

# 2015 Consumer Confidence Report

Water System Name: MD-1 Hidden Lakes Report Date: July 1, 2016

*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, 2015 and may include earlier monitoring data.*

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

Type of water source(s) in use: Surface water from lake

Name & general location of source(s): Millerton Lake, CA

**Drinking Water Source Assessment information:**

*No contaminants exceeding current MCLs were found, but the assessment did identify; that recreational activities in the lake, septic systems common to the area and extreme weather conditions may affect the pump intake area. These activities can create a potential for outside contamination. A copy of the complete assessment may be viewed at the State’s website, [www.dhs.ca.gov/ps/ddwem/technical/dwp/source\\_info/source\\_index.htm](http://www.dhs.ca.gov/ps/ddwem/technical/dwp/source_info/source_index.htm), or by requesting a summary of the assessment from Environmental Health at (559) 675-7823.*

Time and place of regularly scheduled board meetings for public participation: *Meetings are normally held twice per month on Tuesday at 9:00 a.m. at the Board of Supervisors’ Chambers on 200 W 4<sup>th</sup> Street in Madera. Since the schedule varies call 675-7700 to confirm the meeting date or visit the County website, [www.madera-county.com/supervisors](http://www.madera-county.com/supervisors) to check the schedule and preview the agenda.*

For more information, contact: *Madera County Special Districts* Phone: *(559) 675-7820*

<b>TERMS USED IN THIS REPORT</b>	
<p><b>Maximum Contaminant Level (MCL):</b> 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.</p> <p><b>Maximum Contaminant Level Goal (MCLG):</b> 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).</p> <p><b>Public Health Goal (PHG):</b> 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.</p> <p><b>Maximum Residual Disinfectant Level (MRDL):</b> 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.</p> <p><b>Maximum Residual Disinfectant Level Goal (MRDLG):</b> 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.</p>	<p><b>Primary Drinking Water Standards (PDWS):</b> MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.</p> <p><b>Secondary Drinking Water Standards (SDWS):</b> 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.</p> <p><b>Treatment Technique (TT):</b> A required process intended to reduce the level of a contaminant in drinking water.</p> <p><b>Regulatory Action Level (AL):</b> The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.</p> <p><b>Variations and Exemptions:</b> State Board permission to exceed an MCL or not comply with a treatment technique under certain conditions.</p> <p><b>ND:</b> not detectable at testing limit</p> <p><b>ppm:</b> parts per million or milligrams per liter (mg/L)</p> <p><b>ppb:</b> parts per billion or micrograms per liter (µg/L)</p> <p><b>ppt:</b> parts per trillion or nanograms per liter (ng/L)</p> <p><b>ppq:</b> parts per quadrillion or picogram per liter (pg/L)</p> <p><b>pCi/L:</b> picocuries per liter (a measure of radiation)</p>

**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 of 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 Resources 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.

**The following tables 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.

**TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA**

Microbiological Contaminants (complete if bacteria detected)	Highest No. of Detections	No. of months in violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	(In a mo.) 1	0	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i>	(In the year) 0	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or <i>E. coli</i>	0	Human and animal fecal waste

**TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER**

Lead and Copper (complete if lead or copper detected in the last sample set)	Sample Date	No. of samples collected	90 <sup>th</sup> percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	8/12/14	5	1.6	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	8/12/14	5	.066	0	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

**TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS**

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	12/23/15	5.2	5.2	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	12/23/15	12	12	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

\*Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided later in this report.

**TABLE 4 – 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 Source of Contaminant
Arsenic (ppb)	12/23/15	2.4	2.4	10	.004	Erosion of natural deposits; runoff from orchards; glass and electronics production waste.
Gross Alpha (pCi/L)	2015	1.8	1.8	15	0	Erosion of natural deposits
Total Trihalomethanes (ppb)	2015	62	*31-96	*80	N/A	By-product of drinking water chlorination
Total Haloacetic Acids (ppb)	2015	34.9	7.4-56	*60	N/A	By-product of drinking water disinfection
Total Organic Carbon (ppm)	2015	1.42	1.1-2.6	TT	N/A	Various natural and manmade sources
Total Alkalinity	2015	17.5	15-24	N/A	N/A	
Chlorine	2015	.62	.50-1.25	4.0	N/A	Added for disinfection
Bicarbonate Alkalinity	2015	21.2	15-30	N/A	N/A	
Hexavalent Chromium (ppb)	2014	.2	0.0002	10	0.02	Discharges from electroplating factories, leather tanneries, wood preservation, erosion of natural deposits.
Atrazine (ppb)	2014	.5	.5	1	.15	Runoff from herbicide
Alachlor (ppb)	2014	1.0	1.0	2	4	Runoff from herbicide
Simazine (ppb)	2014	1.0	1.0	4	4	Herbicide from runoff

**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 Source of Contaminant
Iron (ppb)	12/23/15	120	120	300	N/A	Leaching from natural deposits; industrial wastes
Sulfate (ppm)	12/23/15	ND	ND	500	N/A	Runoff/ leaching from natural deposits; industrial waste.
Chloride (ppm)	12/23/15	5	5	500	N/A	Runoff/ leaching from natural deposits; seawater influence

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

VIOLATION OF A MCL, MRDL, AL, TT, OR MONITORING AND REPORTING REQUIREMENT				
Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language
<b>Failure to meet turbidity standards</b>	<b>Turbidities exceeded the .3 NTU standard</b>	<b>3/13/2016-4/20/2016</b>	<b>Various chemical changes and plant operational changes</b>	<b>Turbidity has no health effects. However, high levels of turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.</b>
<b>Failure to monitor for DBP Precursors</b>	<b>TOC samples were not collected the first quarter</b>	<b>1<sup>st</sup> Quarter</b>	<b>Implemented a quarterly monitoring program</b>	<b>Total organic carbon has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of cancer.</b>
<b>Total Coliform Positive</b>		<b>1 Month</b>	<b>Sampling Investigation</b>	<b>Naturally present in the environment</b>

## Summary Information for Violation of MCL and TT Requirements

We are required by drinking water regulations to *monitor* your drinking water for specific contaminants on a regular basis. The results of regular monitoring are indicators of whether or not your drinking water meets all health standards. As shown by the above tables, the Hidden Lake's water system had a violation(s) of Maximum Contaminant Levels (MCL) for Total Haloacetic Acid and Total Trihalomethanes, disinfection byproducts.

The disinfection by products **Total Haloacetic Acids** and **Total Trihalomethanes** are caused by reactions that occur between organic compounds and Chlorine. Some people who drink water containing haloacetic acids and trihalomethanes in excess of the MCL over many years may have an increased risk of getting cancer. To meet the CT requirements for disinfection, chlorination of the raw unfiltered water is required. The chlorination of the raw water increases the amount of byproducts created. Planned system improvements will help remediate this issue.

### Filtered Backwash Recycling Rule (FBRR)

During the year of 2015, Hidden lakes Treatment Facility failed to return recycle flows through the processes of the existing filtration system or to an alternate state-approved location.

Except for the previously stated violations, your drinking water meets or exceeds all other Federal and State requirements.

## For Systems Providing Surface Water as a Source of Drinking Water

<b>TABLE 8 - SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES</b>	
Treatment Technique <sup>(a)</sup> (Type of approved filtration technology used)	Package Conventional Surface Treatment Plant- Rescue Engineers
Turbidity Performance Standards <sup>(b)</sup> (that must be met through the water treatment process)	Turbidity of the filtered water must: 1 – Be less than or equal to <u>.3</u> NTU in 95% of measurements in a month. 2 – Not exceed <u>.3</u> NTU for more than eight consecutive hours. 3 – Not exceed <u>1.0</u> NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	95.6%
Highest single turbidity measurement during the year	.299
Number of violations surface water treatment requirements	0

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

(b) Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

\* Any violation of a TT is marked with an asterisk. Additional information regarding the violation is provided below.

The inability of the treatment plant to produce the quantity and quality of water required by Federal and State regulations has resulted in a Building Moratorium for the community. In 2007, the County applied for funding through the California Department of Public Health Drinking Water Program to upgrade the treatment facilities and resolve these issues. In April 2011, the State approved a total of \$130,000 for planning and design phase of the project if the district increased their monthly rates by \$10 per month to meet the revenue to debt ratio of 1.2 to 1. In September 2011, the community approved the rate increase. In March 2013 CDPH issued a notice of application acceptance for \$130,000 for the planning, design and environmental preparation. The Board of Directors approved the Funding Agreement (FA) on May 14, 2013. The County sent out Request For Qualifications and Proposals to consultants for the project in February 2014. On April 1, 2014, the County evaluated all proposals and ranked AECOM as the consultant for the project. Due to the planning, design and environmental work estimates being more than \$500,000, the State Water Resources Control Board (formally CDPH) and the County have been working together to increase the FA for the Project. On May 12, 2015 the Board of Supervisors approved an amendment to the FA to \$473,000 per the condition that the rate payers approve the rate increase for the loan component of the FA. AECOM was contracted on May 12, 2015 to begin the partial work until the FA is implemented by the rate increase. As this process moves forward communications and meetings with your Home Owners Association and the Community will be held as needed. The County is working with the State to extend the deadline & to amend the FA to the maximum \$500,000 for the planning phase. We are excited that we are now able to move in resolving the water quality issues facing your community.

## Additional General Information on Drinking Water

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 service lines and home plumbing. The MD-1, Hidden Lakes Water System is responsible for providing high quality drinking water, but cannot control the variety of materials used in household 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>.

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 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).

We are required by various State and Federal regulations to monitor your drinking water for specific contaminants on a regular basis. The results of regular monitoring are indicators of whether or not your drinking water meets all health standards. For your convenience, we have summarized the annual findings here in this report. We hope you find this both informative and helpful. Please feel free to contact our office should you have any further questions regarding the quality of your water.

The County of Madera works continuously to provide the best available water to every tap. We ask that you, our customers, help us protect our water sources. Water is the heart of our community, our way of life, and our future.

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### Water Conservation Tips for Consumers

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference – try one today and soon it will become second nature.

- Take short showers – a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath. Use a water-efficient showerhead. They are inexpensive, easy to install, and can save you up to 750 gallons a month.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Fix leaking toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Water plants only when necessary Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. For more information, visit [www.epa.gov/watersense](http://www.epa.gov/watersense).