# Meadowridge Mutual Water Company

Consumer Confidence Report For 2021

April 25, 2022



# 2021 Water Quality Report

For

### Meadowridge Mutual Water Company Water System #4400665

Meadowridge Mutual Water Company is proud to present our annual water quality report covering all testing information performed. Starting in January of 2019, Weber-Hayes and Associates (WHA) was brought on as the system operator and will be handling all water system sampling and reporting. As such, this report has been updated and submitted by WHA on the behalf of the Meadowridge Mutual Water Company. All records are updated and maintained by WHA.

We want you to understand the efforts we make to provide you safe and reliable drinking water. We continually monitor water from the system and all bacterial, mineral, and chemicals tests completed met EPA and State drinking water standards, except for iron and coliform bacteria:

- In February 2020, Well #2 groundwater had 0.41mg/L of iron, which slightly exceeds the MCL of 0.3 mg/L. Iron is a secondary contaminant, meaning that the MCL refers to the effects on taste, odor, or appearance of the drinking water, not the health of consumers. High levels of Iron may cause rust color staining on tubs, sinks and clothing.
- Coliform bacteria was detected in November and December 2021, indicating that it was time to perform a periodic flushing of the water lines. The coliform bacteria was most likely present on minor sediment in the water lines, prior to being flushed out. Once this flush was completed, the coliform bacteria was not detected and has not been detected since. Coliform bacteria is naturally present in the environment and is not considered a health hazard.

This "Consumer Confidence Report" includes a full list of those constituents, when they were last sampled, and whether they fulfilled the requirements of the Safe Drinking Water Act.

### Water System Details

The water system has fifteen service connections and serves approximately thirty-eight full time residents. Our water system is supplied by two untreated groundwater wells (Wells 1 & 2). Well-1 is a redundant well used in conjunction with Well-2 as a secondary supply. Well-2 is the primary source of our water supply. This water is stored in two, 40,000-gallon steel tanks. The height of the storage tanks provides gravity pressure throughout the water system.

In 2021, our water system used 4,565,460 gallons of water, of which 96% came from Well-2 and 4% came from Well-1. Our water system used 18% less water in 2021, as compared to 2020.

Santa Cruz County near Corralitos is in severe drought status (based on limited precipitation during the past several rainy seasons). The Meadowridge Mutual Water Company requests that all residents continue to reduce water consumption wherever possible. Drip irrigation systems, soaker hoses, and rain sensing shut offs are all great ways to reduce water waste when watering outdoors. The key to proper irrigation is to not allow water to run-off landscaping or flow to the gutters. Avoid irrigating between 11 a.m. and 7 p.m. and irrigate conservatively to help preserve our precious resource.

Annual meetings are held the last Tuesday in April at a residence within the subdivision.

### Source of Drinking Water Contamination

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 naturallyoccurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming

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- **Pesticides and herbicides** that may come from a variety of sources such as agriculture, urban storm water 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 storm water 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 Department of Health Services (DHS) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Please note that 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.

Some people may be more vulnerable to contaminants in drinking water than the general population. Individuals with health issues such as a person with cancer undergoing chemotherapy, a person who has 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) or online at www.epa.gov/safewater.

The attached tables summarize the two source wells and distribution system analytical data results.

### 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) or Public Health Goal (PHG)**: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the USEPA. PHGs are set by the California 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, reporting 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. **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**: Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

**ND**: not detectable at testing limit



#### Table 1: Summary of Source Well-1 (-001) Analytical Results

Meadowridge Mutual Water System I.D. No. #4400665 (-001)

#### WELL #1 (-001) [backup, lower, older well]

Analyte	Date last Sampled	Results (ppm; mg/L) (unless otherwise noted)	MCL (ppm; mg/L)
PRIMARY INORGANICS			
Aluminum (Al)	5/8/19	ND	0.2 2   1
Antimony (Sb)	5/8/19	ND	0.006
Arsenic (As)	5/8/19	ND	0.01
Barium (Ba)	5/8/19	ND	1
Beryllium (Be)	5/8/19	ND	0.004
Boron (B)	5/8/19	0.110	*CA-AL: 1
Cadmium (Cd)	5/8/19	ND	0.005
Chromium (Cr)	5/8/19	0.006	0.05
Copper (Cu)	5/8/19	ND	*AL: 1.3   1.0 <sup>2</sup>
Cyanide (CN)	5/8/19	ND	0.15
Fluoride (F)	6/10/19	0.16	2.0
Lead (Pb)	5/8/19	ND	*AL: 0.015
Mercury (Hg)	5/8/19	ND	0.002
Nickel (Ni)	5/8/19	ND	0.1
Nitrate (as N)	7/28/21	1.3	10
Nitrate (as N)	6/10/19	1.1	10
Nitrite (as N)	5/8/19	ND	1
Nitrate-N + Nitrite-N	5/8/19	1.2	10
Selenium (Se)	5/8/19	ND	0.05
Silver (Ag)	5/8/19	ND	0.1 <sup>2</sup>
Thallium (Tl)	5/8/19	ND	0.002
SENERAL MINERAL			
pH value (pH units)	6/10/19	8.2	6.5 - 8.5 <sup>2a</sup>
Specific Conductivity (μS/cm)	6/10/19	560	1,600 <sup>2</sup>
Bicarbonate Alkalinity (as HCO3)	6/10/19	280	
Carbonate Alkalinity (as CO3)	6/10/19	ND	
Calcium (Ca)	6/10/19	64	
Chloride (Cl)	6/10/19	19	500 <sup>2</sup>
MBAS (Surfactants)	5/8/19	ND	0.5 <sup>2</sup>
Magnesium (Mg)	6/10/19	22	
Manganese (Mn)	6/10/19	ND	0.05 <sup>2</sup>
Potassium (K)	6/10/19	2.2	
Sodium (Na)	6/10/19	27	
Sulfate (SO <sub>4</sub> )	6/10/19	55	500 <sup>2</sup>
Iron (Fe), total	6/10/19	ND	0.3 <sup>2</sup>
Total Hardness (as CaCO <sub>3</sub> )	6/10/19	250	
Total Alkalinity (as CaCO <sub>3</sub> )	6/10/19	230	
Total Dissolved Solids	6/10/19	350	1,000 <sup>2</sup>
Zinc (Zn)	6/10/19	0.34	5 <sup>2</sup>



#### Table 1: Summary of Source Well-1 (-001) Analytical Results

Meadowridge Mutual Water System I.D. No. #4400665 (-001)

#### WELL #1 (-001) [backup, lower, older well]

Analyte	Date last Sampled	Results (ppm; mg/L) (unless otherwise noted)	MCL (ppm; mg/L)
GENERAL PHYSICAL			
Color (Co/Pt) (Units)	6/10/19	ND	15 <sup>2</sup>
Odor T.O.N. (Threshold Number)	6/10/19	ND	3 <sup>2</sup>
Turbidity (NTU)	6/10/19	0.3	5 <sup>2</sup>
OTHER			
Hexavalent Chromium (Cr <sup>+6</sup> )	12/1/14	ND	0.01 <sup>a</sup>
Perchlorate	6/10/19	ND	0.006
Synthetic Organic Compounds (SOC)	4/13/15	ND	varies
Volatile Organic Compounds (VOC)	2/18/20	ND	varies
1,2,3 Trichloropropane (TCP)	5/8/19	ND	0.00005
Gross Alpha	6/10/19	1.14	15 pCi/L

#### All Data & MCLs QC'd on 4/25/22 by: S. Mixan (WHA)

#### **NOTES:**

Not all analytes are sampled every year. Most recent data is shown.

ppm = parts per million; which is equivalent to milligrams per liter (mg/L)

MCL = Maximum Contaminant Level. Primarily based on US Environmental Protection Agency (EPA) & California drinking water regulations

ND = Not Detected at or above the laboratory's Reporting Limit

2 = Secondary MCLs are set to protect the odor, taste, and appearance of drinking water and DO NOT affect health at that level

2a = EPA secondary drinking water standard

a = MCL is no longer in effect

\*California (CA-NL) and/or EPA Action Levels (AL) are shown for analytes which do not have an MCL

1,2,3-TCP = 1,2,3-Trichloropropane

pCi/L = picocuries per liter

NTU = Nephelometric Turbidity Units



# Table 2: Summary of Source Well-2 (-002) Analytical Results Meadowridge Mutual Water System I.D. No. #4400665

#### WELL #2 (-002) [primary, upper, newer well]

Analyte	Date Sampled	Results (ppm; mg/L) (unless otherwise noted)	MCL (ppm; mg/L)
RIMARY INORGANICS			
Aluminum (Al)	2/11/20	ND	0.2 2   1
Antimony (Sb)	2/11/20	ND	0.006
Arsenic (As)	2/11/20	ND	0.01
Barium (Ba)	2/11/20	ND	1
Beryllium (Be)	2/11/20	ND	0.004
Boron (B)	2/11/20	ND	*CA-AL: 1
Cadmium (Cd)	2/11/20	ND	0.005
Chromium (Cr)	2/11/20	0.0021	0.05
Copper (Cu)	6/10/19	ND	*AL: 1.3   1.0 <sup>2</sup>
Cyanide (CN)	2/11/20	ND	0.15
Fluoride (F)	6/10/19	0.16	2.0
Lead (Pb)	2/11/20	ND	*AL: 0.015
Mercury (Hg)	2/11/20	ND	0.002
Nickel (Ni)	2/11/20	ND	0.1
	2/28/22	1.8	10
Nitrate (as N)	2/26/21	1.9	10
	2/11/20	1.8	10
Nitrite (as N)	2/11/20	ND	1
Nitrate-N + Nitrite-N	2/11/20	1.8	10
NO <sub>3</sub>	2/28/22	8.2	45
Selenium (Se)	2/11/20	ND	0.05
Silver (Ag)	2/11/20	ND	0.1 2
Thallium (Tl)	2/11/20	ND	0.002
ENERAL MINERAL			
pH value	2/11/20	7.8	6.5 - 8.5 <sup>2a</sup>
Specific Conductivity	2/11/20	410	1,600 μS/cm <sup>2</sup>
Bicarbonate Alkalinity (as HCO3)	2/11/20	210	
Carbonate Alkalinity (as CO3)	2/11/20	ND	
Calcium (Ca)	2/11/20	41	
Chloride (Cl)	2/11/20	13	500 <sup>2</sup>
MBAS (Surfactants)	2/13/14	ND	0.5 <sup>2</sup>
Magnesium (Mg)	2/11/20	18	
Manganese (Mn)	2/11/20	0.04	0.05 <sup>2</sup>
Potassium (K)	2/11/20	2.1	
Sodium (Na)	2/11/20	20	
Sulfate (SO <sub>4</sub> )	2/11/20	27	500 <sup>2</sup>
Iron (Fe), total	2/11/20	0.41 **	0.3 <sup>2</sup>
Total Hardness (as CaCO <sub>3</sub> )	2/11/20	180	
Total Alkalinity (as CaCO <sub>3</sub> )	2/11/20	180	
Total Dissolved Solids	2/11/20	250	1,000 <sup>2</sup>
Zinc (Zn)	2/11/20	0.082	5 <sup>2</sup>



## Table 2: Summary of Source Well-2 (-002) Analytical Results Meadowridge Mutual Water System I.D. No. #4400665

#### WELL #2 (-002) [primary, upper, newer well]

Analyte	Date Sampled	Results (ppm; mg/L) (unless otherwise noted)	MCL (ppm; mg/L)
GENERAL PHYSICAL			
Color (Co/Pt) (Units)	2/11/20	ND	15 <sup>2</sup>
Odor T.O.N. (Threshold Number)	2/11/20	ND	3 <sup>2</sup>
Turbidity (NTU)	2/11/20	3.5	5 <sup>2</sup>
OTHER			
Hexavalent Chromium (Cr <sup>+6</sup> )	12/1/14	ND	0.01 <sup>a</sup>
Perchlorate	3/4/20	ND	0.006
Synthetic Organic Compounds (SOC)	4/13/15	ND	varies
Volatile Organic Compounds (VOC)	2/18/20	ND	varies
1,2,3 Trichloropropane (TCP)	5/8/19	ND	0.000005
Gross Alpha	3/4/20	1.20	15 pCi/L

#### Data QC performed on 4/25/22 by: S. Mixan (WHA)

#### **NOTES:**

Not all analytes are sampled every year. Most recent data is shown.

ppm = parts per million; which is equivalent to milligrams per liter (mg/L)

MCL = Maximum Contaminant Level. Primarily based on US Environmental Protection Agency (EPA) & California drinking water regulations

ND = Not Detected at or above the laboratory's Reporting Limit

2 = Secondary MCLs are set to protect the odor, taste, and appearance of drinking water and DO NOT affect health at that level

2a = EPA secondary drinking water standard

a = MCL is no longer in effect

\*California (CA-NL) and/or EPA Action Levels (AL) are shown for analytes which do not have an MCL

\*\* Indicates a secondary MCL exceedance. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water and DO NOT affect health at that level.

1,2,3-TCP = 1,2,3-Trichloropropane

pCi/L = picocuries per liter

NTU = Nephelometric Turbidity Units



### Table 3: Summary of Distribution System Analytical Results Meadowridge Mutual Water System, Water System I.D. No. 440665

Analyte	Date Sampled	RESULT (ppm; mg/L)	MCL (ppm; mg/L)
Bacteria			
Coliform	Jan - Oct 2021	Absent	
Coliform	Nov - Dec 2021	Present (issue addressed)	
Coliform	Jan 3, 2022	Absent (issue resolved)	
E Coli	Jan - Dec 2021	Absent	
Disinfection By-Products			
Total Trihalomethanes			0.80
Total HAA			0.60
Lead & Copper			
Lead	7/15/19	ND	AL: 0.015
Copper	7/15/19	ND to 0.33	AL: 1.3   1.0 <sup>2</sup>

#### All Data & MCLs QC'd on 4/25/22 by: S. Mixan (WHA)

#### **NOTES:**

ppm = parts per million; which is equivalent to milligrams per liter (mg/L)

MCL = Maximum Contaminant Level. Primarily based on US Environmental Protection Agency (EPA) & California drinking water regulations

ND = Not Detected at or above the laboratory's Reporting Limit

2 = Secondary MCLs are set to protect the odor, taste, and appearance of drinking water and DO NOT affect health at that level

 $AL = California \, (CA-NL) \, and/or \, EPA \, Action \, Levels \, (AL) \, are \, shown \, for \, analytes \, which \, do \, not \, have \, an \, MCL$