2022 Consumer Confidence Report

Water System Name: MERRY MOUNTAIN MUTUAL # CA0400013 Report Date: August 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.

Language in Spanish: Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse MERRY MOUNTAIN MUTUAL a 530-675-3229 para asistirlo en español.

Type of water source(s) in use: Groundwater

Name & general location of source(s): Your water comes from 4 sources: Well #1, Well #2, Well #3, Well #4 Merry Way, Clipper Mills CA 95930

Drinking Water Source Assessment information: Drinking Water Source Assessments for Well #1, Well #2, Well #3 and Well #4 of the Merry Mountain Mutual Water System have not been completed.

Discussion of Vulnerability:
Source assessment summaries are not available for these water sources.

Acquiring Information:
For more information visit https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/DWSAP.html or contact:
Butte County Public Health, Division of Environmental Health
Environmental Health Program Manager
202 Mira Loma Drive, Oroville, CA 95965.
530-552-3880, 530-538-5339 (fax)

Time and place of regularly scheduled board meetings for public participation: Quarterly meetings are held at the Merry Mountain Owners Assoc office. Butte County and https://www.waterboards.ca.gov offer opportunities for public participation.

For more information, contact: Albert Lardizabal, President ph (530) 908-8652 or Phone: HOA (530) 675-3229

TERMS USED IN THIS REPORT

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.

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).

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.

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 (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that 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.

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.

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)

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.

Regulation of Drinking Water and Bottled Water Quality: 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.

About Your Drinking Water Quality - Drinking Water Contaminants Detected: Tables 1, 2, 3, 4, 5, 6, 7, 8 and A 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	Highest Number of Detections	No. of months in violation	MCL	MCLG	Typical Source of Bacteria
E. Coli	(In the year 2022) 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)	(2020)	5	0	0	15	0.2	0	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	(2020)	5	0.8190	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)	(2016 - 2022)	12.3	3.0 – 35	None	None	Salt present in the water and is generally naturally occurring
Hardness (ppm)	(2016 - 2022)	81.4	44.6 – 115	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
Arsenic (µg/L)	(2021-2022)	0.5	ND – 2 (Well #4 2.0)	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Gross Alpha (pCi/L)	(2018- 2022)	0.104	ND – 0.212	15	(0)	Erosion of natural deposits.
Nitrate as N (mg/L)	(2022)	ND	ND - ND	10 (as N)	10 (as N)	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits.

While the Gross Alpha test result was below the detection limit for required reporting, the result was higher than the (MCLG).

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)	(2016- 2022)	1	ND - 1	500	n/a	Runoff/leaching from natural deposits; seawater influence.
Iron (µg/L)	(2016 - 2022)	182	ND, ND, 510, 220 (Well #s 1, 2 ,3, 4)	300	n/a	Leaching from natural deposits; industrial wastes
Specific Conductance (µS/cm)	(2016 - 2022)	183	102 - 263	600	n/a	Substances that form ions when in water; seawater influence.
Sulfate (mg/L)	(2021 -2022)	3	0.9, 1.6, 6.4 (Well #s 2, 3, 4)	500	n/a	Runoff/leaching from natural deposits; industrial wastes.
Total Dissolved Solids (TDS)	(2016 - 2022)	100	50 - 130	1000	n/a	Runoff/leaching from natural deposits.
Turbidity (NTU)	(2016 - 2022)	0.8	.2 - 1.8	5	n/a	Soil runoff.
Zinc (µg/L)	(2019 - 2022)	ND	Well #4 declined from 3070 to ND	5000	n/a	Runoff/leaching from natural deposits.

TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects Language
Hexavalent Chromium (ug/L)	(2014-2020)	0.7	ND, ND, 2.2 (Well #s 1, 2, 4)	0.02 *	Some people who drink water containing Hexavalent Chromium in excess of the MCL over many years may have an increased risk of getting cancer.
Vanadium (ug/L)	(2016 - 2021)	4.5	(3.0 – 7.0)	50	Vanadium exposures resulted in developmental and reproductive effects in rats.

* In 2022 there was no MCL for hexavalent chromium. The previous MCL of 10µg/L was withdrawn on 9/11/17. Hexavalent Chromium is expected to be reinstated with an MCL in the Primary Drinking Water Standard in late 2023 or early 2024.

TABLE 7 – SUMMARY INFORMATION FOR VIOLATION OF A MCL, MRDL, AL, TT OR MONITORING REPORTING REQUIREMENT

About our Iron: Iron was found at a concentration of 510 (µg/L) in Well #3 in 2021, This exceeded the secondary MCL of *300 µg/L*. When the level of Iron in the water from each of the four wells is averaged because they supply the Merry Mountain Mutual water system together, the result is *182 µg/L,* which is under the SMCL. The Iron SMCL was set to protect you against unpleasant aesthetic affects such as color, taste, odor and the staining of plumbing fixtures (e.g., tubs and sinks), and clothing while washing. The high iron levels are due to leaching of natural deposits.

TABLE 8 – SAMPLING RESULTS SHOWING FECAL INDICATOR-POSITIVE GROUNDWATER SOURCE SAMPLES
NONE DETECTED

TABLE A – ADDITIONAL DETECTIONS (This information is not required to be reported.)

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Typical Source of Contaminant
Calcium (mg/L)	(2016 - 2022)	14.5	8.0 – 23.0	n/a	n/a
Magnesium (mg/L)	(2016 - 2022)	11	6.0 – 14.0	n/a	n/a
pH (units)	(2016 - 2019)	6.2	5.3, 7.1 (Well #1, Well #4)	n/a	n/a
Alkalinity (Total) mg/L	(2016 - 2022)	88	40 - 120	n/a	n/a
Aggressiveness Index	(2016 - 2022)	9.7	8.2 – 11.2	n/a	n/a
Langelier Index	(2016 - 2022)	- 2.1	-3.5 to -0.6	n/a	n/a

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. ***MERRY MOUNTAIN MUTUAL*** 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.

Source Water Protection Tips for Consumers

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides – they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use U.S. EPA's Adopt Your Watershed https://nepis.epa.gov/Exe/ZyPDF.cgi/20004I2M.PDF?Dockey=20004I2M.PDF or for Tools and Resources to protect watersheds visit https://www.epa.gov/hwp/tools-and-resources-protect-watersheds .

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 minutes shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair, and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They are inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- 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 it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- 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. Make it a family effort to reduce next month's water bill!
- Visit https://www.epa.gov/watersense for more information.