# Water is Precious



# MEINERS OAKS WATER DISTRICT CONSUMERS CONFIDENCE REPORT FOR 2012

Last year, as in years past, your tap water meets all EPA and State drinking water health standards. Meiners Oaks Water District has delivered safe drinking water that did not violate any maximum contaminant levels. This report details about where your water comes from, what it contains, and how it compares to State standards.

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 EPA'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).

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. Water can also 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, which 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, which are byproducts of industrial processes and petroleum production, and can, also come from gas stations, urban storm water runoff and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.
- Disposing of unused, unwanted, and expired medications once it was common practice to flush these <u>medications</u> (also known as <u>pharmaceuticals</u>) down the toilet. Your doctor or pharmacist may have directed you to do this. We now know that these substances are bad for our environment - the ground, water, and the air around us.
- Department of Health and EPA regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

For more information please look to (www.nodrugsdownthedrain.org) In order to ensure that tap water is safe to drink, the USEPA and the California Department of Public Health (CDPH) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

In order to ensure that tap water is safe to drink, USEPA and the California Department of Health Services prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish a limit for contaminants in bottled water that must provide the same protection for public health. To add to the delivery and protection of your drinking water, we have added a new EPA approved 2 stage filtration system with a coagulant to aid the removal of turbidity, Cryptosporidium and Giardia. The first stage has a run of 10 filters and the second has a run of 8 filters. The filtration system combined with chlorine gas at a level of .8 to 1.2 ppm (parts per million) meet the minimum removal and inactivation requirements of the State of California which are 2 log (99%) for Cryptosporidium, 3 log (99.9%) Giardia and 4 log (99.99%) viruses. With the addition of chlorine gas at a level of .8 to 1.2 ppm (parts per million) which can help to ensure that the best water possible is being delivered to our customers.

#### **Sources of your Water**

Your water comes from four district wells drilled 100 to 400 feet into underground aquifers. Two groundwater wells are located at Lomita and Rice, and two wells three miles north of Meiners Oaks and one more new additional well off of Myer Rd. We also have one water system connection to receive surface water from Lake Casitas. Customers may receive Lake Casitas surface water if our wells need repair or cannot

keep up with system demand. A blend of surface and ground water is delivered on those occasions.

#### **Water Conservation**

Meiners Oaks Water District would like to remind its customers that a phase 1 water shortage has been declared requesting that every customer voluntarily reduce their water consumption by 20%. This will help reduce the strain on our wells and lower the amount of water that would need to be purchased from Lake Casitas. It is a precious natural resource that we cannot afford to abuse. We would also like to remind everyone that this has been a below normal year for rainfall at 15.23"; which is 45.7% of normal. This means that we all should pay close attention to the amount we all use from day to day. So please keep in mind to use positive shut off valves when washing your car or watering your plants or garden. Use low flow shower heads and faucets. Low flow toilets are also a big water saver. If you cannot afford low flow toilets or any of the many other water saving devices available to you, as a customer of Meiners Oaks Water District, you are eligible for rebates from Casitas Municipal Water District. At this point in the year our well levels are looking good, but if the weather doesn't become more cooperative in the upcoming years water levels could drop and conditions could become more severe. So please remember to conserve our precious resource. Another way to save water is to use smart controllers for your irrigation valves. They are available through Casitas Municipal Water rebate program and most irrigation supply houses. Let Casitas Water know that you are one of our customers and present them a water bill from our district and they will take it from there. Please contact Ron Merckling at 649-2251 EXT. 118 for more information.

#### **Fun Facts**

Studies have shown that house holds in America will use approximately 146,000 gallons annually. 42 percent of that or approximately 61,300 gallons is used indoors. The 58 percent that is left approximately 84,700 gallons is being used outdoors. Not including sanitary purposes, one person can survive on one gallon of water per day. The average person uses 4 to 5 gallons of water per day – sanitary uses included 1.1 billion People lack access to an improved water supply – that's approximately one in six people on earth.

Assume there are 25,000 restaurants in the **U.S. only** (which is a underestimate). Suppose 300 (again, an underestimation) people going to each of those restaurants wants water. That means  $25,000 \times 300 = 7,500,000$  people want water each day. Now, let's say each glass of water is 1 pint. If each person leaves even 1/4 of the glass untouched, that means  $7,500,000 \times 0.25 = 1,875,000$  pints = 937,500 quarts = 234,375 gallons of water left in glasses everyday! And, even that is an underestimation for just the U.S.!

Moral: Never leave water in glasses, or don't take more than you need to. Even with today's low showerhead water flow rate, if you use a showerhead with 2.5 gallons per minute, then in ten minutes you will use up 25 gallons!

March 22 is "World Water Day", a day to remember how precious freshwater is. For more information about saving water and doing your part go to <a href="https://www.bewaterwise.com">www.bewaterwise.com</a> or <a href="https://www.bewater.org">www.meinersoakswater.org</a>

#### Conclusion

Meiners Oaks Water District would like remind its customers that by using water efficient fixtures in their homes, they can cut back on their water usage considerably. We would also like to remind our customers that there is not an infinite supply of water locally, or in our state, and a few small changes in our life styles could help make a difference for everyone.

The Meiners Oaks Water District Board meets on the third Tuesday of each month at the water district office: 202 W. El Roblar. The meetings begin at 6:00 PM and anyone may attend any of these regular meetings. If you have any questions, please call (805) 646-2114.

Water System Name:  MEINERS OAKS WATER DISTRICT	Report Date:	May 2013	
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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, 2012

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

**Type of water sources(s) in use:** According to CDPH records, the Sources Well 01 and Well 02 are Groundwater under the influence of Surface Water. This Assessment was done using the Default Groundwater System Method. According to CDPH records, the Sources Well 04 and Well 07 are Groundwater. This Assessment was done using the Default Groundwater System Method.

Your water comes from 5 sources: Well 01, Well 02, Well 04, Well 07 and Well 08.

For more information about this report, or for any questions relating to your drinking water, please call (805) 646-2114 and ask for Mike Hollebrands, or visit our website at <a href="https://www.meinersoakswater.org">www.meinersoakswater.org</a>

#### 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.

Public Health Goal (PHG): The level of a

**Primary Drinking Water Standards (PDWS):** MCLs 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, order, 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.

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.

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

**Variances and Exemptions:** Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

ND: not detectable at testing limit

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

**ppb:** parts per billion or micrograms per liter  $(\mu g/L)$ 

**ppt:** parts per trillion or nanograms per liter (ng/L) **ppq:** parts per quadrillion or picograms per liter (pg/L)

**pCi/l:** picocuries per liter (a measure of radioactivity)

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, spring, 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, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- *Inorganic contaminants*, such as salts and metals, which 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, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Radioactive contaminants, which can be naturally occurring or the result of oil production and mining activities.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of
  industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff,
  and septic systems.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the California Department of Health Services (Department) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

Tables 1,2,3,4,5 and 6 list all of the drinking water contaminants that were detected during the most recent sampling for the constituents. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The Department 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 shaded. Additional information regarding the violation is provided later in this report.

TABLE 1 - SAM	TABLE 1 - SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER						
Lead and Copper (complete if lead or copper detected in the last sample set)	No. of Samples Collected	90th Percentile Level	No. Site Exceeding AL	AL	PHG	Typical Sources of Contaminant	
Lead (Pb) (ppb)	25 (2011)	5.90	2	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers, erosion of natural deposits	
Copper (ppm)	20 (2011)	0.357	0	1.3	.17	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	

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

TABLE 2 - SAMPLING RESULTS FOR SODIUM AND HARDNESS						
Chemical or	Sample	Level	Range of	MCL	PHG	
Constituent						
(and reporting units)	Date	Detected	Detections	(MRDL)	(MCLG)	Typical Sources of
						Contaminant
Sodium (ppm)	2010	48	47 - 48	none	none	Salt present in the water and
						is generally naturally
						occurring
Hardness (ppm)	2010	398	396 - 401	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		
Barium (Ba) ppm	2011	0.03	0.03 - 0.04	1	2	Discharge from oil drilling wastes and from metal refineries; erosion of natural deposits		
Chromium (Total Cr) ppb	2011	2	1 - 3	50.0	n/a	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits		
Fluoride (F) ppm	2010	0.5	0.5 - 0.5	2	1	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories.		
Nitrate (NO3) ppm	2012	35.5	2 - 76	45	45	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits		
Nitrate + Nitrite as N ppm	2010	2.05	1.6 - 2.5	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits		
Selenium (Se) ppb	2011	1.0	ND - 3	50	30	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots(feed additive)		
Gross Alpha pCi/L	2012	3.8	4 - 4	15	n/a	Erosion of natural deposits.		

Any violation of MCL,AL or MRDL is shaded. Additional information regarding the violation is provided later in this report. Nitrate samples were taken from well 8. Water from well 8 was not being introduced to the water system during the high Nitrate period.

TABLE 5 - DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD							
Chemical or Constituent	Sample	Level	Range of	MCL	PHG		
(and reporting units)	Date	Detected	Detections	(MRDL)	(MCLG)	Typical Sources of Contaminant	
Chloride ppm	2010	34	33 - 36	500	n/a	Runoff/leaching from natural deposits; seawater influence	
Color (Unfiltered) Units	2010	5	ND - 10	15	n/a	Naturally-occurring organic materials	
Iron (Fe) ppb	2010	130	90 - 200	300	n/a	Leaching from natural deposits; Industrial wastes	
Specific Conductance umhos/cm	2010	920	916 - 925	1600	n/a	Substances that form ions when in water; seawater influence	
Sulfate (SO4) ppm	2010	228	219 - 238	500	n/a	Runoff/leaching from natural deposits; industrial wastes	
TDS ppm	2010	620	610 - 630	1000	n/a	Runoff/leaching from natural deposits	

TABLE 6 - DETECTION OF UNREGULATED CONTAMINANTS							
Chemical or Constituent	Sample	Level	Range of	Notification	Health Effects Language		
(and reporting units)	Date	Detected	Detections	Level			
Boron ppm	2010	0.5	0.5 - 0.5 (2010)	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.		
Vanadium ppm	2011	0.0004	ND - 0.002 (2011)	0.05	The babies of some pregnant women who drink water containing vanadium in excess of the action level may have an increased risk of developmental effects, based on studies in laboratory animals.		

#### **Additional General Information on Drinking Water**

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 USEPA's Safe Drinking Water Hotline (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 provider. 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 (800-426-4791)

For Lead (Pb), 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. *MEINERS OAKS 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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

# Summary Information for Contaminants Exceeding an MCL, MRDL, or AL, or a violation of Any Treatment Technique or Monitoring and Reporting Requirement

**About our Total Coliform Bacteria:** Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems. The addition of chlorine as a disinfectant at the source eliminates the coliform bacteria. There were no coliform bacteria detected at any of our distribution system sample sites.

**About our Fecal Coliform:** Fecal Coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely-compromised immune systems.

For Lead above 15 ppb (regulatory AL) in more than 5%, and up to and including 10%, of sites sampled: Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).

For Nitrate (NO3) results above 23 ppm (50% of the MCL) but below 45 ppm (the MCL): 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.

#### **Drinking Water Source Assessment Information**

#### **Assessment Info**

A source water assessment was conducted for the WELL 01, WELL 02, WELL 04, and WELL 07 of the MEINERS OAKS CWD water system in March, 2001.

Well 01 - is considered most vulnerable to the following activities not associated with any detected contaminants: Agricultural Drainage

Septic systems - low density [<1/acre]

Well 02 - is considered most vulnerable to the following activities not associated with any detected contaminants:

Agricultural Drainage

Septic systems - low density [<1/acre]

Well 04 - is considered most vulnerable to the following activities not associated with any detected contaminants:

Agricultural Drainage

Sewer collection systems

Wells - Agricultural/ Irrigation

Well 07 - is considered most vulnerable to the following activities not associated with any detected contaminants:

Agricultural Drainage

Sewer collection systems

Wells - Agricultural/Irrigation

Well 08 - is considered most vulnerable to the following activities not associated with any detected contaminants:

Agricultural Drainage

Septic systems - low density [<1/acre]

#### **Discussion of Vulnerability**

Assessment summaries are not available for some sources. This is because:

- The Assessment has not been completed. Contact the local Department of Health Services (DHS) Drinking Water field office or the water system to find out when the Assessment is scheduled to be done.
- The source is not active. It may be out of service, or new and not yet in service.
- The Assessment was not submitted electronically. The site used to obtain Assessments only provides access to Assessment summaries submitted electronically.

#### **Acquiring Info**

A copy of the completed assessments may be viewed at: DHS-DWFOB 1180 Eugenia Place, Suite 200 Carpinteria, CA 93013

You may request a summary of an assessment be sent to you by contacting: District Engineer 805-566-1326

For more info you may visit <a href="http://swap.ice.ucdavis.edu/TSinfo/TSintro.asp">http://swap.ice.ucdavis.edu/TSinfo/TSintro.asp</a> or contact the health department in the county to which the water system belongs.