

# 2022 ANNUAL DRINKING WATER CONSUMER CONFIDENCE REPORT

This report explains where your water comes from, provides information on water quality and how it is measured, and presents the District's 2022 test results which show that *drinking water met, or was better than, state and federal water quality standards.* 

The District prides itself on water treatment, which is done locally to the highest of standards. Stringent monitoring and testing happen round-the-clock. In 2022, water samples from school sites were tested for both lead and copper in recognition of the importance of safeguarding our community's child population and the EPA's Lead and Copper Rule.



Nick Turner, General Manager

Water quality and supply management go hand-inhand. Thanks to a combination of good planning and precipitation, the current water supply outlook is secure. Ample rain this winter filled reservoirs and reduced use by allowing customers to stop irrigating for months. The District's successful efforts to procure drought resilient options such as desalinated water have also increased our local, reliable supplies.

## Community collaboration in water conservation is key.

Rain or shine, all customers share in the responsibility to make water supplies last as intended. Efficient water use remains essential to ensure water will be available when we need it most. Customer water conservation efforts are supported through a variety of programs including rebates and free on-site water efficiency check-ups. Additionally, the District is constantly working to improve quality and extend water supplies with infrastructure projects ranging from replacing aging pipelines and improving reservoir storage to updating meters and treatment facilities.

Reliability. Service. Quality. District tradition for more than a century.



Water quality meets or exceeds all State and Federal standards

Certified/Licensed Distribution Staff and Engineers maintain and repair infrastructure

Certified/Licensed Treatment Staff and Engineers ensure testing and compliance

Drinking Water Consumer Confidence Report published annually

Monitoring and sampling occur 24 hours/ day, 365 days/year



Reliable water service is essential for our health and safety, fire protection and to preserve the community's unique character.









Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien. Para información en español llame al 805.969.2271. MONTECITO WATER DISTRICT 583 San Ysidro Road, Santa Barbara, CA 93108 phone: 805.969.2271 email: info@montecitowater.com

# Montecito Water District's Water Quality Summary 2022

| Montecito Water District's Water Quality Summary 2022 |           |  |                                 |                            |                              |                            |                             |                            |  |   |
|---|-----------|--|---------------------------------|----------------------------|------------------------------|----------------------------|-----------------------------|----------------------------|--|---|
| Primary<br>Standards<br>(PDWS)                        | Units     | Maximum<br>Contaminant<br>Level                                    | Public<br>Health Goal<br>(MCLG) | Jameson<br>Lake<br>Average | Jameson<br>Lake<br>Range     | Ground<br>Water<br>Average | Ground<br>Water<br>Range    | Cachuma<br>Lake<br>Average | Cachuma<br>Lake<br>Range   | Common Sources of Contamination in Drinking Water   |
| Water Clarity   |           |  |                                 |                            |                              |                            |                             |                            |  |   |
| Treated<br>Turbidity                                  | NTU       | $TT = 1 \text{ NTU}$ $TT = 95\% \text{ of}$ $Samples \le 0.3$      | NA                              | 0.06                       | 0.03-0.28<br>100.0%          | <0.1                       | <0.1<br>100%                | 0.05                       | 0.05<br>100%   | Soil runoff.  |
| Radioactive Cont                                      | taminant  | s (2020)   |                                 |                            |                              |                            |                             |                            |  |   |
| Gross Alpha<br>Particle Activity                      | pCi/L     | 15   | (0)                             | 1.33                       | 1.33                         | 2.63                       | 1.22 - 3.86                 | ND                         | ND   | Erosion of natural deposits.  |
| Uranium   | pCi/L     | 20   | 0.43                            | NA                         | NA                           | 1.10                       | 0.82 - 1.56                 | 0.76                       | 0.76   | Erosion of natural deposits.  |
| Inorganic Contar                                      | ninants   |  |                                 |                            |                              |                            |                             |                            |  |   |
| Aluminum  | µg/L      | 1000   | 600                             | 14                         | ND-40                        | ND                         | ND                          | 56                         | ND - 180   | Erosion of natural deposits; residue from some surface water<br>treatment processes.  |
| Arsenic   | µg/L      | 10   | 0.004                           | ND                         | ND                           | 0.33                       | ND-1                        | ND                         | ND   | Erosion of natural deposits; runoff from orchards.  |
| Barium  | mg/L      | 1  | 2                               | 0.05                       | 0.05                         | 0.08                       | 0.06-0.09                   | ND                         | ND   | Discharges of oil drilling wastes: erosion of natural deposits.   |
| Total Chromium  | µg/L      | 50   | 100                             | 11                         | 11                           | ND                         | ND                          | ND                         | ND   | Discharge from electroplating factories, leather tanneries, wood<br>preservation, chemical synthesis, refractory production, and textile<br>manufacturing facilities; erosion of natural deposits |
| Fluoride  | mg/L      | 2  | 1                               | 0.2                        | 0.2                          | 0.8                        | 0.5 - 1.0                   | 0.46                       | 0.39 - 0.51  | Erosion of natural deposits; discharge from fertilizer.   |
| Mercury   | µg/L      | 2  | 1.2                             | 0.063                      | 0.063                        | 0.13                       | 0.09-0.20                   | ND                         | ND   | Erosion of natural deposits; runnoff from landfills and cropland.   |
| Nickel  | µg/L      | 100  | 12                              | 7                          | 7                            | 1                          | ND-2.0                      | ND                         | ND   | Erosion of natural deposits.  |
| Nitrate as N<br>(Nitrogen)                            | mg/L      | 10   | 10                              | ND                         | ND                           | 0.92                       | 0.5-2.90                    | 0.86                       | 0.10 - 2.40  | Runoff or leaching from fertilizer use; leaching from septic tanks and<br>sewage; erosion from natural deposits   |
| Selenium  | µg/L      | 50   | 30                              | ND                         | ND                           | 4                          | 2.0-6.0                     | ND                         | ND   | Discharge from petroleum, glass, and metal refineries; erosion<br>of natural deposits; discharge from mines and chemical<br>manufacturers; runoff from livestock lots (feed additive).            |
| Primary Standards for<br>Distribution System          |           | Units  | Maximum<br>Contaminant<br>Level |                            | Public Health<br>Goal (MCLG) |                            | Distribution System Average |                            | Distribu<br>System F   |   |
| Disinfectant  |           |  |                                 |                            |                              |                            |                             |                            |  |   |
| Free Chlorine Residual                                |           | mg/L   | MRDL, 4.0                       |                            | MRDLG, 4.0                   | 0.70                       |                             |                            | 0.20-2   | .02 Drinking water disinfectant added for treatment   |
| Disinfection Byp                                      | roducts ( | DBP)   |                                 |                            |                              |                            |                             |                            |  |   |
| Total Trihalomethanes                                 |           | µg/L   | 80                              |                            | NA                           | Highest LRAA, 55.5         |                             |                            | 18-7   | 9 Byproduct of drinking water disinfection  |
| Haloacetic Acids                                      |           | µg/L   |                                 | 60                         | NA                           |                            | Highest LRA                 | A, 43.4                    | 14-6   | ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,,  |
| Bromate (Cachuma Lake) µg/L                           |           | μg/L   | 10                              |                            | 0.1                          | 5.4                        |                             |                            | 3.3 -  | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,   |
| Total Organic Carbon (DBP<br>Precursor)               |           | mg/L   |                                 | Т                          | NA                           | 2.7                        |                             | 1.1-4.                     | Various natural and manmade sources. Total Organic Carbon<br>0 (TOC) has no health effects. However, it provides a medium<br>for the formation of disinfection byproducts. |   |
| Microbiological (                                     | Contamin  | ant Samples  |                                 |                            |                              |                            |                             |                            |  |   |
| Total Coliform Bacteria                               |           | <5% of Mont<br>% Tests Samples of<br>Positive minimum 4<br>samples |                                 | oles of<br>ium 48          | 0                            |                            | 0.00%                       |                            | 0  | Naturally present in the environment.   |
| Lead and Copper<br>Rule (2020)                        |           | Units RAL  | PHG                             |                            | nples<br>ected               | Above RA                   |                             | 90th<br>rcentile           | Schools<br>(range)   | Common Sources of Contamination in Drinking Water   |
| Lead  |           | μg/L 15  | 0.2                             | 3                          | 86                           | 0                          |                             | ND                         | ND   | Internal corrosion of household water plumbing systems; discharges<br>from industrial manufacturers; erosion of natural deposits.   |
| Copper  |           | µg/L 1300  | 300                             | 3                          | 6                            | 0                          |                             | 232                        | ND-1580  | Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.  |

Lead and Copper Rule Every three years, a minimum of 30 residences are tested for lead and copper levels at the tap. The most recent set of 36 samples was collected in 2020. All of the samples were well below the regulatory action level (RAL). Copper was detected in 28 samples. The 90th percentile value was at 232 ug/L. Lead was not detected in any of the samples. The 90th percentile value was Non-Detect. 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. Montecito Water 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 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 Safe Drinking Water Hotline or at http://www.epa.gov/lead.

| Secondary<br>Standards                  | Units | Maximum<br>Contaminant<br>Level | Jameson<br>Lake<br>Average | Jameson Lake<br>Range | Ground<br>Water<br>Average | Ground Water<br>Range | Cachuma<br>Lake<br>Average | Cachuma<br>Lake Range | Common Sources of Contamination in Drinking Water             |  |
|---|-------|---------------------------------|----------------------------|-----------------------|----------------------------|-----------------------|----------------------------|-----------------------|---|--|
| Aesthetic Standards                     |       |                                 |                            |                       |                            |                       |                            |                       |   |  |
| Color                                   | Units | 15                              | 6                          | 6                     | ND                         | ND                    | 3                          | ND - 5                | Naturally-occurring organic materials.                        |  |
| Chloride                                | mg/L  | 500                             | 6                          | 6                     | 148                        | 89-198                | 33                         | 30 - 36               | Runoff or leaching from natural deposits; seawater influence. |  |
| Iron                                    | µg/L  | 300                             | ND                         | ND                    | 1                          | ND-30                 | ND                         | ND                    | Leaching from natural deposits; industrial wastes.            |  |
| Manganese                               | µg/L  | 50                              | ND                         | ND                    | 6                          | ND-40                 | ND                         | ND                    | Leaching from natural deposits.                               |  |
| Threshold Odor at<br>60 degrees celcius | Units | 3                               | ND                         | ND                    | ND                         | ND                    | 3                          | 1 - 4                 | Naturally-occurring organic materials.                        |  |
| Specific<br>Conductance                 | µS/cm | 1600                            | 898                        | 798-1041              | 1175                       | 899-1445              | 952                        | 883 - 1016            | Substances that form ions in water; seawater influence.       |  |
| Sulfate                                 | mg/L  | 500                             | 225                        | 225                   | 149                        | 128-195               | 280                        | 240 - 310             | Runoff or leaching from natural deposits; industrial wastes.  |  |
| Total Dissolved<br>Solids               | mg/L  | 1000                            | 620                        | 620                   | 710                        | 560-890               | 640                        | 542 - 736             | Runoff or leaching from natural deposits.                     |  |
| Zinc                                    | mg/L  | 5                               | ND                         | ND                    | 0.017                      | ND - 0.030            | ND                         | ND                    | Runoff or leaching from natural deposits; industrial wastes.  |  |

## Montecito Water District's Water Quality Summary 2022

| Secondary Standards              | Units    | Maximum<br>Contaminant<br>Level | Jameson<br>Lake<br>Average | Jameson<br>Lake<br>Range | Ground<br>Water<br>Average | Ground<br>Water<br>Range | Cachuma<br>Lake<br>Average | Cachuma<br>Lake<br>Range |  |  |  |
|----------------------------------|----------|---------------------------------|----------------------------|--------------------------|----------------------------|--------------------------|----------------------------|--------------------------|--|--|--|
| Additional Constituents Analyzed |          |                                 |                            |                          |                            |                          |                            |                          |  |  |  |
| рН                               | pH units | NS                              | 7.9                        | 7.1-8.3                  | 7.3                        | 7.0-7.7                  | 7.70                       | 7.53 - 7.84              |  |  |  |
| Total Hardness                   | mg/L     | NS                              | 385                        | 328-428                  | 411                        | 284-528                  | 386                        | 340 - 428                |  |  |  |
| Total Alkalinity                 | mg/L     | NS                              | 183                        | 168-212                  | 195                        | 176-204                  | 185                        | 170 - 209                |  |  |  |
| Boron                            | mg/L     | 1000 (RAL)                      | ND                         | ND                       | 0.6                        | ND-0.6                   | 0.38                       | 0.37 - 0.39              |  |  |  |
| Calcium                          | mg/L     | NS                              | 104                        | 104                      | 78                         | 57-117                   | 87                         | 77 - 96                  |  |  |  |
| Magnesium                        | mg/L     | NS                              | 31                         | 31                       | 28                         | 20-41                    | 45                         | 37 - 50                  |  |  |  |
| Sodium                           | mg/L     | NS                              | 29                         | 29                       | 97                         | 72-137                   | 60                         | 54 - 65                  |  |  |  |
| Potassium                        | mg/L     | NS                              | 3                          | 3                        | 0.7                        | ND-1.0                   | 4.5                        | 3.8 - 5.0                |  |  |  |
| Vanadium                         | mg/L     | NS                              | 3                          | 3                        | ND                         | ND                       | ND                         | ND                       |  |  |  |
|                                  |          | Unregulated Cor                 | ntaminant Mo               | nitoring Rule            | 4 (2019-20)                |                          |                            |                          |  |  |  |
| HAA5                             | µg/L     | NS                              | 32.87                      | 23.98 - 44               | NA                         | NA                       | 13                         | ND - 32                  |  |  |  |
| HAA6Br                           | µg/L     | NS                              | 8.03                       | 4.24 -<br>14.09          | NA                         | NA                       | 14                         | ND - 24                  |  |  |  |
| HAA9                             | µg/L     | NS                              | 39.95                      | 32.57 -<br>48.94         | NA                         | NA                       | 24                         | ND - 51                  |  |  |  |
| Bromochloroacetic Acid           | µg/L     | NS                              | 3.29                       | 1.89 - 5.45              | NA                         | NA                       | 3.9                        | ND - 8.2                 |  |  |  |
| Bromodichloroacetic Acid         | µg/L     | NS                              | 2.95                       | 2.15 - 4.05              | NA                         | NA                       | 3.5                        | ND - 5.8                 |  |  |  |
| Chlorodibromoacetic Acid         | µg/L     | NS                              | 0.85                       | 0 - 1.9                  | NA                         | NA                       | 2.2                        | ND - 3.3                 |  |  |  |
| Dibromoacetic Acid               | µg/L     | NS                              | 0.71                       | 0 - 1.9                  | NA                         | NA                       | 2.3                        | ND - 4.2                 |  |  |  |
| Dichloroacetic Acid              | µg/L     | NS                              | 12.34                      | 7.75 - 20                | NA                         | NA                       | 6.0                        | ND - 16                  |  |  |  |
| Monobromoacetic Acid             | µg/L     | NS                              | 0.24                       | 0 - 0.8                  | NA                         | NA                       | 2.3                        | ND - 4.9                 |  |  |  |
| Monochloroacetic Acid            | µg/L     | NS                              | 1.17                       | ND - 1.6                 | NA                         | NA                       | 2.3                        | ND - 4.9                 |  |  |  |
| Trichloroacetic Acid             | µg/L     | NS                              | 18.41                      | 10.75 - 26               | NA                         | NA                       | 4.2                        | ND - 12                  |  |  |  |

This Consumer Confidence Report (CCR) reflects changes in drinking water regulatory requirements during 2021. These revisions add the requirements of the federal Revised Total Coliform Rule, effective since April 1, 2016, to the existing state Total Coliform Rule. The revised rule maintains the purpose to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of microbials (i.e., total coliform and E. coli bacteria). The U.S. EPA

Nitrate as N (Nitrogen): Nitrate 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. MWD's highest nitrate level in 2022 was 2.90 mg/L. 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.

#### People with Sensitive Immune Systems

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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. 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). anticipates greater public health protection as the rule requires water systems that are vulnerable to microbial contamination to identify and fix problems. Water systems that exceed a specified frequency of total coliform occurrences are required to conduct an assessment to tetermine if any sanitary defects exist. If found, these must be corrected by the water system. The state Revised Total Coliform Rule became effective July 1, 2021.

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 storm water 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 storm water 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 storm water 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.

#### **Drinking Water Info**

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

Source Water Assessment: A comprehensive source water assessment of the District's drinking water sources was adopted in June 2021. A copy of this report is available for public inspection at the District Office.

Last year, as in years past, your tap water met all EPA and State drinking water health standards. Montecito Water District vigilantly safeguards its water supplies and once again we are proud to report that our system has never violated a maximum contaminant level or any other water quality standard. This brochure is a snapshot of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to State standards. We are committed to providing you information because informed customers are our best allies.

#### WATER QUALITY TERMINOLOGY

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 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 U.S. Environmental Protection Agency.

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.

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

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:** 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.

mg/L: Milligrams per liter, or parts per million. 1 mg/L is equal to about one drop in 17 gallons of water.

 $\mu g/L$ : Micrograms per liter, or parts per billion. 1 ug/L is equal to about one drop in 17,000 gallons of water.

- <: Less than.
- NA: Not applicable.
- NS: No Standard.

ND: Non-detected.

pCi/L: Pico curies per liter, a measure of radiation.

umhos/cm: Micromhos per centimeter (an indicator of dissolved minerals in water).

NTU: Nephelometric turbidity unit.

LRAA: Locational Running Annual Average

For Water Softeners: MWD's surface water has a hardness range of 19 to 25 grains per gallon, while groundwater has a hardness range of 17 to 31 grains per gallon. One grain per gallon equals 17.1 mg/L.

Footnotes: The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

Surface water sources include the District's Jameson Lake and Lake Cachuma. The District's Amapola Well, Paden Well No. 2, Ennisbrook Well No. 5, Ennisbrook Well No. 2 and T Mosby Well No. 2 were used as groundwater supply sources.

An average number of 52 coliform samples were collected each month at 12 District sampling stations in compliance with the Federal Revised Total Coliform Rule . All sample results were negative.

Turbidity is a measure of the cloudiness of the water. Montecito Water District monitors for it continuously because turbidity is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants. 100% of the District's samples met the Turbidity Performance standard. The highest single surface water turbidity measurement during the year was 0.28 NTU.

# WATER SOURCES 2022

Most water supplies are rainfall dependent, and become limited in times of drought. As the District looks to the future, it aims to increase its access to local, reliable supplies.



**RELIABLE SINCE 1921** www.montecitowater.com



Doulton Tunnel, a horizontal well, source of groundwater and conveyance from Jameson Lake





Jameson Lake, a District owned surface water facility.



Groundwater wells, source from the Montecito Groundwater Basin.

# FACILITIES

The District's water source portfolio and array of facilities is highly diversified. The combination of its own assets and collaboration with many partners provides added resilency.

Conservation – water supply that is attained through efficiency of use - is unique in that it is dependent on people rather than rainfall. The District will continue to look to its customers for their partnership in using water wisely.



For more information please contact Chad Hurshman, Water Treatment and Production Superintendent, at 805.969.7924



Conservation - Water efficiency.



7 Pumping Stations







Nells

12 Groundwater





State Water Project & Supplemental Water Purchase.



Water Supplied by the City of Santa Barbara, secured by Charles E. Meyer Desalination facility.

### **BOARD OF DIRECTORS:**

Tobe Plough, President Ken Coates, Vice-President Floyd Wicks, Director Cori Hayman, Director Brian Goebel, Director Nick Turner, P.E. General Manager & Board Secretary



For meeting times, agendas, and additional resources: www.montecitowater.com

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien. Para información en español llame al 805.969.2271.