2016 Consumer Confidence Report

Water System Name: VENTURA RIVER WATER DISTRICT Report Date: June 2017

We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2016.

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

Type of water source(s) in use: According to SWRCB records, this Sources Well 01 and Well 02 are Groundwater. This Assessment was done using the Default Groundwater System Method. Information regarding the type of water source of Well 03 and Well 04 is not available, as this water system does not have a completed assessment on file. Please see the Drinking Water Source Assessment Information section located at the end of this report for more details.

Your water comes from 4 source(s): Well 01 (1989), Well 02, Well 03 - Active and Well 04 (2007)
and from 2 treated location(s): Baldwin Tank #2 and Casitas TP Treated

Opportunities for public participation in decisions that affect drinking water quality: Regularly-scheduled water board or city/county council meetings currently are not held.

For more information about this report, or any questions relating to your drinking water, please call (805) 646-3403 and ask for Bert Rapp.

TERMS USED IN THIS REPORT

Maximum Contaminant Level (MCL): The highest level of contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically 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 (USEPA).

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.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

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

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

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Regulatory Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

ND: not detectable at testing limit

ppm: parts per million or milligrams per liter (mg/L)

ppb: parts per billion or micrograms per liter (µg/L)

pCi/L: picocuries per liter (a measure of radiation)

NTU: Nephelometric Turbidity Units

umhos/cm: micro mhos per centimeter

The sources of drinking water: (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- *Microbial contaminants,* such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- *Inorganic contaminants,* such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- *Pesticides and herbicides,* that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- *Organic chemical contaminants,* including synthetic and volatile organic chemicals, that are by-products if industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- *Radioactive contaminants,* that can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the USEPA and the State Water Resource Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Tables 1, 2, 3, 4, 5, 6, 7 and 8 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The State Board allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old.

Any violation of MCL, AL or MRDL is highlighted. Additional information regarding the violation is provided later in this report.

Table 1 - SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

Lead and Copper (complete if lead or copper detected in last sample set)	**Sample Date**	**90th percentile level detected**	**No. Sites Exceeding AL**	**AL**	**PHG**	**Typical Sources of Contaminant**
Lead (ppb)	22 (2016)	3.1	1	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers, erosion of natural deposits
Copper (ppm)	22 (2016)	0.54	0	1.3	.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Table 2 - SAMPLING RESULTS FOR SODIUM AND HARDNESS

Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**MCL**	**PHG (MCLG)**	**Typical Sources of Contaminant**
Sodium (ppm)	(2011 - 2014)	44	38 - 48	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	(2012 - 2014)	432	409 - 458	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

Table 3 - DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**MCL [MRDL]**	**PHG (MCLG) [MRDLG]**	**Typical Sources of Contaminant**
Fluoride (ppm)	(2011 - 2014)	0.3	ND - 0.5	2	1	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories.

Nitrate as N (ppm)	(2013 - 2016)	6.6	1.2 - 11.1	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Nitrate + Nitrite as N (ppm)	(2011 - 2014)	3.4	0.8 - 6.5	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Gross Alpha (pCi/L)	(2010 - 2013)	1.013	ND - 2.51	15	(0)	Erosion of natural deposits.

Table 4 - TREATED DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**MCL [MRDL]**	**PHG (MCLG) [MRDLG]**	**Typical Sources of Contaminant**
Nitrate as N (ppm)	(2016)	5	n/a	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits

Table 5 - DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**MCL**	**PHG (MCLG)**	**Typical Sources of Contaminant**
Chloride (ppm)	(2011 - 2014)	39	16 - 52	500	n/a	Runoff/leaching from natural deposits; seawater influence
Color (Units)	(2011 - 2014)	2	ND - 6	15	n/a	Naturally-occurring organic materials
Iron (ppb)	(2012 - 2014)	150	100 - 260	300	n/a	Leaching from natural deposits; Industrial wastes
Specific Conductance (umhos/cm)	(2011 - 2014)	904	791 - 1020	1600	n/a	Substances that form ions when in water; seawater influence
Sulfate (ppm)	(2011 - 2014)	202	180 - 241	500	n/a	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	(2012 - 2014)	630	610 - 660	1000	n/a	Runoff/leaching from natural deposits
Turbidity (NTU)	(2011 - 2014)	0.5	ND - 2.1	5	n/a	Soil runoff

Table 6 - DETECTION OF UNREGULATED CONTAMINANTS

Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**Notification Level**	**Typical Sources of Contaminant**
Boron (ppm)	(2011 - 2014)	0.5	0.5 - 0.6	1	The babies of some pregnant women who drink water containing boron in excess of the notification level may have an increased risk of developmental effects, based on studies in laboratory animals.

Table 7 - ADDITIONAL DETECTIONS

Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**Notification Level**	**Typical Sources of Contaminant**
Calcium (mg/L)	(2012 - 2014)	122	116 - 129	n/a	n/a
Magnesium (mg/L)	(2012 - 2014)	31	29 - 33	n/a	n/a
pH (units)	(2011 - 2014)	7.7	7.2 - 8.0	n/a	n/a
Alkalinity (mg/L)	(2011 - 2014)	203	180 - 230	n/a	n/a
Aggressiveness Index	(2011 - 2014)	12.4	11.9 - 12.8	n/a	n/a
Langelier Index	(2011 - 2014)	0.52	-0.02 - 0.9	n/a	n/a

Table 8 - DETECTION OF DISINFECTANT/DISINFECTANT BYPRODUCT RULE							
Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**MCL (MRDL)**	**PHG (MCLG)**	**Violation**	**Typical Sources of Contaminant**
Total Trihalomethanes (TTHMs) (ppb)	(2016)	40.275	5.9 - 53.5	80	n/a	No	By-product of drinking water disinfection
Chlorine (ppm)	(2016)	3.35	.8 - 3.5	4.0	4.0	No	Drinking water disinfectant added for treatment.
Haloacetic Acids (five) (ppb)	(2016)	27.25	ND - 37	60	n/a	No	By-product of drinking water disinfection

Additional General Information on Drinking Water

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts if some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

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).

Lead Specific Language for Community Water Systems: 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 the service lines and home plumbing. *Ventura River 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.

Summary Information for Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement

About our Lead: Infants and children who drink water containing lead in excess of the action level may experience delays in their physical or mental development. Children may show slight deficits in attention span and learning abilities. Adults who drink this water over many years may develop kidney problems or high blood pressure.

About our Nitrate as N: Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die because high nitrate levels can interfere with the capacity of the infant`s blood to carry oxygen. Symptoms include shortness of breath and blueness of the skin. High nitrate levels may also affect the oxygen-carrying ability of the blood of Pregnant women.

Systems with nitrate (as nitrogen) above 5 ppm (50% of the MCL), but below 10 ppm (the MCL): 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.

2016 Consumer Confidence Report

Drinking Water Assessment Information

Assessment Information

VRWD has four active groundwater wells as its groundwater sources. The active wells are Wells 1, 2, 3 and 4. There are no sewer lines or sewage disposal facilities located within 50 and 100 feet of well sites, respectively. The four well sites are fenced for security. The wells are located about 700 feet from an active stream (when water is flowing). VRWD conducted the drinking water source assessment of its active wells. Wells 1 and 2' s assessments were completed back in August 2001; Well 4' s assessment was completed in March 2007. The following table lists the top possible contaminating activities for the two wells. Currently VRWD is only able to pump from one of the four active wells, Well 1. VRWD is constructing a new well, Well 7. The well has been drilled and the permit amendment application was submitted on December 21, 2015. VRWD expects to turn the well on for service in late 2016. Well 7, when activated, is going to replace Wells 2 and 3, which will be abandoned.

Well 01 (1989)	- Moderate physical barrier effectiveness. Possible Contaminating Activities (top ranked): Sewer collection systems; animal grazing; low density septic systems, agricultural drainage; agricultural wells; NPDES/WDR permitted discharges; historic waste dumps/ landfills; storm drain discharge; storm water detention facility, roads and freeways; surface water
Well 02	- Low physical barrier effectiveness. Possible Contaminating Activities (top ranked): Sewer collection systems; utility stations; green waste transfer station; animal grazing; high and low density septic systems, agricultural drainage; agricultural wells; irrigated crops; NPDES/WDR permitted discharges; historic gas stations; historic waste dumps/ landfills; abandoned wells; storm drain discharge; storm water detention facility; roads and freeways; surface water
Well 03 - Active	- --- physical barrier effectiveness. Possible Contaminating Activities (top ranked): Septic systems
Well 04 (2007)	- Moderate physical barrier effectiveness. Possible Contaminating Activities (top ranked): Sewer collection systems; green waste processing; high and low density septic systems; animal grazing; agricultural drainage; agricultural wells; fertilizer, pesticide/ herbicide application; NPDES/WDR permitted discharges; historic gas stations and waste dumps/ landfills; underground storage tanks confirmed; above ground storage tanks; storm drain discharge; storm water detention facility; surface water

Discussion of Vulnerability

Well 1

The well was constructed in 1989 with a depth of 242 feet. An 8- inch sewer line is located about 60 feet west/northwest of the well and a single family residence' s septic system is located about 120 feet east of the well. The well site is within the Ventura River flood zone. The well is located over 150 feet from the river and therefore not subject to the SWTR requirements. The well is housed in a concrete block building. It has a 55 feet deep annular seal and a concrete surface seal. The well is equipped with a 16- inch steel casing and is packed with gravel. The highest perforations are 92 feet below the ground level. There are no clay layers located above the highest perforations. The well has a deep water turbine pump which is powered by an electrical motor. The well's air release valve is screened. Well 1 is the primary well and the only one pumping currently.

Well 2

The well was constructed in 1958. It was re- constructed in 1996 with a depth of 230 feet. The well is housed in a concrete block building. The well site is located in Ventura River flood zone. However, it is located over 150 feet from the river and therefore not subject to the SWTR requirements. The well is equipped with a 16- inch steel casing and packed with gravel. The well is sealed at the surface and has an annular seal depth of 50 feet. The depth of the highest perforations is 65 feet. The well has no confining clay layers above the highest perforations. The well' s air release

valve is screened. The well has been offline since 2014. VRWD shall sample the well for nitrate and bacteriological activities before putting it back into service. VRWD shall also complete the Title 22 chemical testing of the well water prior to
providing it to customers.

Well 3
The well was constructed in 1969 with a depth of 220 feet. It is housed in a metal building in a fenced site behind an office yard. The well is equipped with a 16- inch steel casing and packed with gravel. It is surface sealed and has an annular depth of 50 feet. The perforations begin at 70 feet below surface. The well' s geological formation is a mix of rock and clay from the ground surface down to the highest perforations. VRWD screened the well' s air release valve during the Sanitary Survey. The well will be shut down for the rest of this year (last used in July).

Well 4
The well was constructed in 2007 with a depth of 250 feet. It is located in the Ventura River flood zone, but the flow in the river is over 150 feet away and therefore the well is not subjected to the SWTR requirements. An 8- inch sanitary sewer line runs about 125 feet from the well. A 16- inch 304 Stainless Steel casing was installed for the well. A cement grout annular seal was constructed from the surface to 50 feet below the ground surface. The well has a concrete surface seal. The well is housed in a concrete block building. The highest perforation is 73 feet deep and extends down to the 120 feet. The well' s air release valve is screened. The well has been offline since 2013. VRWD shall sample the well for nitrate and bacteriological activities before putting it back into service. VRWD shall also complete the Title 22 chemical testing of the well water prior to providing it to customers.

Acquiring Information
A copy of the complete assessment may be viewed at:
SWRCB Division of Drinking Water District Office
1180 Eugenia Place
Suite 200
Carpinteria, CA 930135

You may request a summary of the assessment be sent to you by contacting:
Jeff Densmore
District Engineer
(805) 566-1326
jeff.densmore@cdph.ca.gov

A copy of the report can also be downloaded at:
http://venturariverwd.com/news-and-events/

4). Organic chemical contaminants, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, that can also come from gas stations, urban storm water runoff, agricultural application and septic systems.

5). Radioactive contaminants, that can be naturally-occurring or be the result of oil and gas production and mining activities.

Lake Casitas has no urban or industrial water runoff and very few residents still live in the watershed. There is no oil, gas or mining production in our watershed.

Chloramine Disinfection

All public drinking water must be disinfected to prevent water-borne diseases. Casitas disinfects the water by adding chlorine and a small amount of ammonia to the water to form chloramines. Chloramine disinfection is approved by the SWRCB Division of Drinking Water and the US Environmental Protection Agency. Many United States and Canadian cities have used chloramines for decades to disinfect water. The Metropolitan Water District of Southern California supplies water to nearly 18 million people and has been successfully using chloramines for disinfection since 1984. Chloramines reduce the level of unwanted disinfection by-products in our water. Disinfection by-products are formed when chlorine mixes with naturally occurring organic material in water. Currently, regulated disinfection by-products include trihalomethanes and haloacetic acids. Chloramines stop the formation of these by-products, and chloraminated water has less of a chlorine taste and odor than chlorinated water. Chloramines do not pose a health hazard to the general population. Chloraminated water is safe for drinking, bathing, cooking and other normal uses. Two specific groups of people, however, do need to take special care with chloraminated water - kidney dialysis patients and tropical fish hobbyists.

Dialysis Patients Have Special Needs

Kidney patients are not harmed from drinking, cooking or bathing in chloraminated water. However, there is a problem that needs to be addressed for individuals who are undergoing dialysis treatment on artificial kidney machines. Chloramines must not be present in the water used in dialysis machines. Chloramines can be removed through a filtration system. We have worked with the SWRCB Division of Drinking Water to ensure that everyone involved with treatment of dialysis patients is alerted to the facts about chloraminated water.

Chloramines and Your Aquarium or Fishpond

Chloramines are toxic to fish or animals that use gills to breath. While chlorine will evaporate rather quickly from standing water, it may take weeks for chloramines to disappear. Thus it is necessary to dechlorinate water used for aquariums and fishponds. We suggest using a filter system or a dechlorinating agent sold at most pet stores for fresh and saltwater aquariums and fishponds. Another option is to install a high-quality granular activated carbon (GAC) filter in your home. The chloramine residual in water used for fish should be kept below 0.1 parts per million. Contact your local pet store or fish shop for additional assistance

Chloramines Are Safe for Plants and Swimming Pools

Chloramines will not affect the chlorine balance in your backyard swimming pool. You still need to add chlorine to retard algae and bacterial growth. Chloramines have no affect on plants, vegetables or fruit trees. For more information on chloramines call 805-649-2251, ext. 120.

Fluoride

Casitas does not add fluoride, but there is some fluoride in the water that is naturally occurring. This level was tested at 0.4 mg/L in the lake source during 2016. For more information on fluoride check the SWRCB Division of Drinking Water's Fluoridation website for more information on fluoridation, oral health and current issues: http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.shtml

Lead and Copper

The latest results from Casitas' lead and copper testing were below the action levels. 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. Casitas 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/safewater/lead. Elevated levels of copper can occur when corrosive water causes leaching of copper plumbing. To prevent leaching, Casitas implemented a corrosion-control plan and adds a small amount of phosphate to the water to lower the corrosivity and reduce copper levels.

Important Health Information

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 at 1-800-426-4791.

Unregulated Contaminant Monitoring

Unregulated contaminant monitoring helps USEPA and the SWRCB Division of Drinking Water to determine where certain contaminants occur and whether the contaminants need to be regulated. Casitas sampled for unregulated contaminants during 2013; see the table for sampling results.

New Aeration System Installed During 2015

A new aeration system was installed in Lake Casitas during fall of 2015. The new system bubbles oxygen into the deeper portions of the lake near the dam. The new system has improved water quality and prevented the taste and odor problems that customers experienced in the past.

CASITAS Municipal Water District

2017 Annual Drinking Water Quality Report

2016 Data

Casitas Keeps Your Water Safe

Casitas strives to provide you with water that meets or exceeds all federal and state standards for safe water. To ensure that you receive the highest quality drinking water, we test beyond what state and federal regulations mandate. This report shows the results of our monitoring for the period of January 1 through December 31, 2016 or the most recent testing period required

Este informe contiene informacion muy importante sobre su agua beber. Traduzcalo o hable con alguien que lo entienda bien. Para la informacion llame por favor 805-649-2251.

Board meetings are open to the public and are held on the second and fourth Wednesdays of each month at 3:00 p.m. at the district main office, 1055 Ventura Avenue, Oak View, CA, 93022. For additional details on the subjects outlined here and for more information about Casitas Municipal Water District, visit us at our Web site: www.casitaswater.org, or call Susan McMahon, Water Quality Supervisor, at 805-649-2251 extension 120.

Your Tap Water Is Safe to Drink

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the State Water Resources Control Board (SWRCB) Division of Drinking Water prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration Regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health.

Drinking water, including bottled water, may be reasonably expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-¬800-426-4791).

Do You Know the Source of Your Water?

The Casitas Municipal Water District is supplied by a blend of ground water and surface water that is treated before it is distributed to the public. The surface water comes from Lake Casitas, located near the junction of Highway 150 and Santa Ana Road, and the ground water is drawn from the Mira Monte Well. Most of the watershed is federally protected to limit contamination of the lake. For additional protection we inspect the watershed on a regular basis.

For more information, you may review the 1995 Watershed Sanitary Survey and the 2016 update, which are available at our main office in Oak View.

Lake Casitas is considered to be most vulnerable to the following activities not associated with any detected contaminants: boat services (repair and refinishing), petroleum pipelines and recreation. There have been no contaminants detected in the water supply, although the lake is still vulnerable to activities located near this major source of our drinking water. The potential sources of contaminants include private sewage disposal systems; livestock and wildlife grazing; limited pesticide and herbicide use; activities in the surrounding recreation area; unauthorized dumping; limited growth of new homes or urban areas; traffic accidents; and spills.

The 2002 Drinking Water Source Assessment for the Mira Monte Well is also available to the public at our office. This well is considered to be most vulnerable to the use of fertilizers and animal grazing, which raise nitrate levels in the water. In addition, the Mira Monte Well may be vulnerable to activities associated with an urban environment. However, these activities have not resulted in contamination of the well.

Nature and Man Influence Your Water Quality

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 human activity.

Contaminants that may be present in source water include:

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

2). Inorganic contaminants, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff; industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

3). Pesticides and herbicides that may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

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Casitas Water Quality Table 2017 (2016 Data)

Primary Health Standards

CONSTITUENTS	MCL (MRDL)	PHG, (MCLG) (MRDLG)	LAKE CASITAS TREATED WATER LEVEL/AVERAGE	LAKE CASITAS TREATED WATER RANGE	MIRA MONTE WELL AVERAGE	MIRA MONTE WELL RANGE	DISTRIBUTION SYSTEM AVERAGE	DISTRIBUTION SYSTEM RANGE	Year Tested Lake or Distribution System	Year Tested Well[d]	Source of Contamination
Turbidity	**Treatment technique (TT)[b]**										
Filter Effluent Turbidity (NTU)[a]	1 NTU	NA	highest value = 0.11	NA	NA	NA	NA	NA	2016	NA	Soil runoff
	95% < 0.2 NTU		100% of turbidity measurements < 0.2 NTU						2016	NA	
			100% = lowest monthly % of samples meeting turbidity limits								
MICROBIOLOGICAL											
Total Coliform Bacteria[b]	> 1 positive sample/month	(0)					0	0	2016	NA	Naturally present in the environment
E. Coli Bacteria	> 1 positive sample/month	(0)					0	0	2016	NA	Human and animal fecal waste
INORGANIC CHEMICALS											
Barium (ppm)	1	2	ND	NA	0.1	NA	NA	NA	2016	2016	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Fluoride (ppm)	2.0	1	0.4	NA	0.6	NA	NA	NA	2016	2016	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate as N (ppm)[c]	10	10	ND	NA	8.2	7.7-8.6	0.6	0.4-0.8	2016	2016	Runoff and leaching from fertilizer use; leaching from tanks and sewerage; erosion from natural products
DISINFECTION BY-PRODUCTS AND DISINFECTANT RESIDUALS											
Chloramines (ppm)	[4.0]	[4.0]					2.8	1.2-3.8	2016	NA	Drinking water disinfectant added for treatment
Trihalomethanes (ppb)	80	NA					68.5	26.9-55.9	2016	NA	By-product of drinking water disinfection
Haloacetic acids (ppb)	60	NA					38	20-43	2016	NA	By-product of drinking water disinfection
INDIVIDUAL TAP MONITORING FOR: LEAD AND COPPER	**Regulatory Action Level**	**PHG**	**# of samples collected**	**Homes above RAL**	**Level detected at 90th percentile**				**Year Tested**		
Lead (ppb)	15	0.2	23	0	ND				2014	NA	Internal corrosion of household plumbing systems; discharges from industrial manufacturers; erosion of natural products
Copper (ppm)[e]	1.3	0.3	23	0	1.0				2014	NA	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives

Secondary Aesthetic Standards[f]

CONSTITUENTS	State MCL	PHG/NL	LAKE CASITAS TREATED WATER LEVEL/AVERAGE	LAKE CASITAS TREATED WATER RANGE	MIRA MONTE WELL AVERAGE	MIRA MONTE WELL RANGE	DISTRIBUTION SYSTEM AVERAGE	DISTRIBUTION SYSTEM RANGE	Year Tested Lake	Year Tested Well[d]	Source of Contamination
Turbidity(NTU)	5	NA	0.4	NA	0.2	NA			2016	2016	Soil run-off
Total Dissolved Solids (ppm)	1000	NA	400	NA	380	NA			2016	2016	Run-off/leaching from natural deposits
Specific Conductance (uS/cm)	1600	NA	624	NA	633	NA			2016	2016	Substances that form ions in water; seawater influence
Chloride (ppm)	500	NA	21	NA	58	NA			2016	2016	Run-off/leaching from natural deposits; seawater influence
Sulfate (ppm)	500	NA	150	NA	37.9	NA			2016	2016	Run-off /leaching from natural deposits; industrial wastes
Zinc (ppm)	5	NA	ND	NA	0.12	0.09-0.15			2016	2016	Run-off /leaching from natural deposits; industrial wastes
Additional Monitoring											
UCMR 3 Monitoring											
Chlorate (ppb)	800	NA	ND	ND	176	65-290	ND	ND	2013	2013	A disinfection by-product
Molybdenum (ppb)	NA	NA	3.3	3.1-3.4	1.0	ND-1.9	3.4	3.2-3.5	2013	2013	A naturally-occuring element found in ores and present in plants, animals and bacteria
Strontium (ppb)	NA	NA	703	660-750	520	470-570	723	670-770	2013	2013	A naturally-occuring element
Vanadium (ppb)[g]	50	NA	See footnote f		See footnote f		See footnote f		2013	2013	A naturally-occuring elemental metal
ADDITIONAL CONSTITUENTS (UNREGULATED)		**PHG/NL**									
Alkalinity (Total as CaCO3 ppm)	NA	NA	110	NA	150	NA			2016	2016	A measure of the capacity to neutralize acid
pH (units)	6.5-8.5 US EPA	NA	7.5	NA	6.7	NA			2016	2016	A measure of acidity or alkalinity
Bicarbonate Alkalinity (HCO3)	NA	NA	140	140	180	NA			2016	2016	
Boron (ppb)	NA	(1000)	200	NA	ND	NA			2016	2016	A naturally-occurring element
Calcium (ppm)	NA	NA	49	NA	47	NA			2016	2016	A naturally-occurring element
Magnesium (ppm)	NA	NA	25	NA	14	NA			2016	2016	A naturally-occurring element
Potassium (ppm)	NA	NA	3	NA	ND	NA			2016	2016	A naturally-occurring element
Total Hardness (ppm)	NA	NA	225 (13.1 grains/gal)	NA	175	NA			2016	2016	"Hardness" is the sum of polyvalent cations present in the water, generally magnesium and calcium. The cations are usually naturally occuring.
Sodium (ppm)	NA	NA	30	NA	50	NA			2016	2016	"Sodium" refers to the salt present in the water and is generally naturally occurring.

TERMS USED IN THIS REPORT:

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 (USEPA).

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Notification Level: Health based advisory levels established by The State Board* for chemicals in drinking water that lack MCLs.

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

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Regulatory Action Level (RAL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

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

Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.

UCMR 3: Unregulated Monitoring Contaminant Rule (Third round). This monitoring helps the EPA and The State Board* determine where certain contaminants occur and whether the contaminants need to be regulated.

Key To Table (ACRONYMS)

NA = Not Applicable
ND = None Detected
NL = Notification Level
NS = No Sample
NTU = Nephelometric Turbidity Units (a measure of turbidity)
ppt = Parts per trillion, or nanograms per liter (ng/L)
pCi/L = Picocuries per liter (a measure of radiation)
ppm = Parts per million, or milligrams per liter (mg/L)
ppb = Parts per billion, or micrograms per liter (ug/L)
TT = Treatment Technique
uS/cm = Micro Siemens per Centimeter (a measure of specific conductance)

Water Quality Table Footnotes:

a) Turbidity is a measure of the cloudiness of water and is a good measure of water quality and filtration performance; 100 % of the samples tested for turbidity were below the required TT level of 0.2 NTU and 100% is the lowest monthly percentage of samples meeting the turbidity limits.

b) During 2016 Casitas collected 159 samples for total coliform bacteria testing according to the Total Coliform Rule. Total Coliform bacteria were not detected in any of these samples.

c) Mira Monte Well is above the MCL for nitrate, however the well water is blended with lake Casitas water with the resulting nitrate level averaging 0.6 ppm as nitrogen.

d) 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.

e) Casitas has implemented a corrosion control plan by adding a small amount of phosphate to the water to lower corrosivity and reduce copper levels. Six customer tap samples for copper and lead were taken during 2016; none were above the action level.

f) These results are below the detection limits for reporting and can only be used as an estimate. For vanadium sampling the highest level (in ppb) for the lake was 1.2 (ND for 2014), the well was 0.78 and 1.2 for the distribution system.

* CA State Water Resources Control Board