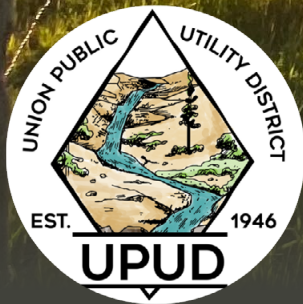


ANNUAL WATER QUALITY REPORT

Reporting Year 2022



Presented By
Union Public Utility District

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

PWS ID#: CA0510001



UPUD's Mission Continues

We are pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2022. We are always dedicated to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best-quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

Monitoring

Monitoring of the water is conducted 365 days a year by skilled, certified water treatment plant operators. Samples collected from supply sources, treatment facilities, and distribution systems throughout our service area are analyzed using state-of-the-art laboratory equipment. Analysis other than for treatment is done by Alpha Analytical Laboratories Inc. in Elk Grove. Samples are collected on a monitoring schedule approved by the U.S. EPA and State Board.



Source Water Assessment

Through source water assessments, no contaminants have been detected in the water supply. However, UPUD staff monitor potential vulnerabilities to sources of contaminants for our system, which includes wastewater treatment plants, historic mining operations, sewer collection systems, NPDES/WDR permitted discharges, grazing (>5 large animals or equivalent per acre), low-density septic systems (<1/acre), agricultural drainage, and recent burn areas (<10 years).

A copy of the complete assessment is available at the State Board Drinking Water Field Operations Branch, Stockton District Office, 31 East Channel Street, Room 270, Stockton, CA 95202, or UPUD's headquarters. You may request a summary of the assessment by contacting UPUD or calling the State Board district office at (209) 948-7696.

“Thousands have lived without love, not one without water.”
—W.H. Auden

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium*

and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or <http://water.epa.gov/drink/hotline>.



Lead in Home Plumbing

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. We are responsible for providing high-quality drinking water, but we 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 two 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 at (800) 426-4791 or at www.epa.gov/safewater/lead.

QUESTIONS? We want our valued customers to be informed about their water quality. For more information or questions about this report or concerning your water quality, please contact the Union Public Utility District (UPUD) office at customerservice@upudwater.org or (209) 728-3651, or visit our website at www.upudwater.com.

Substances That Could Be in 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.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (U.S. EPA) and the State Water Resources Control Board (State Water Board) prescribe regulations that limit the number 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. Drinking water, including bottled water, may be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk.

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 can 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, which are by-products of industrial processes and petroleum production and which can also come from gas stations, urban stormwater runoff, agricultural applications, and septic systems;

Radioactive Contaminants that can be naturally occurring or can be the result of oil and gas production and mining activities.

More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Water Treatment

It is the goal of UPUD to provide the highest-quality water to all customers within the district's service area. Raw water is treated for the removal of harmful microorganisms through coagulation, filtration, and disinfection. The finished water's pH is adjusted for corrosion control, and chlorine is utilized for disinfection. No fluoridation is used.

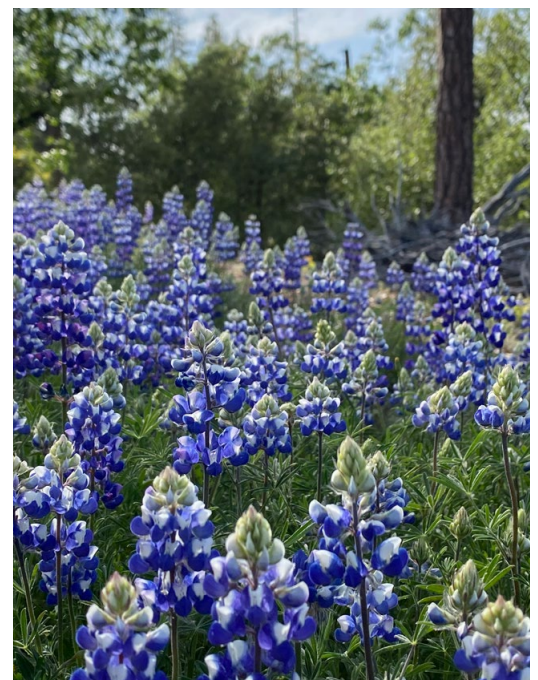
Where Does My Water Come From?

The Highway 4 community is incredibly lucky to receive water directly from the watershed that we live in. Our water starts its journey in the high Sierra Nevada as rain and snow. Water flows down the North Fork of the Stanislaus River and makes its way through Hunters Reservoir in Avery. From there, our water flows through Utica Water and Power Authority's ditch system, which diverts to UPUD's Cademartori Reservoir and water treatment facilities.



Community Participation

We'd like to invite you to get involved with our water district. Our board of directors meets on the third Wednesday of each month at 5:30 p.m. at the district office, located at 339 Main Street in Murphys. As Californians are asked to make water conservation a way of life, we want to thank our customers for their continued efforts to protect our most valuable natural resource. For conservation tips and helpful sources on water efficiency guidelines and more information about UPUD and your water, please visit www.upudwater.com, email customerservice@upudwater.com, or call (209) 728-3651.



Test Results

UPUD routinely monitors for contaminants in your drinking water according to federal and state regulations. Our water is monitored for many different kinds of substances on a very strict sampling schedule. The water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water. (A complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink. Our goal is to keep all detects below their respective maximum allowed levels.

The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

Unregulated Contaminant Monitoring

UPUD participated in the fourth stage of the U.S. EPA's Unregulated Contaminant Monitoring Rule (UCMR4) program by performing additional tests on our drinking water. UCMR4 sampling benefits the environment and public health by providing the U.S. EPA with data on the occurrence of contaminants suspected to be in drinking water, in order to determine if U.S. EPA needs to introduce new regulatory standards to improve drinking water quality. Unregulated contaminant monitoring data are available to the public, so please feel free to contact us if you are interested in obtaining that information. If you would like more information on the U.S. EPA's Unregulated Contaminant Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chlorine (ppm)	2022	[4.0 (as Cl ₂)]	[4 (as Cl ₂)]	0.11	0.02–0.48	No	Drinking water disinfectant added for treatment
HAA5 [sum of 5 haloacetic acids]–Stage 2 (ppb)	2022	60	NA	30.90	11.40–39.90	No	By-product of drinking water disinfection
TTHMs [total trihalomethanes]–Stage 2 (ppb)	2022	80	NA	41.48	33.31–50.24	No	By-product of drinking water disinfection

Tap water samples were collected for lead and copper analyses from sample sites throughout the community¹

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	PHG (MCLG)	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2020	1.3	0.3	0.06	0/20	No	Internal corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	2020	15	0.2	0.007	0/20	No	Internal corrosion of household water plumbing systems; Discharges from industrial manufacturers; Erosion of natural deposits

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloride (ppm)	2022	500	NS	1.1	NA	No	Runoff/leaching from natural deposits; Seawater influence
Color (units)	2022	15	NS	15	NA	No	Naturally occurring organic materials
Iron (ppb)	2022	300	NS	<100	NA	No	Leaching from natural deposits; Industrial wastes
Odor, Threshold (TON)	2022	3	NS	<1.0	NA	No	Naturally occurring organic materials
Specific Conductance (µmho/cm)	2022	1,600	NS	33	NA	No	Substances that form ions when in water; Seawater influence
Sulfate (ppm)	2022	500	NS	0.83	NA	No	Runoff/leaching from natural deposits; Industrial wastes
Total Dissolved Solids (ppm)	2022	1,000	NS	32	NA	No	Runoff/leaching from natural deposits
Turbidity (NTU)	2022	5	NS	0.69	NA	No	Soil runoff



UNREGULATED SUBSTANCES²

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Bromide (ppb)	2019	ND	NA	By-product of drinking water disinfection
HAA6Br (ppb)	2019	0.44	ND–1.06	By-product of drinking water disinfection
HAA9 (ppb)	2019	19.48	8.8–31.76	By-product of drinking water disinfection
Hardness, Total [as CaCO₃] (ppm)	2022	12	NA	Naturally occurring calcium and magnesium
Manganese (ppb)	2019	6.88	NA	Leaching from natural deposits
Sodium (ppm)	2022	1.7	NA	Naturally occurring
Total Organic Carbon [TOC] (ppb)	2019	1,767	NA	NA

¹ One school requested lead and copper sampling in the UPUD service area. Testing was completed per state guidelines. All results were below the required levels. No further action was required.

² Unregulated contaminant monitoring helps U.S. EPA and the State Board determine where certain contaminants occur and whether the contaminants need to be regulated.

Definitions

90th %ile: The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

AL (Regulatory Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

MCL (Maximum Contaminant Level): 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 (SMCLs) are set to protect the odor, taste, and appearance of drinking water.

MCLG (Maximum Contaminant Level Goal): 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. EPA.

MRDL (Maximum Residual Disinfectant Level): 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.

MRDLG (Maximum Residual Disinfectant Level Goal): 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.

NA: Not applicable.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NS: No standard.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

PDWS (Primary Drinking Water Standard): MCLs and MRDLs for contaminants that affect health, along with their monitoring and reporting requirements and water treatment requirements.

PHG (Public Health Goal): 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 EPA.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

TON (Threshold Odor Number): A measure of odor in water.

µmho/cm (micromhos per centimeter): A unit expressing the amount of electrical conductivity of a solution.

µS/cm (microsiemens per centimeter): A unit expressing the amount of electrical conductivity of a solution.



BY THE NUMBERS

The number of Olympic-sized swimming pools it would take to fill up all of Earth's water.

800
TRILLION

1

The average cost in cents for about 5 gallons of water supplied to a home in the U.S.

The percent of Earth's water that is salty or otherwise undrinkable, or locked away and unavailable in ice caps and glaciers.

99

50

The average daily number of gallons of total home water use for each person in the U.S.

The percent of Earth's surface that is covered by water.

71

330
MILLION

The amount of water on Earth in cubic miles.

The percent of the human brain that contains water.

75