# 2022 Madera Ranchos MD10 Consumer Confidence Report

June 2023

MD10 Madera Ranchos
Water System ID# 2010008

*For more information, contact us with the information below*


200 West 4th Street
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*Madera County Public Works tests the drinking water quality for many constituents as required by state and federal regulations. The information in this report shows the results of our monitoring for the period of January 1 to December 31, 2022 and may include earlier monitoring data.*

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Board meetings are normally held every 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.

**Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse [*Madera County MD-10 Madera Ranchos*] 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 [*Madera County MD-10 Madera Ranchos*]以获得中文的帮助:[ *200 W. 4th St. 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-10 Madera Ranchos 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-10 Madera Ranchos*] 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-10 Madera Ranchos*] ntawm [*200 W. 4th St. Madera, CA 93637*] rau kev pab hauv lus Askiv.**

## 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.

**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.

**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 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)

## Where does your water come from?

Five deep wells drawing water from an underground aquifer. These wells are Charlton, New Fender, Dublin, Kensington and Berkshire.

A source water assessment was recently completed 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.

## Sources of drinking water and contaminants that may be present in source water

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.

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Tables 1, 2, 3, 4, 5, and 6 list all 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 | 0 | 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) | 2022 | 10 | 2 | 0 | 15 | 0.2 | 1 | Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits |
| Copper (ppm) | 2022 | 10 | 0.170 | 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) | 1/2021 | 21.1 | 2.3 -36 | None | None | Salt present in the water and is generally naturally occurring |
| | 1/2021 | 108 | 81 - 130 | 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** |
| Gross Alpha Particle Activity (pCi/L) | 2017-2021 | 3.1 | 1.9 – 4.5 | 15 | o | Erosion of natural deposits |
| Arsenic (µg/L) | 2021 | 4.7 | 3.1 – 6.1 | 10 | 0.004 | Erosion of natural deposits; runoff from orchards; glass and electronics production wastes |
| Barium (mg/L) | 2021 | .21 | .053 - .330 | 1 | 2 | Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits |
| Chromium [Total] (µg/L) | 2021 | 3.3 | 1.5 – 5.9 | 50 | (100) | Discharge from steel and pulp mills and chrome plating; erosion of natural deposits |
| Fluoride (mg/L) | 2021 | 1.42 | .12 - 4 | 2.0 | 1 | Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories |
| Nitrate (mg/L) | 2022 | 2.8 | 1.8 – 3.6 | 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) | 2021 | 2 | <4-2 | 6 | 1 | 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. |

| 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* |
| Chloride mg/L | 2021 | 54.3 | 37 -80 | 500 mg/L | | Runoff/leaching from natural deposits; seawater influence |
| Calcium mg/L | 2021 | 25.67 | 21 - 34 | N/A | | Leaching from natural deposits |
| Odor---Threshold | 2021 | 1 | 1 | 3 Units | | Naturally-occurring organic materials |
| Specific Conductance | 2018-2019 | 403 | 340 - 440 | 1,600 µS/cm | | Substances that form ions when in water; seawater influence |
| Sulfate | 2018-2019 | 6 | 5.6 – 6.9 | 500 mg/L | | Runoff/leaching from natural deposits; industrial wastes |
| Turbidity | 2018-2019 | 0.32 | 0.2 – 0.4 | 5 Units | | Soil runoff |
| Manganese | 2021 | ***955** | 21 - ***1400** | 50 µg/L | | Leaching from natural deposits |

# 2022 Madera Ranchos MD10 Consumer Confidence Report

**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.

Madera County Public Works

200 West 4th Street

Madera, CA 93637

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