

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.

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.

Groundwater from OWS wells contains manganese, a naturally occurring metal which is removed through oxidation and filtration at the OWS Treatment Plant. Manganese was not detected in the filter-effluent during 2019.

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 the immediate watershed.

### Fluoride

Fluoride is not added to the water, but there is some naturally-occurring fluoride in the water. Fluoride test results ranged from 0.3 - 0.4 mg/L for all sources during 2019. For more information on fluoride, check the SWRCB Division of Drinking Water's Fluoridation website for information on fluoridation, oral health, and current issues: [http://www.waterboards.ca.gov/drinking\\_water/certlic/drinkingwater/Fluoridation.shtml](http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.shtml)

### Chlorine/Chloramine Disinfection

All public drinking water must be disinfected to prevent water-borne diseases. The OWS is disinfected through the use of chlorine, while the CMWD water is disinfected by adding chlorine and a small amount of ammonia to form chloramines. The OWS is normally chlorinated, but there may be some occasions when the water fed to the OWS is from the CMWD source and is chloraminated. 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. 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.

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.

Chloramines are toxic to fish and other animals that use gills to breathe. 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 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 effect on plants, vegetables or fruit trees. For more information on chloramines call 805-649-2251 Ext. 120.

### Lead and Copper

The latest results from OWS lead and copper testing were below the action levels. CMWD adds a small amount of phosphate to the water from the Lake Casitas source to lower the corrosivity and reduce copper levels, as part of our Corrosion Control plan. 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. CMWD/OWS is responsible for providing high quality drinking water, but cannot control the variety of materials used in private 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.

Additionally, as part of the school lead testing program, CMWD sampled four schools in the OWS service area in 2017 and provided them with testing results.

### Additional Bacteriological Sampling

In addition to weekly compliance sampling and analysis for microbial contamination, Casitas MWD samples for potential bacteriological contamination following water service interruptions and main repairs, as well as supplemental samples within the distribution system. Casitas MWD also conducts bacteriological monitoring of source water. Casitas is currently implementing a mainline replacement program to replace aging and undersized mains in the Ojai Water System. Prior to any newly installed main being placed into service, the new main is disinfected and analyzed for bacteriological contamination. Three main replacement projects were completed in 2019, with multiple main replacement projects scheduled for summer and fall of 2020.

Two precautionary Boil Water Notifications were issued for discrete portions of the Ojai Water System in 2019 following large water main breaks. Extensive bacteriological monitoring was conducted for these portions; bacteriological contamination was not detected and the notices were lifted. Design is currently in process to replace the aging pipelines related to the large water main breaks stated above.

### 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.



# Annual Drinking Water Quality Report

## CMWD's "Ojai Water System" ID# CA5610014, 2019 Data

### High Water Quality Standards

Casitas Municipal Water District's (CMWD) Ojai Water System, strives to meet, or exceed, all USEPA 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 monitoring for the period of January 1 through December 31, 2019, which is the most recent testing period required.

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

Board meetings are held on the second and fourth Wednesdays of each month at 3:00 p.m. at the district office: 1055 Ventura Avenue, Oak View, CA, 93022. Due to COVID-19 restrictions, meetings may be held via teleconference and are broadcast live via the internet. Please refer to meeting agendas for current information on how to participate: [www.casitaswater.org/about-us/board-of-directors](http://www.casitaswater.org/about-us/board-of-directors), click 'Board Meetings' for a list of broadcast meetings. For additional details on the subjects outlined here, important updates and notices, and for more information about Casitas Municipal Water District, visit us at our web site: [www.casitaswater.org](http://www.casitaswater.org), or call Jordan Switzer, Water Quality Supervisor at 805-649-2251 Ext. 120.

### Ensuring 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). Additional information on bottled water is available on California Department of Public Health's website at <https://www.cdph.ca.gov/Programs/CEH/DFDCS/Pages/FDBPrograms/FoodSafetyProgram/Water.aspx>

### Do You Know the Source of Your Water?

There are eight sources of water for Ojai Water System (OWS). Groundwater is pumped from the Ojai Valley Groundwater Basin through six wells located in the town of Ojai. The groundwater basin is recharged from a collection of local drainage basins, streams and creeks, as well as natural percolation from rain, agriculture, and domestic use. The water system periodically supplements supplies with treated water from CMWD.



CMWD water is a blend of ground water and surface water. The surface water comes from Lake Casitas, located near the junction of Highway 150 and Santa Ana Road. The ground water is drawn from the Mira Monte Well, located in Mira Monte. 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 2013 Source Water Assessment for each groundwater well serving the OWS. For the CMWD sources, the Watershed Sanitary Survey 2016 update, and the 2002 Mira Monte Well Drinking Water Source Assessment are also upon request by contacting Jordan Switzer at 805-649-2251 Ext. 120

The OWS groundwater well sources are considered most vulnerable to one or more of the following possible contaminating activities: National Pollutant Discharge Elimination System/waste discharge requirements-permitted discharges; low density septic systems; agricultural and irrigation wells. Contaminants associated with these activities have not been detected in the water supply.

The CMWD Lake Casitas source 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. However, 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; unauthorised dumping; limited growth of new homes or urban areas; traffic accidents; and spills. During 2019, results from sampling of the CMWD raw treatment plant influent were non-detect for giardia and cryptosporidium.

The CMWD Mira Monte 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.

### Influences on 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, which may come from sewage treatment plants, septic systems,

*Continued on page 4 >*

# Ojai Water System Water Quality Table, 2019 Data, ID CA5610014

| Turbidity (NTU)                              | MCL or (MRDL)             | PHG, (MCLG)<br>(MRDLG) | LAKE CASITAS TREATED WATER SOURCE                           |                 |                                   |       | Year Tested             | Source of Constituent                           |   |   |
|--|---------------------------|------------------------|---|-----------------|-----------------------------------|-------|-------------------------|---|---|---|
|  |                           |                        | AVERAGE   |                 | RANGE                             |       |                         |   |   |   |
| Filter Effluent Turbidity (NTU) <sup>a</sup> | 1 NTU                     | NA                     | Highest value = 0.16  |                 | 0.01-0.16                         |       | 2019                    | Soil runoff                                     |   |   |
|  | 95% < 0.2 NTU             |                        | 100% of turbidity measurements < 0.2 NTU                    |                 |                                   |       | 2019                    |   |   |   |
|  |                           |                        | 100% = lowest monthly % of samples meeting turbidity limits |                 |                                   |       | 2019                    |   |   |   |
|  |                           |                        | OWS Distribution System Sampling                            |                 |                                   |       |                         |   |   |   |
|  |                           |                        | HIGHEST POSITIVE SAMPLES/MONTH                              |                 | RANGE                             |       |                         |   |   |   |
| Total Coliform Bacteria <sup>b</sup>         | > 1 positive sample/month | (0)                    | 0   |                 | 0                                 |       | 2019                    | Naturally present in the environment            |   |   |
| E. Coli Bacteria                             | > 1 positive sample/month | (0)                    | 0   |                 | 0                                 |       | 2019                    | Human and animal fecal waste                    |   |   |
|  |                           |                        | OWS Distribution System Sampling                            |                 |                                   |       |                         |   |   |   |
|  |                           |                        | HIGHEST [RAA]/LOCATIONAL RAA                                |                 | INDIVIDUAL SAMPLE POINT RANGE     |       |                         |   |   |   |
| Chlorine (ppm)                               | [4.0]                     | [4.0]                  | [1.4] <sup>c</sup>  |                 | 0.8-2.2                           |       | 2019                    | Drinking water disinfectant added for treatment |   |   |
| Trihalomethanes (ppb)                        | 80                        | NA                     | 39 <sup>c</sup>   |                 | 8-15                              |       | 2019                    | By-product of drinking water disinfection       |   |   |
| Haloacetic acids (ppb)                       | 60                        | NA                     | 16 <sup>c</sup>   |                 | 0-11                              |       | 2019                    | By-product of drinking water disinfection       |   |   |
|  |                           |                        | OWS Customer Tap Sampling                                   |                 |                                   |       |                         |   |   |   |
|  |                           |                        | # of samples collected                                      | Homes above RAL | Level detected at 90th percentile |       |                         |   |   |   |
| Lead (ppb) <sup>d</sup>                      | 15                        | 0.2                    | 20  | 0               | ND                                |       |                         | 2017  | Internal corrosion of household plumbing systems; discharges from industrial manufacturers; erosion of natural products |   |
| Copper (ppm) <sup>d</sup>                    | 1.3                       | 0.3                    | 20  | 1               | 0.9                               |       |                         | 2017  | Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives   |   |
| Lead School                                  |                           |                        | Number of schools requesting lead sampling = 4              |                 |                                   |       | 2017                    |   |   |   |
|  |                           |                        | OWS Treated Water Source                                    |                 | Lake Casitas Treated Water        |       | Mira Monte Well Treated |   |   |   |
|  |                           |                        | Average   | Range           | Average                           | Range | Average <sup>e</sup>    | Range   |   |   |
| Barium (ppm)                                 | 1                         | 2                      | ND  | NA              | 0.13                              | NA    | 0.13                    | 0.10-0.13                                       | 2019  | Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits  |
| Fluoride (ppm)                               | 2.0                       | 1.0                    | 0.3   | NA              | 0.4                               | NA    | 0.4                     | 0.4-0.5   | 2019  | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories   |
| Nitrate as N (ppm)                           | 10                        | 10                     | 4.6   | NA              | ND                                | NA    | 1.2 <sup>f</sup>        | 0.6-1.7   | 2019  | Runoff and leaching from fertilizer use; leaching from tanks and sewerage; erosion from natural products  |
| Selenium (ppb)                               | 50                        | 30                     | 7   | NA              | ND                                | NA    | ND                      | ND-ND   | 2019  | Erosion of natural deposits; discharge from petroleum, glass, metal refineries; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive) |

| Secondary Aesthetic Standards     |                |        |                          |       |                            |       |                         |           |             |   |
|-----------------------------------|----------------|--------|--------------------------|-------|----------------------------|-------|-------------------------|-----------|-------------|---|
| CONSTITUENTS                      | State MCL      | PHG    | OWS Treated Water Source |       | Lake Casitas Treated Water |       | Mira Monte Well Treated |           | Year Tested | Source of Constituent   |
|                                   |                |        | Average                  | Range | Average                    | Range | Average <sup>e</sup>    | Range     |             |   |
| Turbidity(NTU)                    | 5              | NA     | 0.2                      | NA    | 0.2                        | NA    | 0.2                     | NA        | 2019        | Soil run-off  |
| Total Dissolved Solids (ppm)      | 1000           | NA     | 720                      | NA    | 420                        | NA    | 419                     | 390-420   | 2019        | Run-off/leaching from natural deposits  |
| Specific Conductance (uS/cm)      | 1600           | NA     | 1030                     | NA    | 679                        | NA    | 679                     | 679-683   | 2019        | Substances that form ions in water; seawater influence  |
| Chloride (ppm)                    | 500            | NA     | 64                       | NA    | 24                         | NA    | 25                      | 24-63     | 2019        | Run-off/leaching from natural deposits; seawater influence  |
| Sulfate (ppm)                     | 500            | NA     | 211                      | NA    | 161                        | NA    | 158                     | 39-161    | 2019        | Run-off/leaching from natural deposits; industrial wastes   |
|                                   |                |        | OWS Treated Water Source |       | Lake Casitas Treated Water |       | Mira Monte Well Treated |           |             |   |
|                                   |                |        | Average                  | Range | Average                    | Range | Average <sup>e</sup>    | Range     |             | Source of Constituent   |
| Alkalinity (Total as CaCO3 ppm)   | NA             | NA     | 220                      | NA    | 140                        | NA    | 141                     | 140-160   | 2019        | A measure of the capacity to neutralize acid  |
| pH (units)                        | 6.5-8.5 US EPA | NA     | 7.2                      | NA    | 7.6                        | NA    | 7.3                     | NA        | 2019        | A measure of acidity or alkalinity  |
| Bicarbonate Alkalinity HCO3 (ppm) | NA             | NA     | 270                      | NA    | 170                        | NA    | 171                     | 170-190   | 2019        | A measure of the capacity to neutralize acid  |
| Corrosivity (Langlier Index)      | NA             | NA     | 0.1                      | NA    | 0.01                       | NA    | 0.00                    | -0.2-0.01 | 2019        | Indicator of corrosion. A positive Langlier Index indicates the water is non-corrosive  |
| Boron (ppb)                       | NA             | (1000) | 200                      | NA    | 200                        | NA    | 194                     | ND-200    | 2019        | A naturally-occurring element   |
| Calcium (ppm)                     | NA             | NA     | 121                      | NA    | 53                         | NA    | 53                      | 53-53     | 2019        | A naturally-occurring element   |
| Magnesium (ppm) <sup>e</sup>      | NA             | NA     | 30                       | NA    | 26                         | NA    | 26                      | 16-26     | 2019        | A naturally-occurring element   |
| Potassium (ppm)                   | NA             | NA     | ND                       | NA    | 4                          | NA    | 4                       | ND-4      | 2019        | A naturally-occurring element   |
| Total Hardness (ppm)              | NA             | NA     | 425                      | NA    | 239                        | NA    | 238                     | 198-239   | 2019        | "Hardness" is the sum of polyvalent cations present in the water, generally magnesium and calcium. The cations are usually naturally occurring. |
| Sodium (ppm)                      | NA             | NA     | 69                       | NA    | 30                         | NA    | 31                      | 30-50     | 2019        | "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 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.

**Running Annual Average (RAA):** Some MCL's are determined based on the running annual average which is calculated by averaging all sample results within the previous four quarters. Locational running annual average includes results averaged over the previous four quarters for a specific sample site.

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

## Key To Table (ACRONYMS)

- NA = Not Applicable
- ND = None Detected
- NL = Notification Level
- NS = No Sample
- NTU = Nephelometric Turbidity Units (a measure of turbidity)
- ppm = Parts per million, or milligrams per liter (mg/L)
- ppb = Parts per billion, or micrograms per liter (ug/L)
- ppt = Parts per trillion, or nanograms per liter (ng/L)
- pCi/L = Picocuries per liter (a measure of radiation)
- 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 2019, 155 samples were collected for total coliform bacteria testing according to the Total Coliform Rule. Total Coliform bacteria were not detected in any of these samples.
- c) Highest running annual average and locational running annual averages are used to calculate the MCL / MRDL and include sample results from a previous reporting period, whereas range only includes individual sample results in 2019.
- d) Water from the Lake Casitas source has a small amount of phosphate added to lower corrosivity and reduce copper levels.
- e) Average using source water quality data calculated as a flow-weighted average for blending facility production of Lake Casitas Treated and Mira Monte Well.
- f) Mira Monte Well water receives blending treatment with lake Casitas water and when operated, blended water is sampled weekly for nitrates with the resulting nitrate level averaging 1.2 ppm as nitrogen in 2019.