Water System Name: Upper Lake County Water District Report Date: June 17, 2021

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, 2020 and may include earlier monitoring data.

Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse Upper Lake County Water District a 9471 Main St Upper Lake, CA 95485 707-275-3232 para asistirlo en español.

Type of water source in use: Groundwater

Name and general location: Wells 1 & 2 are both located on Mendenhall Ave., Upper Lake

Drinking Water Source Assessment information: <u>Completed December 2002</u>. The sources are both considered to be the most vulnerable to <u>agricultural</u> activities in the area.

Time and place of regularly scheduled board meeting for public participation: 2^{nd} Tuesday of each month in the district office located at 9471 Main St., Upper Lake.

TERMS USED IN THIS REPORT

Maximum Contaminant Level (MCL): The highest level of a Secondary Drinking Water Standards (SDWS): MCLs for contaminants contaminant that is allowed in drinking water. Primary MCLs are set that affect taste, odor, or appearance of the drinking water. Contaminants as close to the PHGs (or MCLGs) as is economically and with SDWSs do not affect the health at the MCL levels technologically feasible. Secondary MCLs are set to protect the Treatment Technique (TT): A required process intended to reduce the odor, taste, and appearance of drinking water. level of a contaminant in drinking water.

Maximum Contaminant Level Goal (MCLG): The level of a Regulatory Action Level (AL): The concentration of a contaminant which, contaminant in drinking water below which there is no known or if exceeded, triggers treatment or other requirements that a water system expected risk to health. MCLGs are set by the U.S. Environmental must follow.

Protection Agency (U.S. EPA). **Variances and Exemptions**: Permissions from the State Water Resources **Public Health Goal (PHG)**: The level of a contaminant in drinking Control Board (State Board) to exceed an MCL or not comply with a water below which there is no known or expected risk to health treatment technique under certain conditions.

PHGs are set by the California Environmental Protection Agency. Level 1 Assessment: A Level 1 assessment is a study of the water system Maximum Residual Disinfectant Level (MRDL): The highest to identify potential problems and determine (if possible) why total coliform level of a disinfectant allowed in drinking water. There is convincing bacteria have been found in our water system.

evidence that addition of a disinfectant is necessary for control of **Level 2 Assessment**: A Level 2 assessment is a very detailed study of the microbial contaminants. water system to identify potential problems and determine (if possible) why **Maximum Residual Disinfectant Level Goal** (**MRDLG**): The an *E. coli* MCL violation has occurred and/or why total coliform bacteria level of a drinking water disinfectant below which there is no known have been found in our water system on multiple occasions. or expected risk to health. MRDLGs do not reflect the benefits of **ND**: not detectable at testing limit the use of disinfectants to control microbial contaminants. **ppm**: parts per million or milligrams per liter (mg/L) **Primary Drinking Water Standards (PDWS)**: MCLs and MRDLs **ppb**: parts per billion or micrograms per liter (μ g/L) for contaminants that affect health along with their monitoring and **ppt**: parts per trillion or nanograms per liter (μ g/L) reporting requirements, and water treatment requirements. **ppq**: parts per quadrillion or picogram per liter (μ g/L) **pCi/L**: picocuries per liter (a measure of radiation)

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 byproducts 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 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.

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 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 COLIFORM BACTERIA								
Microbiological Contaminants (complete if bacteria detected)	Highest No. of Detections	No. of Months in Violation	MCL		Typical Source of Bacteria			
Total Coliform Bacteria (state Total Coliform Rule)	0	0	1 positive monthly sample	0	Naturally present in the environment			
Fecal Coliform or <i>E. coli</i> (state Total Coliform Rule)	(In the year)	0	A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or <i>E. coli</i> positive		Human and animal fecal waste			
E. coli (federal Revised Total Coliform Rule)	(In the year) 0	0		0	Human and animal fecal waste			

⁽a) Routine and repeat samples are total coliform-positive and either is *E. coli*-positive or system fails to take repeat samples following *E. coli*-positive routine sample or system fails to analyze total coliform-positive repeat sample for *E. coli*.

TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER								
Lead and Copper (complete if lead or copper detected in the last sample set)	Sample Date	No. of Samples Collected	90 th Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	No. of Schools Requesting Lead Sampling	Typical Source of Contaminant
Lead (ppb)	10/09/19	10	0	0	15	0.2	1	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	10/09/19	10	0.21	0	1.3	0.3	N/A	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	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant		
Sodium (ppm)	12/16/2020	7.0-8.0 mg/L	N/A	0	0	Salt present in the water and is generally naturally occurring		
Hardness (ppm)	12/16/2020	101-112	N/A	0	0	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring		

TABLE 4 – DETECTION OF CONTAMINANTS WITH A <u>PRIMARY</u> DRINKING WATER STANDARD								
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	DLR	Units	MCL	MCLG	Typical Source of Contaminant	
Chlorine Residual	2 monthly	0.4	0.4-0.6	mg/L	4.0	4.0	Drinking water disinfection	
Nitrate (AS N)	09/02/2020	0	0.40	mg/L	10	10	Run off and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits	
Nitrite	09/02/2020	0	0.4	Mg/L	1	1	Run off and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits	
Barium	09/02/2020	130	100	ug/L	1000	100	Naturally occurring in the environment	
Gross Alpha	08/30/2017	0.021- 0.500	3.0	PCi/L	15	15	Decay of natural and man-made deposits	

TABLE 5 – DETECTION OF CONTAMINANTS WITH A <u>SECONDARY</u> DRINKING WATER STANDARD								
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant		
Bicarbonate Alkalinity	12/16/2020	140-150	130-140	NA	NA	Dissolved minerals		
Calcium	12/16/2020	21-23	NA	NA	NA	Naturally occurring in the environment		
Chloride	12/16/2020	3.1-3.6		500	NA	Erosion of natural deposits		
Magnesium	12/16/2020	1	NA	50	NA	Naturally occurring in the environment		
PH Laboratory	12/16/2020	7.05	NA	0	0			
Specific Conductance	12/16/2020	230-240	NA	1600	NA	Substances that form ions when in water		
Sulfate	12/16/2020	7.8	NA	500	NA	Run off /leaching from natural deposits; industrial wastes		
Total Dissolved Solids	12/16/2020	130	110-120	1000	NA	Erosion of 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).

Lead-Specific Language: 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. Upper Lake County Water District 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 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 (1-800-426-4791) or at http://www.epa.gov/lead.