ANNUAL WATER QUALITY REPORT

REPORTING YEAR 2023

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

We are pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2023. 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.

Where Does My Water Come From?

The residents of the Highway 4 area are truly fortunate to have access to water sourced directly from our local watershed. Our water embarks on its journey high up in the Sierra Nevadas, where it begins as rain and snowfall. Cascading down from these lofty heights, it travels along the path of the North Fork of the Stanislaus River, eventually reaching Hunters Reservoir situated in Avery. Continuing its course, our water is channeled through the intricate network of ditches managed by the Utica Water and Power Authority. From there, it finds its way to UPUD's Cademartori Reservoir, where it undergoes treatment at the designated facilities before reaching our community.

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 private 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.

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.

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.

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.

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.

HOW TO READ THIS TABLE

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 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.

Here is a table illustrating the measurement of concentration in terms of time, providing a clearer insight into water quality results.

Units		Equivalence
mg/L - milligrams per liter	ppm - parts per million	1 second in I 1.5 days
1g/L - micrograms per liter	ppb - parts per billion	1 second in nearly 32 years
ng/L - nanograms per liter	ppt- parts per trillion	1 second in nearly 32,000 years
pg/L- picograms per liter	ppq- parts perquadrillion	1 second in nearly 32,000,000 years

Test Results

UPUD consistently monitors your drinking water for contaminants to comply with federal and state guidelines. Our water undergoes rigorous sampling to check for various substances, ensuring it meets strict health standards. We only display detected substances in our water, but a full list of analytical results is available upon request. Detecting a substance does not necessarily indicate unsafe water; our aim is to maintain all detections below permitted levels. Some substances are recommended for monitoring less frequently by the state due to their stable concentrations. In such cases, we include the most recent sample data along with the year it was collected.

REGULATED SUBSTANCES							
SUBSTANCE (UNIT OF MEASURE)	**YEAR SAMPLED**	**MCL (MRDL)**	**PHG (MCLG) [MRDLG]**	**AMOUNT DETECTED**	**RANGE LOW-HIGH**	**VIOLATION**	**TYPICAL SOURCE**
Chlorine (ppm)	2023	[4.0 (as C12)]	[4.0 (as C12)]	0.10	0.02 - 0.46	No	Drinking water disinfectant added for treatment
HAA5 [sum of 5 haloacetic acids]-Stage 2 (ppb)	2023	60	NA	37.40	2.00 - 70.90	No	By-product of drinking water disinfection
TTHMs [total trihalomethanes]-Stage 2 (ppb)	2023	80	NA	63.87	44.91 - 99.60	No	By-product of drinking water disinfection
Tap water samples were collected for lead and copper analyses from sample sites throughout the community							
SUBSTANCE (UNIT OF MEASURE)	**YEAR SAMPLED**	**AL**	**PHG (MCLG)**	**AMOUNT DETECTED (90th %ILE)** [1]	**SITES ABOVE AL/ TOTAL SITES**	**VIOLATION**	**TYPICAL SOURCE**
Copper (ppm)	2023	1.3	0.3	0.13	2/22	No	Internal corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	2023	15	0.2	<.005>	2/22	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)	2023	500	NS	0.61	NA	No	Runoff/leaching from natural deposits; Seawater influence
Color (units)	2023	15	NS	10	NA	No	Naturally occuring organic materials
Iron (ppb)	2023	300	NS	<100	NA	No	Leaching from natural deposits; Industrial wastes
Odor, Threshold (TON)	2023	3	NS	40	NA	No	Naturally occuring organic materials
Specific Conductance (µmho/cm)	2023	1,600	NS	28	NA	No	Substances that form ions when in water; Seawater influence
Sulfate (ppm)	2023	500	NS	0.72	NA	No	Runoff/leaching from natural deposits; Industrial wastes
Total Dissolved Solids (ppm)	2023	1,000	NS	29	NA	No	Runoff/leaching from natural deposits
Turbidity (NTU)	2023	5	NS	0.99	NA	No	Soil runoff

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 deter mine 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.

UNREGULATED SUBSTANCES [2]

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)	2023	10	NA	Naturally occurring calcium and magnesium
Manganese (ppb)	2019	6.88	NA	Leaching from natural deposits
Sodium (ppm)	2023	1.3	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.

Community Participation

We'd like to invite you to get involved with our water district. Our board of directors meets on the fourth 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