

# 2017 Consumer Confidence Report

Water System Name: Howell Mountain Mutual Water Co. Report Date: 6/20/2018

*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 - December 31, 2017.*

**Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.**

Type of water source(s) in use: Surface Water / Groundwater

Name & location of source(s): The water sources for HMMWC are the Friesen Lakes, 8 small lakes located approximately one mile north of the city of Angwin. All water used during the year was drawn from Lake Henne, Deer Lake, Newton Lake, Orville Lake and well #1, well #2.

Drinking Water Source Assessment information: The Watershed Sanitary Survey from 2014 provides information to protect the integrity of our drinking water supplies, and is available for review by calling the HMMWC office at 707-965-2205.

Time and place of regularly scheduled board meetings for public participation: Public meeting information is provided on company website and board meetings (open to the public) are tentatively scheduled for Tuesday, once a month, every month.

For more information, contact: Karl Fernandez, General Manager Phone: (707) 965-2205

## Terms used in this report and Health information

**DLRs:** Detection levels for purpose of reporting.

**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 (USEPA).

**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.

**ND:** not detectable at testing limit.

**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.

**Variations and Exemptions:** Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

**ppm:** parts per million or milligrams per liter (mg/L).

**ppb:** parts per billion or micrograms per liter (ug/L).

**pCi/L:** picocuries per liter (a measure of radiation)

The sources of drinking water include lakes, streams, ponds, reservoirs 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, which 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*, which 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 Water Recourses Control Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. SWRCB regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Tables 1, 2, 3, 4, and 5 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 Department 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.

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
Total Coliform Bacteria <i>After Treatment</i>	In a month 0	0	A positive result for coliform bacteria would trigger a "boil your water notice".	0	Naturally present in the environment.
Fecal Coliform or <i>E. coli</i> <i>After Treatment</i>	In a year 0	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or <i>E. coli</i>	0	Human and animal fecal waste.

TABLE 2 - SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER						
Lead and Copper	No. of samples collected	90 <sup>th</sup> percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb) <i>After Treatment</i> 9/06/2017	10	2.8 ppb	none	15. ppb	.2 ppb	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.
Copper (ppm) <i>After Treatment</i> 9/06/2017	10	250. ppb	none	1300. ppb	300. ppb	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	Analyses Results		MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm) Lakes Intake Well #1 Well #2	5/09/2017 4/12/2017 10/21/2015	4.1 9.7 10.	none	none	none	Salt present in the water and is generally naturally occurring.
Hardness (ppm) Lakes Inlet Well #1 Well #2	5/09/2017 1/20/2014 10/21/2014	14. 26. 42.	none	none	none	Hardness in drinking water is defined as those minerals that dissolve in water. Hardness is normally considered an aesthetic water quality factor.

*\*The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.*

**TABLE 4 - DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD**

Chemical or Constituent (and reporting units)	Sample Date	Average	Analyses Results	MCL [MRDL]	DLR	Typical Source of Contaminant
Aluminum (ppb) Lakes Intake Well #1 Well #2	5/09/2017 4/12/2017 10/21/2015	N/A	76. ND ND	1000.	50	Erosion of natural deposits; residue from some surface water treatment processes.
Arsenic (ppb) Lakes Intake Well #1 Well #2	05/09/2017 4/12/2017 10/21/2015		ND 4.0 2.9	10.	2.0	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes.
Fluoride (ppm) Lakes Intake Well #1 Well #2	5/09/2017 4/12/2017 10/21/2015		ND ND ND	2.	.1	Erosion of natural deposits.
Nitrate (ppm) Lakes Intake Well #1 Well #2	5/09/2017 4/12/2017 11/28/2017	.40	ND ND .40	45. mg/l	2.0	Runoff and leaching from fertilizer use; erosion of natural deposits.
Total Organic Carbon (ppm) Control of DBP precursors <i>after treatment</i>	Monthly	2.3	48.8% annual average removal	TT	N/A	Various natural and man-made sources.
TTHM (ppb) Trihalomethanes (TTHM) <i>after treatment</i>	Quarterly	50.25 ppb	High Quarter Sept. 77.00 - Low Quarter March 32.00	80.	N/A	By-product in drinking water when chlorine is used for disinfection.
HAA5 (ppb) Haloacetic Acids (HAA5) <i>after treatment</i>	Quarterly	35.75 ppb	High Quarter Sept. 56.00 Low Quarter Mar. 31.00	60.	N/A	By-product in drinking water when chlorine is used for disinfection.

Chromium 6 (ppb)	5/09/2017		ND	10.	1. ppb	Hexavalent Chromium (chromium 6) is also among the most frequently detected contaminants, and may be naturally occurring.
Lakes Intake	4/12/2017		ND			
Well #1	10/21/2017		ND			
Well #2						

**TABLE 5 - DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD**

Chemical or Constituent (and reporting units)	Sample Date	Average	Analyses Results	MCL	DLR	Typical Source of Contaminant
Iron ppb-prior to treatment						Leaching from natural deposits; industrial wastes.
Lakes Intake	5/09/2017		100.	300.	100.	
Well #1	4/12/2017		100.			
Well #2	10/21/2015		ND			
Manganese-prior to treatment						Manganese is a mineral that naturally occurs in rocks and soil and may also be present due to underground pollution sources.
Lakes Intake	5/09/2017	ND	ND	50.	20.	
Well #1	4/12/2017		ND			
Well #2	10/21/2015					
ph (prior to treatment)						The pH value is a good indicator of whether water is hard or soft.
Lakes Intake	5/09/2017		7.6			
Well #1	4/12/2017		6.0			
Well #2	10/21/2015		6.7			
Total Alkalinity (ppm)	Taken once a month.	20.	20.	N/A		The alkalinity of water may be defined as its capacity to neutralize acid.
Turbidity (NTU) <i>After Treatment</i>	Continuous monitoring at Treatment Plant	.042	High .285 Low .021	<.3, at 95% of monthly samples.	N/A	Soil runoff. Turbidity is a measure of the cloudiness of the water; it is a good indicator of the effectiveness of our filtration system.
Zinc ppb - Prior to treatment						Runoff/leaching from natural deposits; industrial wastes.
Lakes Intake	5/09/2017		ND	5000.	50.	
Well #1	4/12/2017		ND			
Well #2	10/21/2015		170.			

**TABLE 6 - DETECTION OF UNREGULATED CONTAMINANTS**

Chemical or Constituent (and reporting units)	Sample Date	Average or analyses result	Range of Detections	Notification Level	Health Effects Language
Sulfate (ppm)					Runoff/ leaching from natural deposits.
Lakes Intake	5/09/2017	.79		500.	
Well #1	4/12/2017	9.4			
Well #2	10/21/2015	2.9			
Calcium (ppm)					Runoff/ leaching from natural deposits.
Lakes Intake	5/09/2017	3.5		N/A	
Well #1	4/12/2017	6.4			
Well #2	10/21/2015	7.7			

Magnesium (ppm)	5/09/2017	1.3			
Lakes Intake	4/12/2017	3.3		N/A	Runoff/ leaching from natural deposits.
Well #1	10/21/2015	5.6			
Well #2					
TDS - total dissolved solids	5/09/2017	68.		MCL 1000.	Total dissolved solids (TDS) is the term used to describe the inorganic salts and small amounts of organic matter present in solution in water.
Lakes Intake	4/12/2017	150.			
Well #1	10/21/2015	170.			
Well #2					

\*Any violation of an MCL, MRDL, or TT is asterisked and bold. 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 USEPA’s Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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. 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).

*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. Howell Mountain Mutual Water Co. 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 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 or at <http://www.epa.gov/safewater/lead>.*

#### Summary Information for Contaminants Exceeding an MCL, MRDL, or AL or Violation of Any TT or Monitoring and Reporting Requirement

Any samples that are not listed in this report, please contact office for details.

### For Systems Providing Surface Water as a Source of Drinking Water

TABLE 7 - SAMPLING RESULTS SHOWING WATER QUALITY AFTER TREATMENT OF SURFACE WATER SOURCES	
Treatment Technique <sup>(a)</sup> (Type of approved filtration technology used)	Conventional multi –media filtration.
Turbidity Performance Standards <sup>(b)</sup> (that must be met through the water treatment process)	Turbidity of the filtered water must: 1 – Be less than or equal to 0.3 NTU in 95% of measurements in a month. 2 – Not exceed 1.0 NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	100%
Highest single turbidity measurement during the year	.285
Number of violations of any surface water treatment requirements	0

(a) A required process intended to reduce the level of a contaminant in drinking water.

(b) Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.