

## 2022 Consumer Confidence Report

### Water System Information

Water System Name: **Edna Ranch East Mutual Water Company**

Report Date: **June 15, 2023**

Type of Water Source(s) in Use: **Groundwater Wells**

Name and General Location of Source(s): **Wells 1, 3, and 4 are located off of Orcutt Road.**

Drinking Water Source Assessment Information: **N/A**

Time and Place of Regularly Scheduled Board Meetings for Public Participation: **Residents are notified of the date and place of annual meetings by US Mail. Other board meetings are held periodically, and residents are notified by e-mail. Recent meetings have been held virtually, via Zoom. A quarterly report is submitted to residents with billing via US Mail.**

For More Information, Contact: **Andy Mangano, (805) 704-9354**

### About This Report

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.

### Importance of This Report Statement in Five Non-English Languages (Spanish, Mandarin, Tagalog, Vietnamese, and Hmong)

Language in Spanish: Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse Edna Ranch East Mutual Water Company a PO Box 441, Arroyo Grande, CA, 93421, (805) 704-9354 para asistirlo en español.

Language in Mandarin: 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 Edna Ranch East Mutual Water Company 以获得中文的帮助: PO Box 441, Arroyo Grande, CA, 93421, (805) 704-9354.

Language in Tagalog: Ang pag-uulat na ito ay naglalaman ng mahalagang impormasyon tungkol sa inyong inuming tubig. Mangyaring makipag-ugnayan sa Edna Ranch East Mutual Water Company a PO Box 441, Arroyo Grande, CA, 93421 o tumawag sa (805) 704-9354 para matulungan sa wikang Tagalog.

Language in Vietnamese: Báo cáo này chứa thông tin quan trọng về nước uống của bạn. Xin vui lòng liên hệ Edna Ranch East Mutual Water Company tại PO Box 441, Arroyo Grande, CA, 93421, (805) 704-9354 để được hỗ trợ giúp bằng tiếng Việt.

Language in Hmong: Tsab ntawv no muaj cov ntsiab lus tseem ceeb txog koj cov dej haus. Thov hu rau Edna Ranch East Mutual Water Company ntawm PO Box 441, Arroyo Grande, CA, 93421, (805) 704-9354 rau kev pab hauv lus Askiv.

## Terms Used in This Report

Term	Definition
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 <i>E. coli</i> 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, and 8 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 No. of Detections	No. of Months in Violation	MCL	MCLG	Typical Source of Bacteria
<i>E. coli</i>	(In the year) 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**

<b>Lead and Copper</b>	<b>Sample Date</b>	<b>No. of Samples Collected</b>	<b>90<sup>th</sup> Percentile Level Detected</b>	<b>No. Sites Exceeding AL</b>	<b>AL</b>	<b>PHG</b>	<b>No. of Schools Requesting Lead Sampling</b>	<b>Typical Source of Contaminant</b>
Lead (ppb)	8/31/2022 9/12/2022	5	6.85	0	15	0.2	N/A	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	8/31/2022 9/12/2022	5	0.375	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**

<b>Chemical or Constituent (and reporting units)</b>	<b>Sample Date</b>	<b>Level Detected</b>	<b>Range of Detections</b>	<b>MCL</b>	<b>PHG (MCLG)</b>	<b>Typical Source of Contaminant</b>
Sodium (ppm)	1/20/2021 6/30/2021 8/16/2022	45.7	39 – 50	None	None	Salt present in the water and is generally naturally occurring
Hardness (ppm)	1/20/2021 6/30/2021 8/16/2022	363.3	350 – 370	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**

<b>Chemical or Constituent (and reporting units)</b>	<b>Sample Date</b>	<b>Level Detected</b>	<b>Range of Detections</b>	<b>MCL [MRDL]</b>	<b>PHG (MCLG) [MRDLG]</b>	<b>Typical Source of Contaminant</b>
Aluminum (ppb)	1/20/2021 6/30/2021 8/16/2022	33.3	ND – 100	1	0.6	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic (ppb) – distribution	2022 (various)	6.06	3.6 – 8.8	10	0.004	<b>Erosion of natural deposits; runoff from orchards; glass and electronics production wastes</b>
<b>Arsenic (ppb)* – raw wells</b>	<b>2022 (various)</b>	<b>14.48</b>	<b>3.0 – 50.0</b>			
Barium (ppm)	1/20/2021 6/30/2021 8/16/2022	0.15	0.12 – 0.18	1	2	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
<b>Chlorine Residual (ppm)*</b>	<b>2022 (various)</b>	<b>1.15</b>	<b>0.14 – 2.13</b>	<b>[4.0 (as Cl<sub>2</sub>)]</b>	<b>[4 (as Cl<sub>2</sub>)]</b>	<b>Drinking water disinfectant added for treatment</b>
Chromium (ppb)	1/20/2021 6/30/2021 8/16/2022	2.6	ND – 7.8	50	(100)	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Copper (ppm)	1/20/2021 6/30/2021 8/16/2022	0.0014	ND – 0.0043	AL = 1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride (ppm)	1/20/2021 6/30/2021 8/16/2022	0.31	0.23 – 0.41	2.0	1	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories

**Table 4. Detection of Contaminants with a Primary Drinking Water Standard, Continued**

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Gross Alpha (pCi/L)	2/12/20 6/1/20 2021 (various)	4.01	0.431 – 8.3	15	(0)	Erosion of natural deposits
Nickel (ppb)	1/20/2021 6/30/2021 8/16/2022	0.73	ND – 2.2	100	12	Erosion of natural deposits; discharge from metal factories
Nitrate (ppm) – distribution	1/11/2022 8/16/2022	0.58	0.35 – 0.80	10 (as N)	10 (as N)	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Nitrate (ppm) – raw wells	1/11/2022 8/16/2022	0.77	ND – 1.9			
Radium 226 (pCi/L)	2021 (various)	0.291	0.156 – 0.442	5	0.05	Erosion of natural deposits
Radium 228 (pCi/L)	2/12/20 6/1/20 2021 (various)	0.191	0 – 0.927	5	0.019	Erosion of natural deposits
Selenium (ppb)	1/20/2021 6/30/2021 8/16/2022	1.07	ND – 3.2	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)
Total Organic Carbon (ppm)	9/15/21	0.91	N/A	TT	N/A	Various natural and manmade sources
Uranium (pCi/L)	6/1/20 2021 (various)	1.86	ND – 6.9	20	0.43	Erosion of natural deposits

**Table 5. Detection of Contaminants with a Secondary Drinking Water Standard**

<b>Chemical or Constituent (and reporting units)</b>	<b>Sample Date</b>	<b>Level Detected</b>	<b>Range of Detections</b>	<b>SMCL</b>	<b>PHG (MCLG)</b>	<b>Typical Source of Contaminant</b>
Chloride (ppm)	1/20/2021 6/30/2021 8/16/2022	62.7	47 – 77	500	N/A	Runoff/leaching from natural deposits; seawater influence
Color (CU)	1/20/2021 6/30/2021 8/16/2022	1.7	ND – 5.0	15	N/A	Naturally-occurring organic materials
Copper (ppm)	1/20/2021 6/30/2021 8/16/2022	0.0014	ND – 0.0043	1	N/A	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Iron (ppb)	1/20/2021 6/30/2021 8/16/2022	60	ND – 180	300	N/A	Leaching from natural deposits; industrial wastes
<b>Manganese (ppb)*</b>	<b>1/20/2021 6/30/2021 8/16/2022</b>	<b>76</b>	<b>14 – 190</b>	<b>50</b>	<b>N/A</b>	<b>Leaching from natural deposits</b>
Odor (units)	1/20/2021 6/30/2021 8/16/2022	0.3	ND – 1.0	3	N/A	Naturally-occurring organic materials
Specific Conductance (µS/cm)	1/20/2021 6/30/2021 8/16/2022	860	820 – 890	1,600	N/A	Substances that form ions when in water; seawater influence
Sulfate (ppm)	1/20/2021 6/30/2021 8/16/2022	61.3	59 – 64	500	N/A	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids – TDS (ppm)	1/20/2021 6/30/2021 8/16/2022	516.7	510 – 530	1,000	N/A	Runoff/leaching from natural deposits
Turbidity (NTU)	1/20/2021 6/30/2021 8/16/2022	0.87	0.27 – 1.70	5	N/A	Soil runoff
Zinc (ppm)	1/20/2021 6/30/2021 8/16/2022	75.3	12 – 140	5	N/A	Runoff/leaching from natural deposits; industrial wastes

**Table 6. Detection of Unregulated Contaminants**

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects
Vanadium (ppb)	9/15/21	12	N/A	50	Vanadium exposures resulted in developmental and reproductive effects in rats.

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

### 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).

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. Edna Ranch East Mutual Water Company 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>.

While your treated drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. The U.S. Environmental Protection Agency continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Manganese was found at levels that exceeded the secondary MCL (Maximum Contaminant Level) standards. The secondary MCLs were set to protect you against unpleasant aesthetic effects (e.g., color, taste, and odor) and the staining of plumbing fixtures (e.g., tubs and sinks) and clothing while washing. The high levels are most likely due to the leaching of natural deposits. The notification level for manganese is used to protect consumers from neurological effects. High levels of manganese in people have been shown to result in adverse effects to the nervous system. (The notification level for manganese is 500 ppb.)

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

Table 7. Violation of a MCL, MRDL, AL, TT or Monitoring Reporting Requirement

Violation	Explanation	Duration	Actions Taken to Correct Violation	Health Effects Language
Raw Well Arsenic MCL Exceedance at Well #4	Due to aquifer conditions beyond the water system's control, groundwater arsenic results from one of the three wells are over the MCL. The use of the well that is over the MCL is minimized.	Ongoing	Edna Ranch East MWC blends water from the three wells to treat for arsenic within the distribution system. The system conducts monthly monitoring of arsenic levels in compliance with the requirements of the San Luis Obispo County Public Health Department permit for the water system.  Distribution arsenic levels have been below the MCL since February 2021.	Some people who drink water containing arsenic in excess of the MCL over many years may experience skin damage or circulatory system problems, and may have an increased risk of getting cancer.  Distribution arsenic levels have been below the MCL since February 2021.
Distribution Chlorine Residual below required minimum of 0.20 mg/L	The discharge line on the chemical pump had become detached and resulted in less chlorine being injected into the system.	Resolved upon discovery.	The discharge line was reattached and the system distribution chlorine residual was returned to normal levels. Distribution bacteriological samples were collected and results were non-detect for all coliform bacteria.	Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.