

Detailed Test Results & Information About Drinking Water in 2015

YOUR ANNUAL DRINKING WATER QUALITY REPORT: Water Quality Continues to Exceed Standards



Water & 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 U.S. Environmental Protection Agency's (USEPA) Safe Drinking Water Hotline (1-800-426-4791).

People with Special Needs

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).

Water Quality Standards

In order to ensure that tap water is safe to drink, the USEPA and the State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Once again, we are very pleased to provide you with this year's Annual Water Quality Report. We want to keep you informed about the quality water and services we have delivered to you over the past year. Montecito's drinking water meets and is better than all drinking water quality requirements.

This report offers the results of our extensive water quality tests conducted during 2015. In addition, the report provides a description of where your water comes from, answers common questions about water quality and offers other useful information.

Steps we take to ensure that the water you drink is safe & healthful

- STEP 1: We begin with a high-quality water supply.
- STEP 2: We treat the water with a variety of filtration processes.
- STEP 3: We add trace amounts of chlorine to disinfect the water as it travels through the water system.
- STEP 4: We test the water. Samples from various locations around the District are analyzed each day in our own laboratory or by independent state-certified labs. Additional testing is conducted each week for bacterial contamination. Results of these and other tests are reported regularly to state authorities.

How accurate are the tests?

The tests, using ultra sensitive measuring equipment, are so accurate that we are able to detect substances as small as one-half part per billion!

High-quality water supply

More than half of the District's water supply comes from Lake Cachuma. Other water sources include State Water, Jameson Lake, Alder and Fox Creeks and a limited groundwater supply. Water from all these sources is thoroughly treated before it is delivered to our customers.

Our water quality program is carried out by state-certified water quality experts. Regular water-quality tests ensure that your drinking water is safe.

Water in the environment

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 naturallyoccurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, that can be naturallyoccurring or result from urban 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.



MONTECITO'S WATER IS NOT LIKE FLINT'S WATER

Headlines from Flint, Michigan concerning lead in the public water supply has made national news. Elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Flint, and its water supply, are located in an old industrial area; in contrast, most of Montecito Water District's high quality water comes from the federally protected watershed of the Santa Ynez River. Montecito's source water is considered nonaggressive water with a potential to "coat" interior piping, versus leaching or corrosion of interior pipes which occurred in Flint.

The Lead and Copper Rule (LCR) was implemented by the Environmental Protection Agency (EPA) in 1991 for the protection of public water supplies from high levels of lead (Pb) and copper (Cu). Pb and Cu typically enter drinking water due to the corrosion of older customer service lines and fittings containing lead and copper materials. MWD is responsible for providing high quality drinking water, but cannot control materials used in plumbing components. Many older water systems, constructed before 1987, were identified as having higher than acceptable levels of Pb and Cu, due in part to the corrosion indices of the water source. The LCR establishes action levels (AL) of 15 parts per billion (ppb) for Pb and 1300 ppb for Cu based on a 90th percentile level of tap water samples. Exceeding the AL is not a violation, but can trigger other requirements that include more frequent water quality monitoring, corrosion control water treatment, source water monitoring/ treatment, public education, and service line replacement.

MWD's Testing Program began in 1993, when the District identified and collected 71 water samples from homes' interior taps. The results showed the 90th percentile of Cu was 645 ppb and Pb only 5 ppb, with no household samples even close to the AL. The overall results of the testing program designated the District as a non-risk water system. The required number of samples was reduced to 30 locations taken every 3 years. LCR sample results taken in 2013 showed Pb and Cu levels lower than the first samples collected in 1993. All of the samples were below the AL. Copper was detected in 30 samples with 90th percentile value at 254 ug/L. Lead was detected in 20 samples and 90th percentile value 2.7 ug/L. The next Pb and Cu testing program is scheduled for September of this year.

When your water has been sitting in the pipes 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 www.epa.gov/lead.

Definitions Used in the Chart

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.

Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of drinking water. Contaminants with SDWS do not affect the health at MCL

levels.

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 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.

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.

Footnotes:

¹The 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.

²Surface water sources include the District's Jameson Lake and Lake Cachuma. The District's Amapola Well, Ennisbrook Well No. 2, Ennisbrook Well No. 5 and Paden Well No. 2 were used as groundwater supply sources.

³Turbidity 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 0.13 NTU.

⁴An average number of 52 coliform samples were collected each month at 12 District sampling stations in compliance with the Federal Coliform Rule.

RESULTS OF 2015 DRINKING WATER QUALITY TESTS

The table below lists all the drinking water contaminants and other constituents that we detected during the 2015 calendar year. We tested for over 180 contaminants and constituents. Not included in the list below are substances for which we test but were not detected. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing conducted between January 1 and December 31, 2015.^{1,2}

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	Major Sources of Contamination in Drinking Water
Water Clarity Treated Turbidity ³	NTU	TT = 1 NTU TT = 95% of Samples	NA	0.05	0.02 - 0.13 100%	0.05	ND - 0.20 100%	NA	ND - 0.07 100%	Soil runoff.
Radioactive Contar	ninan	ts		-	-					
Gross Alpha Particle Activity	pCi/L	15	(0)	0	0	1.85	0.49 - 2.34	ND	NA	Erosion of natural deposits.
	mants ma/l	1	0.6	0.01	0.03	ND	ND	012	0.05-0.18	Frasian of natural deposits: residual from
Aloninon	// L	1000 (200)	0.0	0.01	0.00	50		0.12	0.05 0.10	some surface water treatment processes.
Boron Hexavalent Chromium, Cr VI	ug/L ug/L	1000 (RAL) 10	NA 0.02	ND ND	ND ND	50 ND	ND - TOO ND	NA ND	NA NA	NA Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities,
Fluoride	mg/L	2	1	0.2	0.2	0.5	0.5 - 0.7	0.45	0.37 - 0.51	erosion of natural deposits Erosion of natural deposits; water
Nitrate as NO3 ⁵	mg/L	45	45	1.1	0.3 - 2.0	17.8	3.0 - 28.6	ND	NA	Runoff or leaching from fertilizer use; leaching from septic tanks and
Selenium	ug/L	50	(30)	ND	ND	10.8	9.0 - 14.0	ND	NA	sewage; erosion from natural deposits. Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive).
Primary Standards for Distribution System	Units	Maximum Contaminant Level	Public Health Goal (MCLG)	Distribution System Average		Distribution System Range				Major Sources of Contamination in Drinking Water
Disinfectant							-			
Free Chlorine Residual	mg/L	MRDLG, 4.0	MRDLG, 4.0	0.	69	0.20 -	2.20			By-product of drinking water chlorination.
Disinfection By Pro	ducts							1		
Total Trihalomethanes ⁸ Haloacetic Acids Bromate	ug/L ug/L ug/L	LRAA, 80 LRAA, 60 10	NA NA 0.1	Highest LRAA, 81.0 Highest LRAA, 31.8 5.6		33.5 - 117.6 4 - 37.0 2.5 - 9.5				By-product of drinking water chlorination. By-product of drinking water chlorination. By-product of drinking water disinfection.
Microbiological Co	ntami	nant Samp	oles							
Total Coliform Bacteria ⁴	% Tests Positive	<5% of Monthly Samples	0	0.00% 0				Naturally present in the environment.		
Lead and Copper Rule	Units	RAL	PHG	Samples	Collected	Above	e RAL	90th Percentile		
Lead ^o Copper ⁶	ug/L ug/L	15 1300	0.2 300	30 0 30 0		2.7 254		Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits, leaching from wood preservatives.		
Secondary Drinking Water Standards (SDWS)	Units	Maximum Contaminant Level		Jameson Lake Average	Jameson Lake Range	Ground Water Average	Ground Water Range	Cachuma Lake Average	Cachuma Lake Range	Major Sources of Contamination in Drinking Water
Aesthetic Standard	5 :+-	10		ND	ND	ND	ND	17	10 00	Naturally occurring anoni-
Color Chloride	mg/L	500		ΝD 7	ND 7	262	95 - 490	38.6	31.9 - 46.0	Runoff or leaching from natural deposits; seawater influence.
Iron	Ug/L	300		ND	ND	10	ND - 40	160	110-239	Leaching from natural deposits; industrial wastes.
Manganese Threshold Odor at 60 Degrees Celcius Specific Conductance Sulfate	ug/L Units uS/cm mg/L	50 3 1600 500		ND ND 854 244	ND ND 854 244	13 ND 1411 196	ND - 30 ND 924 - 1950 95 - 270	34 19 947 259	25 - 42 3 - 40 879 - 986 241 - 290	Leaching from natural deposits. Naturally-occurring organic minerals. Substances that form ions in water. Runoff or leaching from natural deposits; inducting water.
Total Dissolved Solids Zinc	mg/L ug/L	1000 50		550 ND	550 ND	875 38	550 - 1670 ND - 150	686 NA	592 - 744 NA	Runoff or leaching from natural deposits Naturally-occurring in trace amounts, but can be detected in soft, acidic water systems.
Additional Constitu	ents /	Analyzed		0.00	0.00 0.50	7.0	(0.70	7.0.1	7.00 0.00	
pri Total Hardness ⁷ Total Alkalinity Calcium Magnesium Sodium Potassium Uranium	pH units mg/L mg/L mg/L mg/L mg/L ug/L ug/L	NS NS NS NS NS NS NS		8.23 357 173 91 33 36 3 NS	8.00 - 8,50 324 - 372 160 - 188 91 33 36 3 ND	7.0 456 200 141 50 99 1 ND	6.8 - 7.2 265 j- 582 180 -230 65 - 202 25 - 84 70 - 150 1 - 2 ND	7.84 341 186 70.4 43.5 69.4 4.44 1.5	7.20 - 8.22 318 - 370 176 - 220 56.1 - 72.2 39.4 - 47.0 65.0 - 75.0 4.00 - 4.78 1.5	

⁵Nitrate in drinking water at levels above 45 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 serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with 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 2015 was 28.6 mg/L.

⁶Lead & Copper Rule

Every three years, 30 residences are tested for lead and copper levels at the tap. The most recent set of samples was collected in 2013. All of the samples were well below the regulatory action level (RAL). Lead (RAL 15.0 ug/L) was detected in 20 samples with the 90th percentile value registering 2.7 ug/L Copper (RAL 1,300 ug/L) was detected in 30 samples with the 90th percentile value registering 254 ug/L. It has been found that, 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 www.epa.gov/lead.

⁷Surface water has a hardness range

of 19 to 25 grains per gallon; groundwater has a range of 25 to

35 grains per gallon.

⁸As reported in the 2014 Annual Water Quality Report, on May 20, 2015 results for Total Trihalomethanes exceeded the LRAA of 80 ug/L required by the EPA.The District's quarterly sampling results have remained under the MCL with all subsequent analysis.

For more information, visit the EPA website at: http://water.epa.gov/lawsregs/rulesregs/sdwa/ ucmr/ucmr3/index.cfm or call 202-564-3750, TTY 711.

Unregulated Contaminants Monitoring (UCMR3									
	Units	Jameson Lake Average	Jameson Lake Range	Ground Water Average	Ground Water Range	Cachuma Lake Average	Cachuma Lake Range		
Cromium, Total	ug/L	0.05	ND - 0.30	ND	ND	0.54	ND - 1.7		
Molybdemum	ug/L	1.4	1.1 - 2.3	3.8	ND - 10.0	6.3	ND - 11		
StronDum	ug/L	1238	1000 - 1400	923	580 -1200	1045	670 -1900		
Vanadium	ug/L	0.36	ND - 0.81	1.37	0.24 - 3.30	1.7	ND - 4.0		
Chromium 6 (Hexavalent Chromium) ug/L	0.088	ND - 0.240	0.028	ND - 0.120	0.49	ND - 1.8		
Chlorate	ug/L	208	ND - 320	143	ND - 270	253	72 - 410		
1,4 Dioxane	ug/L	ND	ND	ND	ND	0.024	ND - 0.11		
1,1 Dichloraoethane	ug/L	ND	ND	ND	ND	31	ND - 130		
Chloromethane	ug/L	ND	ND	ND	ND	31	ND - 250		

The UCMR3 requires all public water systems serving more than 10,000 people to perform assessment monitoring for 21 chemical contaminants for at least a 12-month period between January 2013 and December 2015. Assessment Monitoring uses common analytical method technologies used by drinking water laboratories. As required by the EPA, UCMR3 data reflects all detected contaminants from May 2014 through February 2015.

Please visit us at **montecitowater.com**. Learn about the District's history, Board of Directors, agendas and minutes, newsletters, ongoing construction projects, water quality, billing information, conservation and more.

Your Water Quality Report

583 San Ysidro Road Montecito, CA 93108 805/969-2271 email: webmaster@montecitowater.com

Samuel Frye W. Douglas Morgan Charles A. Newman

BOARD OF DIRECTORS Richard Shaikewitz, President Jan E. Abel, Vice-President

LECITO

GENERAL MANAGER/SECRETARY **Nick Turner, P.E.**

En Español Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.

more about water, the District, or public participation opportunities, please call Nick Turner, General Manager, at 969-2271, or visit our website at

to your questions about water quality, please contact Chad Hurshman, Water Treatment and Production Superintendent, at 969-7924. Chad joined the District in 2001 and became the Treatment Superintendent in 2006. He holds a State Level 4 Treatment Certification and is a valued and experienced employee serving the District and our community. **Source Water Assessment:**

A comprehensive source water assessment of the District's surface water sources was completed in December 2010. A copy of this report is

available for public inspection at the District Office.

Public Information: To learn

www.montectitowater.com

For More Information About Water Quality Who to Contact: For answers



Consumer Confidence Report Certification Form

(To be submitted with a copy of the CCR)

Water System Name:	Montecito Water District	
Water System Number:	421-0007	dia.

The water system named above hereby certifies that its Consumer Confidence Report was distributed on 6/30/2016 (*date*) to customers (and appropriate notices of availability have been given). Further, the system certifies that the information contained in the report is correct and consistent with the compliance monitoring data previously submitted to the State Water Resources Control Board, Division of Drinking Water (DDW).

Certified by:	Name: Signature:	Chad Hurshman Char D-D-D-Char						
	Title:	Treatment Superintendent						
	Phone Number:	(805) 969-7924	Date:	7/15/2016				

To summarize report delivery used and good-faith efforts taken, please complete this page by checking all items that apply and fill-in where appropriate:

CCR was distributed by mail or other direct delivery methods (attach description of other direct delivery methods used).

CCR was distributed using electronic delivery methods described in the Guidance for Electronic Delivery of the Consumer Confidence Report (water systems utilizing electronic delivery methods must complete the second page).

- Good faith" efforts were used to reach non-bill paying consumers. Those efforts included the following methods:
 - Posting the CCR at the following URL: <u>http://www.montecitowater.com/public.htm</u>
 - Mailing the CCR to postal patrons within the service area (zip code: 93108)
 - Advertising the availability of the CCR in news media (attach copy of press release)
 - Publication of the CCR in a local newspaper of general circulation (attach a copy of the published notice, including name of newspaper and date published)
 - Posted the CCR in public places (attach a list of locations)
 - Delivery of multiple copies of CCR to single-billed addresses serving several persons, such as apartments, businesses, and schools
 - Delivery to community organizations (attach a list of organizations)
 - Publication of the CCR in the electronic city newsletter or electronic community newsletter or listserv (attach a copy of the article or notice)
 - Electronic announcement of CCR availability via social media outlets (attach list of social media outlets utilized)
 - Other (attach a list of other methods used)
 - *For systems serving at least 100,000 persons:* Posted CCR on a publicly-accessible internet site at the following URL: www._____
 - *For privately-owned utilities*: Delivered the CCR to the California Public Utilities Commission

Consumer Confidence Report Electronic Delivery Certification

Water systems utilizing electronic distribution methods for CCR delivery must complete this page by checking all items that apply and fill-in where appropriate.

- Water system mailed a notification that the CCR is available and provides a direct URL to the CCR on a publicly available website where it can be viewed (attach a copy of the mailed CCR notification). URL: www.
- Water system emailed a notification that the CCR is available and provides a direct URL to the CCR on a publicly available site on the Internet where it can be viewed (attach a copy of the emailed CCR notification). URL: www._____
 - Water system emailed the CCR as an electronic file email attachment.
 - Water system emailed the CCR text and tables inserted or embedded into the body of an email, not as an attachment (attach a copy of the emailed CCR).
- *Requires prior DDW review and approval.* Water system utilized other electronic delivery method that meets the direct delivery requirement.

Provide a brief description of the water system's electronic delivery procedures and include how the water system ensures delivery to customers unable to receive electronic delivery.

This form is provided as a convenience and may be used to meet the certification requirement of section 64483(c), California Code of Regulations.