

583 San Ysidro Road, Montecito, CA 93108 phone: 805.969.2271 email: info@montecitowater.com

# 2019 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 2019 test results which show that drinking water met, or was better than, state and federal water quality standards.



#### Message from Nick Turner, General Manager

Montecito Water District takes pride in continuing to deliver a reliable supply of high-quality water to the communities of Montecito and Summerland. As in prior years, the test results

included in this report demonstrate that MWD's water quality met or exceeded all state and federal standards in 2019.

Lead and copper sampling results, as well as other water quality data, are reported in this annual Consumer Confidence Report. To further safeguard water quality for children, in 2019 MWD conducted testing at public and private schools district-wide and lead was not detected. (California Assembly Bill 746 required community water systems to test lead levels in drinking water by July 1, 2019 at all California public, K-12 school sites that were constructed before January 1, 2010.)

For the first time since 2011, Jameson Lake spilled over Juncal Dam in February of 2019. Although the lake was full, water quality issues resulting from the Thomas Fire prevented water delivery for much of the year. MWD implemented innovative and enhanced treatment processes, and is now successfully treating and delivering this important source. With surface water supplies flush and available MWD is strategically resting wells – not pumping – to allow groundwater supplies to recover and replenish following the historic 8-year drought.

Careful supply management and good water quality go hand-in-hand. MWD's current water sources are all rainfall dependent. While 2019 was a year of abundant rainfall, pursuing potential new water sources, such as desalinated and recycled water, remained a top priority. Droughts are forecast to be more severe and longer-lasting in coming years, and MWD plans to be prepared for future water supply challenges.

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's Water Quality Summary 2019**

Montectio's water quality summary 2019											
Primary Standards (PDWS)	Units	Maximum Contaminant Level	Public Health Goal (MCLG)	Jameson Lake Average	Jameson Lake Range	Ground Water Average	Ground Water Range	Cachuma Lake Average	Cachuma Lake Range	Common Sources of Contamination in Drinking Water	
Water Clarity											
Treated Turbidity	NTU	TT = 1 NTU  TT = 95% of Samples < 0.3	NA	0.09	0.03 - 0.29 100.0%	0.20	0.10 - 0.20 100%	NA	ND -0.18 100%	Soil runoff.	
<b>Radioactive Contan</b>	ninants										
Gross Alpha Particle Activity	pCi/L	15	(0)	1.74	1.74	2.63	1.72 - 3.86	NA	NA	Erosion of natural deposits.	
Uranium	pCi/L	20	0.43	NA	NA	1.10	0.82 - 1.56	0.83	NA	Erosion of natural deposits.	
<b>Inorganic Contamin</b>	nants										
Aluminum	μg/L	1000	600	23.3	ND - 60	ND	ND	19	ND - 54	Erosion of natural deposits; residue from some surface water treatment processes.	
Arsenic	μg/L	10	0.004	ND	ND	0.25	ND - 1.0	1	ND - 1.2		
Fluoride	mg/L	2	1	0.2	0.2	0.8	0.5 - 1.0	0.45	0.38 - 0.6	Erosion of natural deposits; discharge from fertilizer.	
Nitrate as N (Nitrogen)	mg/L	10	10	0.7	0.7	1.99	0.6 - 6.4	0.21	ND - 0.33	Runoff or leaching from fertilizer use; leaching from septic tanks and sewage; erosion from natural deposits	
Selenium	μg/L	50	30	ND	ND	4.8	2.0 - 9.0	NA	NA	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharg from mines and chemical manufacturers; runo from livestock lots (feed additive).	

Primary Standards for Distribution System	Units	Maximum Contaminant Level	Public Health Goal (MCLG)	Distribution System Average	Distribution System Range	Common Sources of Contamination in Drinking Water
Disinfectant						
Free Chlorine Residual	mg/L	MRDLG, 4.0	MRDLG, 4.0	0.63	0.20 - 1.95	Drinking water disinfectant added for treatment
Disinfection By Products						
Total Trihalomethanes	μg/L	80	NA	Highest LRAA, 65.6	32 - 88	By-product of drinking water disinfection
Haloacetic Acids	μg/L	60	NA	Highest LRAA, 47.5	10 - 79	By-product of drinking water disinfection
Bromate (Cachuma Lake)	μg/L	10	0.1	3.6	2.2 - 5.4	By-product of drinking water disinfection
Total Organic Carbon (DBP Precursor)	μg/L	TT	NA	3.9	3.9 - 5.0	Various natural and manmade sources. Total Organic Carbon (TOC) has no health effects. However, it provides a medium for the formation of disinfection byproducts.
Microbiological Contamin	ant Samples					
Total Coliform Bacteria	% Tests Positive	<5% of Monthly Samples	0	0.00%	0	Naturally present in the environment.
Cryptosporidium	No. of oocyst/L	TT	0	0	0	Naturally present in the environment.

Lead and Copper Rule (2018)	Units	RAL	PHG	Samples collected	Above RAL	90th Percentile	Common Sources of Contamination in Drinking Water
Lead	μg/L	15	0.2	32	0	ND	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.
Copper	μg/L	1300	300	32	0	309	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 32 samples was collected in 2017. All of the samples were well below the regulatory action level (RAL). Copper was detected in 29 samples. The 90th percentile value was at 309 ug/L. Lead was detected in 1 sample (7.6 ug/L). 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 Standards	Units	Maximum Contaminant Level	Jameson Lake Average	Jameson Lake Range	Ground Water Average	Ground Water Range	Cachuma Lake Average	Cachuma Lake Range	Common Sources of Contamination in Drinking Water
Aesthetic Standards									
Chloride	mg/L	500	5	5	256	142 - 472	28.6	25.6 - 36.4	Runoff or leaching from natural deposits; seawater influence.
Iron	μg/L	300	ND	ND	25	ND - 110	ND	NA	Leaching from natural deposits; industrial wastes.
Manganese	μg/L	50	ND	ND	10	ND - 30	ND	NA	Leaching from natural deposits.
Threshold Odor at 60 degrees celcius	Units	3	0.6	ND - 4	ND	ND	3	1.4 - 8	Naturally-occurring organic minerals.
Specific Conductance	μS/cm	1600	754	754	1602	1140 - 1830	1024	852 - 1109	Substances that form ions in water; seawater influence.
Sulfate	mg/L	500	175	175	197	120 - 261	306	206 - 346	Runoff or leaching from natural deposits; industrial wastes.
Total Dissolved Solids	mg/L	1000	500	500	1043	650 - 1180	708	532 - 810	Runoff or leaching from natural deposits.
Zinc	mg/L	5	ND	ND	0.013	ND - 0.030	NA	NA	Runoff or leaching from natural deposits; industrial wastes.

Secondary Standards	Units	Maximum Contaminant Level	Jameson Lake Average	Jameson Lake Range	Ground Water Average	Ground Water Range	Cachuma Lake Average	Cachuma Lake Range
Additional Constituents		LOVOI	Aveluge	nunge	Average	nunge	Aweruge	nunge
pH	pH units	NS	7.98	7.10 - 8.54	7.4	7.3 - 7.4	7.62	7.10 - 7.82
Total Hardness	mg/L	NS	391	356 - 420	458	190 - 706	430	300 - 492
Total Alkalinity	mg/L	NS	198	180 - 212	210	190 - 230	222	190 - 370
Boron	μg/L	1000 (RAL)	100	100	20	ND - 80	0.38	0.37 - 0.39
Calcium	mg/L	NS	93	93	116	48 - 169	99.7	75.3 - 110
Magnesium	mg/L	NS	22	22	41	17 - 69	45	31 - 52
Sodium	mg/L	NS	20	20	99	65 - 141	60	57 - 63
Potassium	mg/L	NS	3	3	1	1	3.8	3.2 - 4.2
Unregulated Contamina	nt Monitorin	g Rule 3 (2014-15)						
Total Chromium	μg/L	NS	0.05	ND - 0.30	ND	ND	0.54	ND - 1.7
Molybdenum	μg/L	NS	1.4	1.1 - 2.3	3.8	ND - 10.0	6.3	ND - 11
Strontium	μg/L	NS	1238	1000 - 1400	923	580 - 1200	1045	670 - 1900
Vanadium	μg/L	NS	0.36	ND - 0.81	1.37	0.24 - 3.30	1.7	ND - 4.0
Chromium 6 (Hexavalent Chromium)	μg/L	NS	0.088	ND - 0.240	0.028	ND - 0.120	0.49	ND - 1.8
Chlorate	μg/L	NS	208	ND - 320	143	ND - 270	253	72.0 - 410
1,4-Dioxane	μg/L	NS	ND	ND	ND	ND	0.024	ND - 0.11
1,1-Dichloroethane	ng/L	NS	ND	ND	ND	ND	31	ND - 130
Chloromethane	ng/L	NS	ND	ND	ND	ND	31	ND - 250
Unregulated Contamina	nt Monitorin	g Rule 4 (2019)						
HAA5	μg/L	NS	32.17	23.2 - 47	NA	NA	13	ND - 32
HAA6Br	μg/L	NS	6.92	3.17 - 14.84	NA	NA	14	ND - 24
HAA9	μg/L	NS	38.49	30.67 - 51.5	NA	NA	24	ND - 51
Bromochloroacetic Acid	μg/L	NS	2.53	0.77 - 5.7	NA	NA	3.9	ND - 8.2
Bromodichloroacetic Acid	μg/L	NS	2.96	2 - 4.2	NA	NA	3.5	ND - 5.8
Chlorodibromoacetic Acid	μg/L	NS	0.82	0 - 2.2	NA	NA	2.2	ND - 3.3
Dibromoacetic Acid	μg/L	NS	0.41	0 - 1.8	NA	NA	2.3	ND - 4.2
Dichloroacetic Acid	μg/L	NS	10.44	5.5 - 22	NA	NA	6.0	ND - 16
Monobromoacetic Acid	μg/L	NS	0.19	0 - 0.94	NA	NA	2.3	ND - 4.9
Tribromoacetic Acid	μg/L	NS	ND	ND	NA	NA	2.3	ND - 4.9
Trichloroacetic Acid	μg/L	NS	21.13	12 - 28	NA	NA	4.2	ND - 12

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 2019 was 5.3 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. 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. 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).

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 May 2017. 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.

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

ug/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 21 to 25 grains per gallon, while groundwater has a hardness range of 25 to 41 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 51 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 0.29 NTU.

# Where Does Our Water Come From?



# **LOCAL SURFACE WATER**

# Lake Cachuma (A Primary Water Source)

## **Tecolote Tunnel**

Carries water from Lake Cachuma 6.4 miles through the Santa Ynez mountains to the South Coast.

#### **South Coast Conduit Pipeline**

Conveys water from Tecolote Tunnel across the South Coast, from Goleta to Carpinteria.

# Cater Treatment Plant City of Santa Barbara

Provides treated water to Montecito Water District via the South Coast Conduit.

# Jameson Lake (A Primary Water Source) Doulton Tunnel

Carries water 2.2 miles from Jameson Lake, and ground water seeps into it providing additional supply.

# Bella Vista and Doulton Treatment Plants

The District provides treated water from Jameson Lake and Doulton Tunnel to customers.

# **POTENTIAL NEW SOURCES**

#### **Desalinated water**

The District is working toward participation in the regional use of the City of Santa Barbara's desalination facility.

## **Recycled water**

The District is working toward implementation of recycled water / water reuse.

#### **SUPPLEMENTAL SURFACE WATER**

State Water Project Table A Allocation and Supplemental Water Purchases

#### San Luis Reservoir

Stores State Water and supplemental water supplies.

# California Aqueduct and the Coastal Branch Pipeline

Convey water from San Luis Reservoir to Lake Cachuma.

## **LOCAL GROUNDWATER**

#### **Groundwater wells**

District groundwater resources are limited, but provide an important and reliable supply.

#### CONSERVATION

#### **Efficient use of water**

Customers have reduced overall water use, and are achieving the District's current conservation target of 30% or more. Conservation is a California way of life!

# We encourage public participation.

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



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



583 San Ysidro Road, Montecito, CA 93108 www.montecitowater.com

#### **BOARD OF DIRECTORS:**

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