2016 Consumer Confidence Report

Water System Name: **Mi Wuk Village Mutual Water Company** Report Date: April 2017

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 ending December 31, 2016.

Este informe contiene información muy importante sobre su agua potable.

Tradúzcalo ó hable con alguien que lo entienda bien.

[This report contains important information about your drinking water.
Translate it, or speak with someone who understands it.]

Type, name & general location of water source(s) in use: Our water source is ground water from three hard rock wells located on the west side of Mi Wuk Village (typically used in fall, winter and spring) or surface water from the Main Tuolumne Ditch (off South Fork Road in Twain Harte) that we purchase from Tuolumne Utilities District (typically used in summer).

Drinking Water Source Assessment information: Source water assessments for all sources were completed in May of 2003. A complete copy may be viewed at the Mi Wuk Village Mutual Water Company office or you may request a summary from the chief operator. All the Wells are considered most vulnerable to golf courses, high density housing, high density septic systems, transportation corridors (freeways/State highways), water supply wells, historic gas stations, automobile body shops, and machine shops not associated with any detected contaminants. Well 3 is additionally considered most vulnerable to machine shops and drinking water treatment plants associated with contaminants detected in the raw well water. The Main Tuolumne Ditch is considered most vulnerable to historic waste dumps/ landfills and electrical/electronic manufacturing associated with contaminants detected in the raw water, and managed forests and historic gas stations not associated with any detected contaminants. **Although these activities exist in areas near one or more of Mi Wuk Village Mutual Water Company's sources, physical barriers, treatment systems and monitoring programs are in place to ensure that water supplied to our customers is not adversely affected.**

Time and place of regularly scheduled board meetings for public participation: The fourth Friday of each month at 9:30 a.m. in our office.

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): 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.

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.

ND: not detectable at testing limit

NS: There is no MCL standard set for this constituent.

n/a: not applicable.

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)

CU (Color Units): a measure of the color intensity of the water.

TON (Threshold Odor Number): a measure of the threshold at which an odor can be detected.

NTU (Nephelometric Turbidity Unit): a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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 by-products 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.

In order to ensure that tap water is safe to drink, the USEPA and the State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

The following Tables 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.

SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

Lead and Copper	Sample Date	No. of samples collected	90th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	2014	10	8	0	15	0.2	Internal corrosion of household water plumbing systems; erosion of natural deposits
Copper (ppm)	2014	10	.025	0	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

SAMPLING RESULTS FOR SODIUM AND HARDNESS						
Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected at Ditch**	**Level and Range of Detections at Wells**	**MCL**	**PHG (MCLG)**	**Typical Source of Contaminant**
Sodium (ppm)	Ditch: 2016 Wells: 2014	1.3	7.0 (5.7-7.7)	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	Ditch: 2016 Wells: 2014	54.6	48.6 (48.0-49.9)	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD						
Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected at Ditch**	**Level and Range of Detections at Wells**	**MCL [MRDL]**	**PHG (MCLG) [MRDLG]**	**Typical Source of Contaminant**
Aluminum (ppm)	Ditch: 2016 Wells: 2014	0.14	ND	1	0.6	Erosion of natural deposits
Nitrate (ppm)	Ditch: 2016 Wells: 2016	ND	1.7 (1.0-2.7)	10 (as N)	10 (as N)	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
TTHMs [Total Trihalomethanes] (ppb)	Distribution System: 2016	Running Annual Average and Range 28.2 (4.7-86.0)		80 (Running Annual Average)	n/a	By-product of drinking water chlorination
HAA5s [Haloacetic Acids] (ppb)	Distribution System: 2016	Running Annual Average and Range 24.1 (0.0-87.0)		60 (Running Annual Average)	n/a	By-product of drinking water chlorination
Chlorine (ppm) [40 samples]	Distribution System: 2016	Average and Range 0.80 (0.20-1.21)		[4.0 (as Cl2)]	[4 (as Cl2)]	Drinking water disinfectant added for treatment

DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD						
Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected at Ditch**	**Level and Range of Detections at Wells**	**MCL**	**PHG (MCLG)**	**Typical Source of Contaminant**
Color (CU)	Ditch: 2016 Wells: 2014	10	< 3	15	n/a	Naturally-occurring organic materials
Iron (ppb)	Ditch: 2016 Wells: 2014	**480***	ND	300	n/a	Leaching from natural deposits
Manganese (ppb)	Ditch: 2016 Wells: 2014	**78.0***	ND	50	n/a	Leaching from natural deposits
Turbidity (NTU)	Ditch: 2016 Wells: 2014	3.6	< 0.05-0.09	5	n/a	Soil runoff
Total Dissolved Solids (ppm)	Ditch: 2016 Wells: 2014	84	85 (81-88)	1000	n/a	Runoff/leaching from natural deposits
Specific Conductance (µmho/cm)	Ditch: 2016 Wells: 2014	27	101 (96-105)	1600	n/a	Substances that form ions when in water
Chloride (ppm)	Ditch: 2016 Wells: 2014	2.9	2.7 (2.4-3.1)	500	n/a	Runoff/leaching from natural deposits
Sulfate (ppm)	Ditch: 2016 Wells: 2014	0.8	< 2.0	500	n/a	Runoff/leaching from natural deposits

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. 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. 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).

Lead-Specific Language for Community Water Systems: 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. Mi Wuk Village 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. [Optional: 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 (1-800-426-4701) or at http://www.epa.gov/lead.

Summary Information for Violation of a MCL

Iron and Manganese MCL Violations in the raw ditch water: *Iron was found at levels that exceed the secondary MCL of 300 µg/L. Manganese was found at levels that exceed the secondary MCL of 50 µg/L. The iron and manganese 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 iron and manganese levels are due to leaching of natural deposits.*

For Systems Providing Surface Water as a Source of Drinking Water

SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES	
Treatment Technique [a] (Type of approved filtration technology used)	Conventional Filtration and Disinfection
Turbidity Performance Standards [b] (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 for more than eight consecutive hours. 3 – Not exceed 5.0 NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	100.0 %
Highest single turbidity measurement during the year (3120 measurements taken)	0.17
Number of violations of any surface water treatment requirements	None

(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.

Please share the information in this report with all the other people who drink this water, especially those who may not have received this report directly (for example, people in apartments and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

If you have any questions, please contact Mike Magill at (209) 586-3304, or stop by our office at 24377 Lama Road to talk to him.