

ANNUAL WATER QUALITY REPORT

Reporting Year 2022



Presented By
City of Ukiah

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

PWS ID#: CA2310003

2022 Executive Summary

The City of Ukiah's Water Resources Department is responsible for providing drinking water to over 5,000 connections. The water that we produce consistently meets or exceeds state and federal standards for drinking water. Our ability to achieve this high standard is made possible by a combination of well-trained staff, an excellent water system, and outstanding sources of water.

In 2022 the city completed the third full year of operation of its recycled water system. The system offsets approximately 1,000 acre-feet of demand from the city's surface water sources. This savings has continued to greatly improve our drought resiliency and offset conservation efforts. With extreme drought and widespread curtailments in the region, this new source of water was vital for preserving agriculture and recreation in Ukiah. In 2023 we will be expanding our recycled water system to provide an additional 500 acre-feet of supply, which will improve drought resilience for our citizens by conserving potable water for domestic use while preserving green public spaces during times of drought.

In 2022 we completed replacement of significant spans of distribution line as part of the rebuilding of Dora Street. In 2023 we will continue large-scale main replacement as an element of the Streetscape Phase 2 project. Our department could not perform the job that we do without the hard work and support of our distribution crew, and their continual dedication is greatly appreciated. The combined efforts of the Distribution and Water Resources Departments ensures that exceptional drinking water is consistently delivered throughout our entire system.

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 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 www.epa.gov/safewater/lead.

Community Participation

Regularly scheduled Ukiah City Council meetings convene on the first and third Wednesday of each month at 6:00 p.m. at the Ukiah Civic Center, 300 Seminary Avenue. These meetings provide citizens with the opportunity to express concerns regarding the city's drinking water.

Monitoring and Reporting Violation

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether our drinking water meets health standards. The city is required to sample for lead and copper every three years. The most recent samples were due in summer 2022, but samples were not collected until November 2022. None of the samples collected were over the action level; however, since the samples were not taken during the required sampling period (June-September 2022), the city was in violation of this regulation. Another round of lead and copper samples will be collected in 2023 to verify the quality of your drinking water.

It is important to note that the city does not have any lead or copper pipes in its water system. These tests are intended to see if the quality of the water supplied to our customers is influenced by the customers' plumbing.

QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please contact Shelly Wagenet, Water Treatment Plant Supervisor, at (707) 467-2842.

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 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.

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.



Source Water Assessment

In December 2021 the City of Ukiah completed a source water assessment. This study considered the topography, type of vegetative cover, soil type, type of animal life, and climate conditions of our watershed in addition to human recreation, industry, and lifestyle. Several areas were considered to have influence on our raw waters. The influence was considered to be minimal, and several areas of concern have been mitigated. Mitigation efforts include closing the landfill and replacing leaking underground storage tanks and bulk fuel containment. The City of Ukiah is continually upgrading its system and monitors for a variety of possible hazards, and its water is still considered safe and reliable.

Vulnerability Summary

According to the results of the vulnerability analysis, the surface water source is considered most vulnerable (vulnerability score of 15) to the following activities not associated with any detected contaminants:

- gas stations
- plastic synthetic producers
- historic gas stations
- historic waste dumps/landfills
- historic mining operations
- confirmed leaking tanks
- wastewater treatment and disposal facilities
- managed forests
- septic systems (high)

To view the complete report, contact water treatment plant staff at (707) 467-2842 or email mwagenet@cityofukiah.com.

Where Does My Water Come From?

The City of Ukiah supplies its customers with water that is considered underflow from the Russian River as well as groundwater from four sources. The amount of water delivered from each source and when it's used are dependent on both the demand on the system and the time of year. There are times of emergency when the city may have to purchase water from our neighboring water systems: Millview County Water District and Willow County Water District.



Test Results

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.

REGULATED SUBSTANCES

				Distribution System		Surface Water		Groundwater			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Barium (ppm)	2022	1	2	ND ¹	NA	ND	NA	0.040 ²	ND–0.100 ²	No	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Chlorine (ppm)	2022	[4.0 (as Cl ₂)]	[4 (as Cl ₂)]	0.84	0.25–1.61	NA	NA	NA	NA	No	Drinking water disinfectant added for treatment
Fluoride (ppm)	2022	2.0	1	ND ¹	NA	ND	NA	0.04	ND–0.11	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate [as nitrate] (ppm)	2022	45	45	ND ¹	NA	0.51	NA	1.6	1.3–2.4	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Turbidity ³ (NTU)	2022	TT	NA	NA	NA	0.195	0.013–0.195	NA	NA	No	Soil runoff
Turbidity (lowest monthly percent of samples meeting limit)	2022	TT = 95% of samples meet the limit	NA	NA	NA	100	NA	NA	NA	No	Soil runoff

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

				Distribution System		Surface Water		Groundwater			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	PHG (MCLG)	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/TOTAL SITES	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/TOTAL SITES	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2022	1.3	0.3	0.310	0/35	NA	NA	NA	NA	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2022	15	0.2	ND	0/35	NA	NA	NA	NA	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)	Distribution System		Surface Water		Groundwater		VIOLATION	TYPICAL SOURCE
				AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH		
Chloride (ppm)	2022	500	NS	10 ¹	NA	5.9	NA	9.1	7.2–13	No	Runoff/leaching from natural deposits; seawater influence
Corrosivity (units)	2022	Noncorrosive	NS	11.2 ¹	NA	10.49	NA	11.3	10.5–11.6	No	Natural or industrially influenced balance of hydrogen, carbon, and oxygen in the water affected by temperature and other factors
Specific Conductance (µmho/cm)	2022	1,600	NS	310 ¹	NA	200	NA	330	290–360	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2022	500	NS	13 ¹	NA	10	NA	16	13–19	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2022	1,000	NS	170	NA	130	NA	204	180–230	No	Runoff/leaching from natural deposits
Turbidity (NTU)	2022	5	NS	0.087	0.010–0.217	NA	NA	0.046	0.001–0.550	No	Soil runoff

UNREGULATED SUBSTANCES⁴

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	Distribution System		Surface Water		Groundwater		TYPICAL SOURCE
		AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	
Bicarbonate (ppm)	2022	160 ¹	NA	88	NA	142	110–160	NA
Boron (ppb)	2021	260	NA	350	NA	112	ND–430	NA
Calcium (ppm)	2022	26 ¹	NA	19	NA	30	23–35	NA
Chlorate (ppb)	2015	64	41–98	8.75	ND–35	125	52–290	NA
Chromium, Total (ppb)	2015	0.15	ND–0.38	0.2	ND–0.4	0.11	ND–0.33	NA
Chromium-6 (ppb)	2015	0.113	0.033–0.180	0.10	0.06–0.14	0.09	0.035–0.13	NA
Magnesium (ppm)	2022	16 ¹	NA	11	NA	19	17–22	NA
Molybdenum (ppb)	2015	0.67	ND–2.1	ND	NA	0.68	ND–2.1	NA
Sodium (ppm)	2021	19	NA	9.9	NA	17	12–22	NA
Strontium (ppb)	2015	251	210–320	213	200–220	263	230–300	NA
Total Alkalinity (ppm)	2022	130 ¹	NA	88	NA	142	110–160	NA
Total Hardness (ppm)	2022	130 ¹	NA	92	NA	155	142–181	NA
Vanadium (ppb)	2015	1.2	0.57–1.8	0.72	0.41–1.3	1.18	0.35–1.8	NA

¹ Sampled in 2021.

² Two groundwater sources sampled in 2021.

³ Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

⁴ Unregulated contaminant monitoring helps U.S. EPA and the State Board determine where certain contaminants occur and whether the contaminants need to be regulated.



DISTRIBUTION SYSTEM DISINFECTION BY-PRODUCTS

TOTAL TRIHALOMETHANES (PPB)	MCL	2021 2ND QTR	2021 3RD QTR	2021 4TH QTR	2021 LRAA	2022 1ST QTR	2022 2ND QTR	2022 3RD QTR	2022 4TH QTR	2022 LRAA	SOURCE
Site #1	80	1.1	7.0	0.0	2.0	0.0	23.4	28.8	0.0	13.1	By-product of drinking water disinfection.
Site #2	80	0.0	0.0	0.0	0.0	0.0	15.8	18.9	0.0	8.7	
Site #3	80	4.3	8.9	6.7	6.5	4.0	23.4	14.9	4.9	11.8	
Site #4	80	3.9	10.8	6.9	7.5	3.5	27.0	30.2	5.5	16.5	
TOTAL HALOACETIC ACIDS (PPB)	MCL	2021 2ND QTR	2021 3RD QTR	2021 4TH QTR	2021 LRAA	2022 1ST QTR	2022 2ND QTR	2022 3RD QTR	2022 4TH QTR	2022 LRAA	SOURCE
Site #1	60	0.0	9.7	0.0	2.4	0.0	19.2	22.1	0.0	10.3	By-product of drinking water disinfection.
Site #2	60	0.0	0.0	0.0	0.0	0.0	12.2	13.4	0.0	6.4	
Site #3	60	1.3	7.6	6.9	5.6	8.0	20.0	14.9	0.0	10.7	
Site #4	60	3.1	10.0	6.3	6.4	7.9	19.2	19.1	0.0	11.6	



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).

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.

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

