Meadowridge Mutual Water Company

Consumer Confidence Report For 2022

April 20, 2023

2022 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 behalf of the Meadowridge Mutual Water Company (MMWC). 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:

- In February 2020, Well #2 groundwater had 0.41milligrams per Liter (mg/L) of iron, which slightly exceeds the Maximum Contaminant Level (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. To our knowledge, these slightly elevated iron levels have not been a nuisance at MMWC – nor are they considered a health concern.

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 2022, our water system used 4,947,729 gallons of water, of which 97% came from Well-2 and 3% came from Well-1. Our water system used 8% more water in 2022, as compared to 2021. See the attached water usage table for details.

Santa Cruz County near Corralitos is in drought status (based on generally 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 naturally-occurring or result from urban storm water 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 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 United States Environmental Protection Agency (US-EPA) and the California State Water Board (Division of Drinking Water) 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. US-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) or online at www.epa.gov/safewater.

The attached tables summarize the two source wells and distribution system analytical data results. A water usage table is also attached.

Terms Used in this Report (or other relevant water system terms)

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)
SDWIS - INORGANICS			
Aluminum (Al)	5/8/19	ND	0.2 [2] | 1
Antimony (Sb)	5/8/19	ND	0.006
Arsenic (As)	5/11/22	0.008	0.01
	5/8/19	ND	
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
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
Selenium (Se)	5/8/19	ND	0.05
Thallium (Tl)	5/8/19	ND	0.002
SDWIS - SECONDARY / GP			
Bicarbonate Alkalinity (as HCO3)	6/10/19	280	--
Carbonate Alkalinity (as CO3)	6/10/19	ND	--
Total Alkalinity (as $CaCO_3$)	6/10/19	230	--
Calcium (Ca)	6/10/19	64	--
Chloride (Cl)	6/10/19	19	500 [2]
Color (Co/Pt) (Units)	6/10/19	ND	15 [2]
Copper (Cu)	5/8/19	ND	*AL: 1.3 | 1.0 [2]
Foaming Agents MBAS (Surfactants)	5/8/19	ND	0.5 [2]
Hardness, Total (as $CaCO_3$)	6/10/19	250	--
Hydroxide as Calcium Carbonate	---	---	---
Iron (Fe), total	6/10/19	ND	0.3 [2]
Magnesium (Mg)	6/10/19	22	--
Manganese (Mn)	6/10/19	ND	0.05 [2]
Odor T.O.N. (Threshold Number)	6/10/19	ND	3 [2]
pH value (pH units)	6/10/19	8.2	6.5 - 8.5 [2a]
Potassium (K)	6/10/19	2.2	--
Silver (Ag)	5/8/19	ND	0.1 [2]
Sodium (Na)	6/10/19	27	--
Specific Conductivity (µS/cm)	6/10/19	560	1,600 [2]
Sulfate (SO_4)	6/10/19	55	500 [2]
Total Dissolved Solids	6/10/19	350	1,000 [2]
Turbidity (NTU)	6/10/19	0.3	5 [2]
Zinc (Zn)	6/10/19	0.34	5 [2]

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)
SDWIS - NITRATES			
Nitrate (as N)	5/11/22	1.2	10
	7/28/21	1.3	
	6/10/19	1.1	
Nitrite (as N)	5/11/22	ND	1
	5/8/19	ND	
Nitrate-N + Nitrite-N	5/11/22	1.2	10
	5/8/19	1.2	
OTHER			
Hexavalent Chromium (Cr^{+6})	12/1/14	ND	0.01 [a]
Perchlorate	6/16/22	ND	0.006
	6/10/19		
Synthetic Organic Compounds (SOC)	4/13/15	ND	varies
Volatile Organic Compounds (VOC)	2/18/20	ND	varies
1,2,3 Trichloropropane (TCP)	5/11/22	ND	0.000005
Gross Alpha	6/16/22	1.72	15 pCi/L
	6/10/19	1.14	

All Data & MCLs QC'd on 4/19/23 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

Boron (B) = this analyte is not required per the SDWIS website

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)
SDWIS - 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
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
Selenium (Se)	2/11/20	ND	0.05
Thallium (Tl)	2/11/20	ND	0.002
SDWIS - SECONDARY / GP			
Bicarbonate Alkalinity (as HCO3)	2/11/20	210	--
Carbonate Alkalinity (as CO3)	2/11/20	ND	--
Total Alkalinity (as $CaCO_3$)	2/11/20	180	--
Calcium (Ca)	2/11/20	41	--
Chloride (Cl)	2/11/20	13	500 [2]
Color (Co/Pt) (Units)	2/11/20	ND	15 [2]
Copper (Cu)	6/10/19	ND	*AL: 1.3 | 1.0 [2]
Foaming Agents MBAS (Surfactants)	9/26/22	ND	0.5 [2]
Hardness, Total (as $CaCO_3$)	2/11/20	180	--
Iron (Fe), total	2/11/20	0.41 **	0.3 [2]
Magnesium (Mg)	2/11/20	18	--
Manganese (Mn)	2/11/20	0.04	0.05 [2]
Odor T.O.N. (Threshold Number)	2/11/20	ND	3 [2]
pH value	2/11/20	7.8	6.5 - 8.5 [2a]
Potassium (K)	2/11/20	2.1	--
Silver (Ag)	2/11/20	ND	0.1 [2]
Sodium (Na)	2/11/20	20	--
Specific Conductivity	2/11/20	410	1,600 µS/cm [2]
Sulfate (SO_4)	2/11/20	27	500 [2]
Total Dissolved Solids	2/11/20	250	1,000 [2]
Turbidity (NTU)	2/11/20	3.5	5 [2]
Zinc (Zn)	2/11/20	0.082	5 [2]

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)
SDWIS - NITRATES			
Nitrate (as N)	2/25/22	1.8	10
Nitrite (as N)	2/11/20	ND	1
Nitrate-N + Nitrite-N	2/11/20	1.8	10
OTHER			
Hexavalent Chromium (Cr^{+6})	12/1/14	ND	0.01 [a]
Perchlorate	3/4/20	ND	0.006
Synthetic Organic Compounds (SOC)	8/31/22	ND	varies
Volatile Organic Compounds (VOC)	2/18/20	ND	varies
1,2,3 Trichloropropane (TCP)	5/11/22	ND	0.000005
Gross Alpha	3/4/20	1.20	15 pCi/L

Data QC performed on 4/19/23 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

Boron (B) = this analyte is not required per the SDWIS website

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 - Dec 2022	Absent	If present
E Coli	Jan - Dec 2022	Absent	If present
Disinfection By-Products			
Total Trihalomethanes	No need to test for these analytes because the water is not chlorinated		0.80
Total HAA			0.60
Lead & Copper			
Lead	9/27/22	ND	AL: 0.015
Copper	9/27/22	ND to 0.27	AL: 1.3 | 1.0 [2]

All Data & MCLs QC'd on 4/19/23 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

Meadowridge 2022 - Water Usage

							Well #1 + #2
Well	#2	Jan	2022		180,267	GAL	192,001
Well	#2	Feb	2022		269,952	GAL	282,871
Well	#2	Mar	2022		314,673	GAL	330,906
Well	#2	Apr	2022		331,740	GAL	346,965
Well	#2	May	2022		540,057	GAL	558,647
Well	#2	Jun	2022		601,706	GAL	623,265
Well	#2	Jul	2022		579,005	GAL	597,637
Well	#2	Aug	2022		625,922	GAL	645,223
Well	#2	Sep	2022		525,505	GAL	540,295
Well	#2	Oct	2022		405,299	GAL	405,299
Well	#2	Nov	2022		224,927	GAL	224,927
Well	#2	Dec	2022		199,693	GAL	199,693
				Total	4,798,746		4,947,729

Well	#1	Jan	2022	11,734	GAL	
Well	#1	Feb	2022	12,919	GAL	
Well	#1	Mar	2022	16,233	GAL	
Well	#1	Apr	2022	15,225	GAL	
Well	#1	May	2022	18,590	GAL	
Well	#1	Jun	2022	21,559	GAL	
Well	#1	Jul	2022	18,632	GAL	
Well	#1	Aug	2022	19,301	GAL	
Well	#1	Sep	2022	14,790	GAL	
Well	#1	Oct	2022	0	GAL	
Well	#1	Nov	2022	0	GAL	
Well	#1	Dec	2022	0	GAL	
			Total	148,983		

2022 TOTAL: Well 1 + Well 2	4,947,729
Well 1	96.99%
Well 2	3.01%