June 2014

Water News

Detailed Test Results & Information About Drinking Water in 2013

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

WATER SUPPLY UPDATE

The last three years of well below average rainfall continue to adversely affect our local surface water supplies at Lake Cachuma and our own reservoir, Jameson Lake. The National Drought Center, monitoring nationwide drought conditions, has now designated Santa Barbara County as in an ***exceptional*** drought through its D4 drought classification. The severity of this drought condition has caused the lowest available local water supply since the last drought twenty-four years ago.

In February 2014, the District declared a water shortage emergency and implemented water rationing beginning March 1, 2014. Customers have responded and overall water usage has sharply decreased by about 40%. We expect that this reduction will sustain the current monthly water delivery schedule through this water year ending September 30, 2014.

In May 2014, the Cachuma Project member units unanimously agreed to reduce deliveries from Lake Cachuma to 45% of normal. This declaration, along with Jameson Lake deliveries decreasing to 20% of normal will reduce these local available water supplies to 35% of normal for the upcoming water year beginning October 1, 2014.

Fortunately, the District has been able to purchase some supplemental water, which is being delivered to offset the local water supply deficit. We are continuing to pursue additional supplemental water purchases to enable our present monthly deliveries under the current District water rationing schedule if the drought persists.

These are very serious times from a water supply management perspective and the coming rainfall season will mark a critical turning point in the District's available water supply to the community. If future supplemental water cannot be acquired, the District may need to further restrict outdoor non-essential water use from current levels to provide water for essential indoor public health and safety purposes.

We wish to acknowledge the successful conservation efforts of our customers and ask that these efforts continue in earnest. Please go to www.montecitowater.com for updates on our current available water supplies and possible changes in water deliveries that may become necessary due to continuing drought conditions.

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 2013. In addition, the report provides a description of where your water comes from, answers common questions about water quality and offers other useful information.

The District participated in additional voluntary sampling to assess the potential of other surface water and groundwater contaminants. No contaminants were detected in any samples assessed. The District is fortunate that the watersheds filling our local lakes and reservoirs provide us with high-quality water.

Bella Vista Water Treatment Plant

Steps We Take to Ensure That the Water You Drink Is Safe and 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 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 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.

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 California State Department of Public Health (CDPH) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems.

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.

RAA: Running annual average.

Footnotes:

[1]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.

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

[3]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 0.26 NTU.

[4]An average number of 51 coliform samples were collected each month at 12 District sampling stations in compliance with the Federal Coliform Rule.

RESULTS OF 2013 DRINKING WATER QUALITY TESTS

The table below lists all the drinking water contaminants and other constituents that we detected during the 2013 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, 2013[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	0.07	0.04 - 0.26 100%	0.10	ND - 0.40 100%	NA	0.07 100%	Soil runoff.
Radioactive Contaminants										
Gross Alpha Particle Activity	pCi/L	15	(0)	0.67	0.67	1.16	0.91 -1.41	1.82	NA	Erosion of natural deposits.
Inorganic Contaminants										
Aluminum	ug/L	1000	600	25	10 - 50	10	ND - 20	0.07	ND - 40	Erosion of natural deposits; residual from some surface water treatment processes.
Boron	ug/L	1000 (RAL)	NA	100	100	67	ND - 100	350	NA	NA
Chromium	ug/L	50	(100)	ND	ND	ND	ND	0.013	ND - 0.026	Erosion of natural deposits.
Fluoride	mg/L	2	1	ND	ND	0.5	0.4 - 0.6	0.39	0.36 - 0.42	Erosion of natural deposits; water additive that promotes strong teeth.
Nitrate as NO3[5]	mg/L	45	45	0.5	ND - 0.8	15.2	0.5 - 25.2	ND	NA	Runoff or leaching from fertilizer use; leaching from septic tanks and sewage; erosion from natural deposits.
Selenium	ug/L	50	(30)	ND	ND	2.5	ND - 5.0	ND	NA	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	0.77	0.20 - 1.79			By-product of drinking water chlorination.
Disinfection By Products								
Total Trihalomethanes	ug/L	80	NA	51.6	33.3 - 80.7			By-product of drinking water chlorination.
Haloacetic Acids	ug/L	60	NA	13	3 - 39			By-product of drinking water chlorination.
Microbiological Contaminant Samples								
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 RAL**	**90th Percentile**		
Lead[6]	ug/L	15	0.2	30	0	2.7		Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits, leaching from wood preservatives.
Copper[6]	ug/L	1300	300	30	0	254		

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 Standards										
Color	Units	15		ND	ND	ND	ND	ND	NA	Naturally-occurring organic minerals.
Chloride	mg/L	500		6	6	145	79 - 210	19.2	18.0 - 21.0	Runoff or leaching from natural deposits; seawater influence.
Iron	ug/L	300		ND	ND	6.3	ND - 190	7	ND - 48	Leaching from natural deposits; industrial wastes.
Manganese	ug/L	50		20	20	0.01	ND - 30	1.7	ND - 8.9	Leaching from natural deposits.
Specific Conductance	uS/cm	1600		731	731	1275	1050 - 1500	840	775 - 895	Substances that form ions in water.
Sulfate	mg/L	500		211	211	221	211 - 230	250	219 - 275	Runoff or leaching from natural deposits; industrial wastes.
Total Dissolved Solids	mg/L	1000		490	490	830	700 - 960	631	556 - 732	Runoff or leaching from natural deposits.
Zinc	ug/L	50		ND	ND	40	ND - 80	10	ND - 20	Naturally-occurring in trace amounts, but can be detected in soft, acidic water systems.
Additional Constituents Analyzed										
pH	pH units	NS		8.18	8.00 - 8.50	7.4	7.3 - 7.50	8.06	7.70 - 8.29	
Total Hardness[7]	mg/L	NS		320	320	509	425 - 593	372	343 - 426	
Total Alkalinity	mg/L	NS		160	160	210	200 - 220	197	180 - 217	
Calcium	mg/L	NS		74	74	134	106 - 162	78.7	74.4 - 89.7	
Magnesium	mg/L	NS		33	33	43	39 - 46	44.0	38.5 - 48.5	
Sodium	mg/L	NS		34	34	68	61 - 75	48.0	44.0 - 52.0	
Potassium	mg/L	NS		2	2	1.0	1.0 - 1.0	3.60	3.38 - 3.90	

[5]**Nitrate** 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 2013 was 25.2 mg/L.

[6]**Lead & 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/safewater/lead.

[7]Surface water has a hardness range of 19 to 25 grains per gallon; groundwater has a range of 25 to 35 grains per gallon.

Lake Cachuma Intake Tower

Lake Cachuma Emergency Pumping Facility Project

Lake Cachuma is a vital part of the District's water supply, both impounding the waters of the Santa Ynez River and providing a pass through for State Water deliveries. This regional facility is shared by the District and three other south coast water purveyors. Water from this reservoir is conveyed to the District by means of an intake tower connected to the 6.4 mile long Tecolote Tunnel. During normal years, water from the lake is conveyed via gravity. However, due to prolonged drought conditions and a diminishing lake level, water will need to be pumped from the lake into the intake tower by a temporary floating pumping facility starting in late summer 2014. This facility will ensure water deliveries continue, even with declining lake levels. This is not the first time this extraordinary drought relief measure has been implemented. A very similar facility was operated during the drought conditions in the early 1990s.

If you have questions regarding this project, please contact Karl Meier, District Engineering Manager at 805/969-2271 or at karl@montecitowater.com.

Communication is Key – Help Us Keep You Informed

The District is expanding its public outreach program. We are asking our customers to provide their updated contact information, including email addresses, to allow the District to provide each of you with current information related to the on-going drought and other important District business.

SIGN UP FOR EMAIL ALERTS

Get updated drought information and other important water updates.

Go to MontecitoWater.com

Regular meetings of the Board of Directors of the Montecito Water District are held on the third Tuesday of every month at 2 pm in the District Board Room, located at our offices at 583 San Ysidro Rd, Montecito.

Chad Hurshman
Water Treatment Superintendent

For More Information About Water Quality

- **Who to Contact:** For answers 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 more about water, the District, or public participation opportunities, please call Tom Mosby, General Manager, at 969-2271, or visit our website at www.montectitowater.com
- **En Español** Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.