2022 Consumer Confidence Report

Water System Name: **MD-1 Hidden Lake Estates #2000544** Report Date: 5-2023

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 to December 31, 2022 and may include earlier monitoring data.

Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse [*Madera County MD-1 Hidden Lake Estates*] a [*200 W. 4th St. Madera CA, 93637*] para asistirlo en español.

这份报告含有关于您的饮用水的重要讯息。请用以下地址和电话联系 ***MD-1 Hidden Lake Estates***以获得中文的帮助:***200 West 4th Street Madera CA 93637 559-675-7811***

Ang pag-uulat na ito ay naglalaman ng mahalagang impormasyon tungkol sa inyong inuming tubig. Mangyaring makipag-ugnayan sa [*Madera County MD-1 Hidden Lake Estates 200 W. 4th St. Madera CA, 93637*] o tumawag sa [*559-675-7811*] para matulungan sa wikang Tagalog.

Báo cáo này chứa thông tin quan trọng về nước uống của bạn. Xin vui lòng liên hệ [*Madera County MD-1 Hidden Lake Estates*] tại [*200 W. 4th St. Madera CA, 93637*] để được hỗ trợ giúp bằng tiếng Việt.

Tsab ntawv no muaj cov ntsiab lus tseem ceeb txog koj cov dej haus. Thov hu rau [*Madera County MD-1 Hidden Lake Estates*] ntawm [*200 W. 4th St. Madera CA, 93637*] rau kev pab hauv lus Askiv.

Type of water source(s) in use: Surface Water

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

Drinking Water Source Assessment information:

A source water assessment was completed April 2003 for this drinking water source. The assessment identifies the vulnerability of the drinking water supply to contamination from typical human activities. The assessments are intended to facilitate and provide the basic information necessary for a local community to develop a program to protect the drinking water supply. These assessments are kept on file at Madera County Government Center if you would like to review these documents call Madera County Public Works at 559-675-7811 to make an appointment.

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 4th Street in Madera. Since the schedule varies call 675-7700 to confirm the meeting date or visit the County website, *www.maderacounty.com* to check the schedule and preview the agenda.

For more information, contact: Madera County Public Works Phone: (559) 675-7811

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 (U.S. EPA).

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.

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.

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

Variances and Exemptions: Permissions from the State Water Resources Control Board (State Board) to exceed an MCL or not comply with a treatment technique under certain conditions.

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an *E. coli* MCL violation has occurred and/or why

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 contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

total coliform bacteria have been found in our water system on multiple occasions.

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)
ppt: parts per trillion or nanograms per liter (ng/L)
ppq: parts per quadrillion or picogram per liter (pg/L)
pCi/L: picocuries per liter (a measure of radiation)
RAA: running annual average

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 byproducts 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 U.S. EPA and the State Board 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.

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 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 an AL, MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

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 (state Total Coliform Rule)	0	0	1 positive monthly sample	0	Naturally present in the environment
Fecal Coliform or *E. coli* (state Total Coliform Rule)	0	0	A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or *E. coli* positive		Human and animal fecal waste
E. coli (federal Revised Total Coliform Rule)	0	0	(a)	0	Human and animal fecal waste

(a) Routine and repeat samples are total coliform-positive and either is *E. coli*-positive or system fails to take repeat samples following *E. coli*-positive routine sample or system fails to analyze total coliform-positive repeat sample for *E. coli*.

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**	**90th Percentile Level Detected**	**No. Sites Exceeding AL**	**AL**	**PHG**	**No. of Schools Requesting Lead Sampling**	**Typical Source of Contaminant**
Lead (ppb)	6/2022	5	.00115	0	15	0.2	0	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	6/2022	5	0.220	0	1.3	0.3	Not applicable	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)	1/2022	4.5		None	None	Salt present in the water and is generally naturally occurring
Hardness (ppm)	1/2022	16		None	None	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

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**
Aluminum (mg/L)	1/2022	0.015		1	0.6	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic (µg/L)	1/2022	1.8		10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Chromium [Total] (µg/L)	1/2022	ND		50	(100)	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Nitrate (mg/L)	1/2022	ND		10 (as N)	10 (as N)	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Perchlorate (µg/L)	1/2022	ND		6	4	Perchlorate is an inorganic chemical used in solid rocket propellant, fireworks, explosives, flares, matches, and a variety of industries. It usually gets into drinking water as a result of environmental contamination from historic aerospace or other industrial operations that used or use, store, or dispose of perchlorate and its salts.
Gross Alpha Particle Activity (pCi/L)	1/2021	1.74		15	(0)	Erosion of natural deposits
Chlorine (mg/L)	2022	1.82 Average	.70-2.90	[MRDLG = 4 (as Cl_2)]	[MRDLG = 4 (as Cl_2)]	Drinking water disinfectant added for treatment
TTHMs [Total Trihalomethanes] (µg/L)	2022	***116.8 RAA**	97 - 140	80	N/A	Byproduct of drinking water disinfection
HAA5 [Sum of 5 Haloacetic Acids] (µg/L)	2022	***88.8 RAA**	75 - 100	60	N/A	Byproduct of drinking water disinfection
Endothall (µg/L)	2/2020	20		100	94	Runoff from herbicide use for terrestrial and aquatic weeds; defoliant

TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD						
Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**SMCL**	**PHG (MCLG)**	**Typical Source of Contaminant**
Manganese µg/L	1/2022	9.5		50 µg/L		Leaching from natural deposits

Total Dissolved Solids [TDS] mg/L	1/2022	65		1,000 mg/L		Runoff/leaching from natural deposits
Specific Conductance µS/cm	1/2022	56		1600		Substances that form ions when in water; seawater influence
Odor---Threshold	1/2022	1 Unit		3 Units		Naturally-occurring organic materials

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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the U.S. 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. U.S. EPA/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: 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. Madera County MD-1 Hidden Lake Estates 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 do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants.] 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 (1-800-426-4791) or at http://www.epa.gov/lead.

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**
TTHM and HAA5 MCL Violation	By-product of drinking water disinfection	**1/1/22-12/31/22**	**See Below**	Some people who drink water containing trihalomethanes or haloacetic acids in excess of the MCL over many years may experience liver, kidney, or central nervous system problems, and may have an increased risk of getting cancer.
Control of DBP Precursors (TOC)	Various natural and manmade sources	**1/1/22-12/31/22**	**See Below**	Total organic carbon (TOC) 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.

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 Acids and Total Trihalomethanes, disinfection byproducts.

The disinfection by products **Total Haloacetic Acids** and **Total Trihalomethanes** are caused by reactions that occur between organic compounds **"Total Organic Carbon"** 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 2022, 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.

Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

For Systems Providing Surface Water as a Source of Drinking Water

TABLE 8 - SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES	
Treatment Technique [(a)] (Type of approved filtration technology used)	Package Conventional Surface Treatment Plant- Rescue Engineers
Turbidity Performance Standards [(b)] (that must be met through the water treatment process)	Turbidity of the filtered water must: 1 – Be less than or equal to 0.3 NTU in 95% of measurements in a month. 2 – Not exceed 0.3 NTU for more than eight consecutive hours. 3 – Not exceed 1.0 NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	100%
Highest single turbidity measurement during the year	1.0
Number of violations of any surface water treatment requirements	1

(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.

Summary Information for Violation of a Surface Water TT

VIOLATION OF A SURFACE WATER TT				
TT Violation	**Explanation**	**Duration**	**Actions Taken to Correct the Violation**	**Health Effects Language**
Control of DBP Precursors (TOC)	Various natural and manmade sources	**1/1/22-12/31/22**	Current treatment process in combination with pre chlorination is unable to accomplish the required TOC removal to meet regulation. A new treatment plant is being designed that will meet the regulation.	Total organic carbon (TOC) 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.

Summary Information for Operating Under a Variance or Exemption

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 at MD-1 Hidden Lakes. In 2007, the County applied for funding through the California Department of Public Health (CDPH) 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 and in March 2013, the 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 from various engineering consultants. 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. The County has worked with the State to extend the deadline & to amend the new FA to the maximum $500,000 for the planning phase on January 2017. In June 2017, the County was notified by the State Water Resources Control Board Division of Financial Assistance (DFA) that MD-1 was no longer considered a disadvantaged community and could no longer qualify for future Grant Funding. All future applications for any grant funding will now need to be justified through an Income Survey in order to determine the district's economic status; otherwise, all future funding will now have to be provided through a loan.

Currently, AECOM has been working on the design of a new surface water treatment plant facility with the State, and County. AECOM has produced a Preliminary Engineering Report, and a Supplemental Report which evaluates the condition of the existing water system and provides various alternative solutions for treatment. Base on the reports, it was determined that the Trident® HS system would be the best form of treatment. The Trident® HS would address all of the ongoing water quality and quantity issues, and bring the water system back into compliance with the State. Design of the new system is still ongoing with the existing Funding Agreement set to expire on September 30, 2019. The remainder of the grant funds will only cover partial design of the treatment system. The County will continue with completing as much of the design phase as possible with the remainder of the Grant Funds. The County will work with the State and residents to apply for funding for a construction loan in order to fund the remainder of the design, and

construction of the improvements.

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.