the

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

Abbreviations

DDW Division of Drinking Water

NA Not applicable ND Not detected

NS No standard established NTU Nephelometric turbidity unit

Parts per billion (micrograms per liter) ppb Parts per million (milligrams per liter) ppm

MicroSiemens per centimeter µS/cm **LRAA** Locational running annual average

SFPUC San Francisco Public Utilities Commission

TON Threshold odor number

USEPA United States Environmental Protection Agency

Table Notes

- For filtered water, the MCL is < 0.3 NTU 95% of the time. This standard was met 100% of the time.
- Data collected prior to 2022.
- In 2022, there were no requests for lead testing in schools.

* Typical Sources in Drinking Water

- Drinking water disinfectant added for treatment
- Soil runoff 2
- Erosion of natural deposits
- 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
- Various natural and man-made sources
- Runoff from natural deposits 9
- 10 Leaching from natural deposits
- Naturally occurring organic materials
- 12 Seawater influence
- 13 Industrial wastes
- Substances that form ions when in water
- Internal corrosion of household plumbing systems
- 16 Leaching from wood preservatives
- 17 Discharges from industrial manufacturers
- 18 Runoff and leaching from fertilizer use
- Leaching from septic tanks and sewage

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 naturally-occurring 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.

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.



Important Information about your **Water Quality**

Lead

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. The District 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 two minutes before using water for drinking or cooking. If you do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants. 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 Safe Drinking Water Hotline or at: www.epa.gov/lead

Hardness

Water hardness is determined mainly by the presence of calcium and magnesium salts. Although hard water does not pose a health risk, it may be considered undesirable for other reasons. Some benefits of water softening are reductions in soap usage, longer life for water heaters and a decrease in encrustation 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 salt-sensitive plants and landscaping. To convert hardness from ppm to grains per gallon, divide by 17.1. A hardness scale is provided for your reference.

| Hardness Classification | Grains per Gallon | mg/L or ppm | | |
|----------------------------|----------------------|----------------|--|--|
| Soft | less than 1.0 | less than 17.1 | | |
| Slightly hard | 1.0–3.5 | 17.1–60 | | |
| Moderately hard | 3.5–7.0 | 60–120 | | |
| Hard | 7.0–10.5 | 120–180 | | |
| Very hard | over 10.5 | over 180 | | |

Capital Improvement Program (CIP) - 2022

The District was busy with planned and unplanned capital improvement projects in 2022. Improvements at the two treatment plants and throughout the distribution system were accomplished in 2022. Many more projects are planned for 2023 and beyond with the District's 10-year CIP planning program. Below are some of the projects the District completed in 2022.



- Emergency Denniston Creek Road Damage Repair, Moss Beach
- Denniston Reservoir Dredging, Moss Beach
- Pilarcitos Creek Waterline Undercrossing at Oak Avenue, Half Moon Bay
- Emergency Waterline Replacement at Purissima Way, Miramar
- Cabrillo Highway Undercrossing at Grandview Blvd, Half Moon Bay
- New Pressure Regulation Valve on Grandview Blvd, Half Moon Bay
- Waterline replacement for the Grandview Blvd neighborhood, Half Moon Bay
- Ongoing (multi-year) Nunes Water Treatment Plant Upgrades for New Sedimentation Basin, Half Moon Bay

WaterSmart 666



Coastside County Water District partners with VertexOne to offer customers access to a free web portal. In the portal you can:

> 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.

Connect With Us!

The District encourages community participation in the decisions affecting 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. Videos of past Board meetings are available at https://www. coastsidewater.org/board-activities/board-meeting-videos.html, and are also broadcast on Pacific Coast Television.



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 on the District's website.

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