# ANNUAL WATER QUALITY REPORT

## REPORTING YEAR 2019

***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

## Our Mission Continues

We are once again pleased to present our Annual Water Quality Report covering all testing performed between January 1 and December 31, 2019. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. Our constant goal is to provide you with a safe and dependable supply of drinking water. 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. This report demonstrates our water quality and what it means.

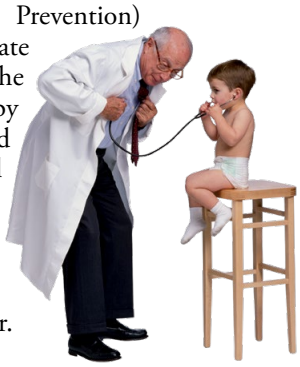
The following information is provided in compliance with those requirements established by the U.S. Environmental Protection Agency (U.S. EPA) and the State Water Resources Control Board (State Water Board).

Please remember that we are always available should you ever have any questions or concerns about your water.

Thank you for allowing us to continue providing your family with clean, quality water. Union Public Utility District works around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

## 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.



## Community Participation

We invite you to get involved with our water district. Our Board of Directors meet the third Wednesday of each month at 7:00 p.m. at the district office, 339 Main Street in Murphys. As Calaveras County emerges from an unprecedented drought, we want to thank our customers for their continued water conservation efforts to protect our most valuable asset - Our Water. For conservation tips, helpful resources for water efficiency guidelines, and more information about UPUD and your water, please visit us online at www.upudwater.com, email us at customerservice@upudwater.com, or call us at (209) 728-3651.

## Source Water Assessment

A source water assessment was conducted for UPUD's surface water source, Utica Ditch, in February 2002. No contaminants have been detected in the water supply; however, the source is considered most vulnerable to the following activities: wastewater treatment plants, mining operations - historic, sewer collection systems, NPDES/WDR-permitted discharges, grazing (more than five large animals or equivalent per acre), septic systems - low density (less than one per acre), agricultural drainage, and recent burn areas (less than 10 years).

A copy of the complete assessment is available at the State Water Board, Drinking Water Field Operations Branch, Stockton District Office, 31 E. Channel Street, Room 270, Stockton, California 95202, or from UPUD, 339 Main Street, Murphys, CA 95247. You may request a summary of the assessment by contacting the district office at (209) 948-7696 or UPUD at (209) 728-3651.

## 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 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 at (800) 426-4791 or at www.epa.gov/safewater/lead.

## Water Treatment

UPUD's goal is 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. EPA and the State Water 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. 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 water poses a health risk.

> "We remain vigilant in delivering the best-quality drinking water"

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 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.

## Where Does My Water Come From?

Our water source is surface water from Stanislaus River that flows through Hunter Reservoir and down the Utica Water and Power Authority's Utica Ditch system with diversions to the UPUD Cademartori Reservoir and water treatment facilities.

## 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, California. Samples are collected on an approved U.S. EPA and State Board monitoring schedule as required.

## Questions?

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

## 2019 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, and 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.

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 |
|---|---|---|---|---|---|---|---|
| **Aluminum** (ppm) | 2019 | 1 | 0.6 | ND | NA | No | Erosion of natural deposits; residue from some surface water treatment processes |
| **Chlorine** (ppm) | 2019 | [4.0 (as Cl2)] | [4 (as Cl2)] | 0.10 | 0.02–0.45 | No | Drinking water disinfectant added for treatment |
| **Haloacetic Acids–Stage 2** (ppb) | 2019 | 60 | NA | 26.03 | 11.00–36.60 | No | By-product of drinking water disinfection |
| **Methyl tert-Butyl Ether [MTBE]** (ppb) | 2018 | 13 | 13 | ND | NA | No | Leaking from underground gasoline storage tanks; discharge from petroleum and chemical factories |
| **TTHMs [Total Trihalomethanes]–Stage 2** (ppb) | 2019 | 80[1] | NA | 69.08 | 51.20–84.80 | No | By-product of drinking water disinfection |
| **Total Coliform Bacteria [federal Revised Total Coliform Rule]** (Positive samples) | 2019 | TT | NA | 0 | NA | No | Naturally present in the environment |
| **Total Coliform Bacteria [state Total Coliform Rule]** (Positive samples) | 2019 | 1 positive monthly sample | (0) | 0 | NA | No | Naturally present in the environment |

**Tap water samples were collected for lead and copper analyses from sample sites throughout the community[2]**

| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | AL | PHG (MCLG) | AMOUNT DETECTED (90TH %ILE) | SITES ABOVE AL/TOTAL SITES | VIOLATION | TYPICAL SOURCE |
|---|---|---|---|---|---|---|---|
| **Copper** (ppm) | 2017 | 1.3 | 0.3 | 0.095 | 0/20 | No | Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |
| **Lead** (ppb) | 2017 | 15 | 0.2 | 4.80 | 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) | 2019 | 500 | NS | 1.2 | NA | No | Runoff/leaching from natural deposits; seawater influence |
| **Color** (Units) | 2019 | 15 | NS | 10 | NA | No | Naturally occurring organic materials |
| **Copper** (ppm) | 2019 | 1.0 | NS | ND | NA | No | Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |
| **Foaming Agents [MBAS]** (ppb) | 2019 | 500 | NS | ND | NA | No | Municipal and industrial waste discharges |
| **Iron** (ppb) | 2019 | 300 | NS | 120 | NA | No | Leaching from natural deposits; industrial wastes |
| **Manganese** (ppb) | 2019 | 50 | NS | ND | NA | No | Leaching from natural deposits |
| **Odor–Threshold** (Units) | 2019 | 3 | NS | ND | NA | No | Naturally occurring organic materials |
| **Silver** (ppb) | 2019 | 100 | NS | ND | NA | No | Industrial discharges |
| **Specific Conductance** (µmho/cm) | 2019 | 1,600 | NS | 40 | NA | No | Substances that form ions when in water; seawater influence |
| **Sulfate** (ppm) | 2019 | 500 | NS | 1.0 | NA | No | Runoff/leaching from natural deposits; industrial wastes |
| **Total Dissolved Solids** (ppm) | 2019 | 1,000 | NS | 32 | NA | No | Runoff/leaching from natural deposits |
| **Turbidity** (Units) | 2019 | 5 | NS | 0.94 | NA | No | Soil runoff |
| **Zinc** (ppm) | 2019 | 5.0 | NS | ND | NA | No | Runoff/leaching from natural deposits; industrial wastes |

[1] Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system and may have an increased risk of getting cancer.

[2] 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, and no further action was required.

[3] Unregulated contaminant monitoring helps U.S. EPA and the State Water Resources Control Board determine where certain contaminants occur and whether the contaminants need to be regulated.

## UNREGULATED SUBSTANCES [3]

| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | AMOUNT DETECTED | RANGE LOW-HIGH | TYPICAL SOURCE |
|---|---|---|---|---|
| **Hardness, Total [as CaCO3]** (ppm) | 2019 | 14.0 | 14.0–14.0 | Naturally occurring calcium and magnesium |
| **Sodium** (ppm) | 2019 | 2.1 | 2.1–2.1 | Naturally occurring |

## UNREGULATED CONTAMINANT MONITORING RULE - PART 4 (UCMR4) [3]

| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | AMOUNT DETECTED | RANGE LOW-HIGH | TYPICAL SOURCE |
|---|---|---|---|---|
| **Bromide** (ppb) | 2019 | ND | NA | By-product of drinking water disinfection |
| **HAA5** (ppb) | 2019 | 19.04 | 8.8–30.7 | 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 |
| **Manganese** (ppb) | 2019 | 6.88 | NA | Leaching from natural deposits |
| **Total Organic Carbon [TOC]** (ppb) | 2019 | 1775 | NA | Naturally occurring |

## 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 percent 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

**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).

**TT (Treatment Technique):** A required process intended to reduce the level of a contaminant in drinking water.

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