2022 Consumer Confidence Report

Water System Information

Water System Name: **Mi Wuk Village Mutual Water Company**

Report Date: June 2023

Type of Water Source(s) in Use: Our Sources are Ground Water from three Hard Rock Wells in use during the Fall, Winter, and Spring, and one Surface Water Source From the Main Tuolumne Canal which Originates at Lyons Reservoir, in use during the Summer.

Name and General Location of Source(s): Wells #1,2,&3 are Located In the West Side of Mi Wuk Village, And The Main Tuolumne Ditch Intake is Located off South Fork Road in Twain Harte we purchase raw water at this site from Tuolumne Utilities' District.

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. at the Mi Wuk Library

For More Information, Contact: Mi Wuk Village Mutual Water Company **Phone:** (209)586-3304

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 **Mi Wuk Village Mutual Water Company** a **PO. Box 61 Mi Wuk Village Ca. 95346** or **(209) 586-3304** 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**Mi Wuk Village Mutual Water Company**以获得中文的帮助: **PO. Box 61 Mi Wuk Village Ca. 95346 (209) 586-3304**.

Language in Tagalog: Ang pag-uulat na ito ay naglalaman ng mahalagang impormasyon tungkol sa inyong inuming tubig. Mangyaring makipag-ugnayan sa **Mi Wuk Village Mutual Water Company** and Address] o tumawag sa **(209) 586-3304** 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 **Mi Wuk Village Mutual Water Company** tại **PO. Box 61 Mi Wuk Village Ca. 95346** or **(209) 586-3304** 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 Mi Wuk Village Mutual Water Company ntawm PO. Box 61 Mi Wuk Village Ca. 95346 or (209) 586-3304 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 *E. coli* 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.

Term	Definition
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, and 4, 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 Lead and Copper

Complete if lead or copper is detected in the last sample set.

Lead and Copper	Sample Date	No. of Samples Collected	90th Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	No. of Schools Requesting Lead Sampling	Typical Source of Contaminant
Lead (ppb)	2020	10	.0057	1	15	0.2	Not applicable	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	2020	10	0.170	0	1.3	0.3	Not applicable	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Table 2. Sampling Results for Sodium and Hardness

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	Ditch:2021 Wells:2020	1.6 7.07	1.6 5.4-8.6	None	None	Salt present in the water and is generally naturally occurring
Hardness (ppm)	Ditch:2021 Wells:2020	10.0 33.0	11.0 27-38	None	None	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

Table 3. Detection of Contaminants with a Primary Drinking Water Standard

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Aluminum (ppm)	Ditch:2021 Wells:2020	.1 ND	.1 ND	.1 .1	0.6 0.6	Erosion of natural Deposits
Nitrate (ppm)	Ditch:2021* Wells:2022	ND 1.4	ND 1.2-1.6	10 (as N) 10 (as N)	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: 2022	Running Annual Average and Range 28.8(3.6-91.0)		80 (Running Annual Average	n/a	By-product of drinking water chlorination
HAA5s [Haloacetic Acids] (ppb)	Distribution System: 2022	Running Annual Average and Range 27.0 (ND-100.0)		60 (Running Annual Average)	n/a	By-product of drinking water chlorination
Chlorine (ppm) [40 samples]	Distribution System: 2022	Running Annual Average and Range 1.10 (0.40-1.50)		[4 (as Cl2)]	4 (as Cl2)]	Drinking water disinfectant added for treatment

Table 4. Detection of Contaminants with a Secondary Drinking Water Standard

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	SMCL	PHG (MCLG)	Typical Source of Contaminant
Color (CU)	Ditch:2021 Wells:2020	20.0 <5.0	20.0 <5.0	15	n/a	Naturally-occurring organic materials
Iron (ppb)	Ditch:2021 Wells:2020	430 50.0	430 ND-150	300	n/a	Leaching from natural Deposits
Manganese (ppb)	Ditch:2021 Wells:2020	54.0 ND	54.0 ND	50	n/a	Leaching from natural Deposits
Turbidity (NTU)	Ditch:2021 Wells:2020	1.4 0..22	1.4 0.11-0.30	5	n/a	Soil runoff
Total Dissolved Solids (ppm)	Ditch:2021 Wells:2020	22 89	22 76.0-99.0	1000	n/a	Runoff/leaching from natural deposits
Specific Conductance (µmho/cm)	Ditch:2021 Wells:2020	28 99.7	28 79-120	1600	n/a	Substances that form ions when in water
Chloride (ppm)	Ditch:2021 Wells:2020	ND 3.03	ND 3.03	500	n/a	Runoff/leaching from natural deposits
Sulfate (ppm)	Ditch:2021 Wells:2020	ND 0.48	ND ND-0.83	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 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).

Nitrate in drinking water at levels above 10 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 10 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

Table 5. Violation of a Monitoring Reporting Requirement

The table below lists the contaminant we did not properly test for during the last year, how many samples we are required to take and how often, how many samples we took, when samples should have been taken, and the date on which follow-up samples were (or will be) taken

Violation	Contaminant to be tested for	Test Frequency	Number of samples taken for this source In the required timeline	When Sample Should Have Been Taken	When sample was taken
MONITORING REQUIREMENTS NOT MET	Nitrate	Annually	0	2022	2023

Actions Taken to Correct Violation

We Collected the missing sample in March 2023, the result was a non-Detect And checked with neighboring companies who also monitor downstream on the same source (Tuolumne Main Canal) and their results for the period in Question were non detect.

Explanation

Our water system failed to monitor as required for drinking water standards during the past year and, therefore, was in violation of the regulations. Even though this failure was not an emergency, as our customers, you have a right to know what you should do, what happened, and what we did to correct this situation. We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During 2022, we failed to monitor one source for nitrate(s) and therefore, cannot be sure of the quality of our drinking water during that time.

What should I do?

There is nothing you need to do at this time.

Health Effects Language

High levels of nitrate in drinking water are associated with adverse health effects. Domestic well users are encouraged to test their well water regularly for nitrate. Infants under six months of age have a greater risk of nitrate poisoning, called methemoglobinemia ("blue baby" syndrome). Toxic effects occur when bacteria in the infant's stomach convert nitrate to more toxic nitrite. When nitrite enters the bloodstream, it interferes with the body's ability to carry oxygen to body tissues. Symptoms include shortness of breath and blueness of the skin around the eyes and mouth. Infants with these symptoms need immediate medical care since the condition can lead to coma and eventually death. During pregnancy, it is common for methemoglobin levels of the pregnant woman to increase from normal (where 0.5 to 2.5% of the total hemoglobin is in the form of methemoglobin) to a maximum of 10% in the 30th week of pregnancy. The level of methemoglobin declines to a normal level after delivery. Pregnant women are susceptible to methemoglobinemia and should be sure that the nitrate concentrations in their drinking water are at safe levels. Some scientific studies suggested a linkage between high nitrate levels in drinking water with birth defects and certain types of cancer. However, long-term scientific studies are needed to determine a direct relationship. According to the EPA, long-term exposure to water with high nitrate levels may cause diuresis, increased starchy deposits, and hemorrhaging of the spleen. People with heart or lung diseases are more susceptible to the toxic effects of nitrate than others because of reduced levels of gastric acidity.

Contact Information

For more information Please Contact Mi Wuk Village Mutual Water Co

Phone (209)586-3304 or email office@miwukwater.com

Table 6. 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	0..35
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.