2022 Annual Drinking Water Quality Report

CITY OF WOODLAKE

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 – December 31, 2022 and may include earlier monitoring data.

Este informe contiene información muy importante sobre su agua de beber.
Tradúzcalo ó hable con alguien que lo entienda bien.

We are pleased to provide you with this year's Annual Water Quality Report. We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is and always has been, to provide you with a safe and dependable supply of drinking water. Our water source came from seven (7) groundwater wells in 2022. The City constructed a new chlorination and sand separator system in 2018 and connected the water system to SCADA, which continues to provide improved water management citywide.

A source water assessment was conducted for the water supply wells of the City of Woodlake water system in August, 2002. The sources are considered most vulnerable to the following activities associated with contaminants detected in the water supply: fertilizer and pesticide and/or herbicide applications. The sources are considered most vulnerable to the following activities not associated with any detected contaminants: airport maintenance and/or fueling areas. A copy of the complete assessment may be viewed at City of Woodlake, 350 N. Valencia Blvd., Woodlake, California. If you would like a summary of the assessment sent to you or if you have any questions about this report or concerning your water utility, please contact Emmanuel Llamas, Community Development Director, at 559/564-8055.

We want our customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled city council meetings. They are held on the 2nd and 4th Monday of each month at 6:30 p.m., at the Woodlake Community Center, 145 N. Magnolia in Woodlake.

The following are definitions of some of the TERMS USED IN THIS REPORT:

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

Maximum Contaminant Level Goal (MCLG): 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. Environmental Protection Agency (USEPA).

Public Health Goal (PHG): 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 Environmental Protection Agency.

Maximum Residual Disinfectant Level (MRDL): 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.

Maximum Residual Disinfectant Level Goal (MRDLG): 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.

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

Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

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

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

Variances and Exemptions: State Board permission to exceed an MCL or not comply with a treatment technique under certain conditions.

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an *E. coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

N/A: Not applicable
ND: not detectable at testing limit
ppm: parts per million or milligrams per liter (mg/L)
ppb: parts per billion or micrograms per liter (µg/L)
ppt: parts per trillion or nanograms per liter (ng/L)
ppq: parts per quadrillion or picogram per liter (pg/L)
pCi/L: picocuries per liter (a measure of radiation)

In general, sources of drinking water (both tap water and bottled water) may 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.

Constituents that may be present in source water to contamination levels 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 stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- Pesticides and herbicides 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 that are byproducts of industrial processes and petroleum production and can also come from gas stations, urban stormwater runoff, agricultural application and septic systems.
- Radioactive contaminants that can be naturally occurring or the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the U. S. Environmental Protection Agency (USEPA) and the State Water Resources Control Board – Division of Drinking Water (DDW) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. DDW regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

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. City of Woodlake 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 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 or at http://www.epa.gov/safewater/lead.

The tables below and on the next page list all the drinking water constituents that were detected during the most recent samplings for the constituent. The presence of these constituents in the water does not necessarily indicate that the water poses a health risk. The DDW requires us to monitor for certain constituents less than once per year because the concentrations of these constituents are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, are therefore more than one year old.

SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA

Microbiological Contaminants			MCL	MCLG	Typical Source of Contamination
Water Supply (Distribution System)	**Highest No. of detections**	**No. of months in violation**			
E. coli	(In the year) 0	0	(a)	0	Human and animal fecal waste
Water Source (Groundwater Wells)	**Total No. of detections**	**Sample Dates (of Detections)**			
E. coli	(In the year) 0	Not Applicable	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.

E. Coli/Fecal Coliform: E. coli/Fecal coliforms are bacteria whose presence indicate that water may be contaminated with human or animal wastes.

Total Coliform: Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present.

The City collects 12 to 15 samples each month in the water supply (distribution) system. The City collects monthly samples at each operational water well (source).

TEST RESULTS (A)

Lead and Copper Rule	No. of samples collected	MCLG	Action Level	90th percentile level detected	No. Sites Exceeding Action Level	Number of Schools Requesting Lead Sampling	Typical Source of Contamination
Lead (ppb) (2021)	20	2	15	ND	1	4 (Completed in 2018)	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm) (2021)	20	0.3	1.3	0.17	0	N/A	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

RADIOACTIVE CONTAMINANTS

Constituent	MCL	PHG [MCLG]	Sample Date	Average Level Detected	Range	Typical Source of Contamination
Gross Alpha Activity (pCi/L)	15	(0)	2014/2018	ND	N/A	Erosion of natural deposits
Uranium (pCi/L)	20	0.43	2001/2020	1.45	1.28 to 1.82	Erosion of natural deposits

SAMPLING RESULTS FOR SODIUM AND HARDNESS						
Constituent	**MCL**	**PHG [MCLG]**	**Sample Date**	**Average Level Detected**	**Range**	**Typical Source of Contamination**
Hardness (ppm)	None	None	2020/2021	108	48 to 160	Generally found in ground and surface water
Sodium (ppm)	None	None	2020/2021	19	10 to 24	Generally found in ground and surface water

DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD						
Constituent	**MCL**	**PHG [MCLG]**	**Sample Date**	**Average Level Detected**	**Range(B)**	**Typical Source of Contamination**
Arsenic (ppb)	10	0.004	2020/2021	3.0	ND to 4.4	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (ppm)	1000	10	2020/2021	65.2	ND to 86	Discharges of oil drilling wastes; erosion of natural deposits
Fluoride (ppm)	2	1	2020/2021	0.18	0.12 to 0.28	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate as N (ppm)	10	10	2021/2022	2.3	ND to **12.0 (C)**	Runoff and leaching from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD					
Constituent	**MCL**	**Sample Date**	**Average Level Detected**	**Range (B)**	**Typical Source of Contamination**
Chloride (ppm)	500	2020/2021	11.2	2.5 to 22	Runoff/leaching from natural deposits; seawater influence
Color (Units)	15	2020/2022	6	ND to 7.4	Naturally-occurring organic materials
Iron (ppb)	300	2020/2021/2022	110	ND to **230(D)**	Leaching from natural deposits; industrial wastes
Specific Conductance (µS/cm)	1600	2021	297	150 to 450	Substances that form ions when in water; seawater influence
Sulfate (ppm)	500	2020/2021	9.7	1.1 to 23	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (TDS) (ppm)	1000	2020/2021	201	97 to 290	Runoff/leaching from natural deposits
Turbidity (Units)	5	2020/2021/2022	0.47	ND to 1.6(E)	Soil runoff

DISINFECTION BYPRODUCTS AND DISINFECTANT RESIDUALS							
Chemical or Constituent (and reporting units)	**MCL [MRDL]**	**PHG**	**MCLG [MRDLG]**	**Sample Date**	**Running Annual Average**	**Range**	**Major Sources in Drinking Water**
TTHM [Total Trihalomethanes] (ppb)	80	N/A	N/A	6/30/2022	<3.2	N/A (F)	Byproduct of drinking water chlorination.
HAA5 [Haloacetic Acids] (ppb)	60	N/A	N/A	6/30/2022	<6	N/A (G)	Byproduct of drinking water disinfection.
Chlorine as CL2 (ppm)	[4.0]	N/A	[4]	2022	0.93	0.9 to 0.98	Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose or stomach.

DETECTION OF SYNTHETIC ORGANIC CONTAMINANTS INCLUDING PESTICIDES & HERBICIDES						
Constituent	**MCL**	**PHG [MCLG]**	**Sample Date**	**Average Level Detected**	**Range (B)**	**Typical Source of Contamination**
Trichloropropane (1,2,3-TCP) (ppt)	5	0.7	2022	ND	N/A (H)	Discharge from industrial and agricultural chemical factories; leaching from hazardous waste sites; used as cleaning and maintenance solvent, paint and varnish remover, and cleaning and degreasing agent; byproduct during the production of other compounds and pesticides.

(A) Results reported due to regulatory requirement or detection of a constituent.
(B) Results reported include amounts that are less than the State Water Resources Control Board – Division of Drinking Water (DDW) required detection level for this contaminant.
(C) ABOUT NITRATE: Nitrate in drinking water at levels above 10 mg/L (as N) is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels as N that are above 10 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.
(D) ABOUT SECONDARY DRINKING WATER STANDARDS: Iron was found at levels exceeding the Secondary MCLs. These MCLs are set to protect you against unpleasant aesthetic affects such as color, taste, odor or appearance of drinking water. The elevated levels are typically due to naturally occurring organic materials.
(E) ABOUT TURBIDITY: Turbidity has no health effects. However, high levels of turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.
(F) ABOUT TOTAL TRIHALOMETHANES (TTHMs): Some people who drink water containing Total Trihalomethanes in excess of the MCL over many years may experience liver, kidney or central nervous system problems, and may have an increased risk of getting cancer.
(G) ABOUT HALOACETIC ACIDS (HAA5s): Some people who drink water containing Haloacetic Acids in excess of the MCL over many years may have an increased risk of getting cancer.
(H) ABOUT 1,2,3-TCP: Some people who drink water containing 1,2,3-trichloropropane (1,2,3-TCP) in excess of the MCL over many years may have an increased risk of getting cancer. 1,2,3-trichloropropane (1,2,3-TCP) had a notification level (NL) of 5 ppt until December 14, 2017, when the MCL of 5 ppt became effective.

Additional General Information On Drinking Water

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some constituents. The presence of constituents does not necessarily indicate that the water poses a health risk. More information about constituents, contaminant levels and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1/800/426-4791 or their website https://www.epa.gov/dwreginfo/drinking-water-regulations.

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 and some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline 1/800/426-4791.

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Consumer Confidence Report
Certification Form
(to be submitted with a copy of the CCR)

(To certify electronic delivery of the CCR, use the certification form on the State Water Board's website at http://www.swrcb.ca.gov/drinking_water/certlic/drinkingwater/CCR.shtml)

Water System Name:	City of Woodlake
Water System Number:	5410020

The water system named above hereby certifies that its Consumer Confidence Report was distributed on May 31, 2023 (*date*) to customers (and appropriate notices of availability have been given). Further, the system certifies that the information contained in the report is correct and consistent with the compliance monitoring data previously submitted to the State Water Resources Control Board, Division of Drinking Water.

Certified by:	Name:	**Emmanuel Llamas**	
	Signature:		
	Title:	**Community Development Director**	
	Phone Number:	(559) 564-8055	Date: **6/5/2023**

To summarize report delivery used and good-faith efforts taken, please complete the below by checking all items that apply and fill-in where appropriate:

☒ CCR was distributed by mail or other direct delivery methods. Specify other direct delivery methods used: **Mailed to every Woodlake water customer.**

☒ "Good faith" efforts were used to reach non-bill paying consumers. Those efforts included the following methods:

- ☒ Posting the CCR on the Internet at: https://cityofwoodlake.com/departments/public-works/
- ☐ Mailing the CCR to postal patrons within the service area (attach zip codes used)
- ☐ Advertising the availability of the CCR in news media (attach copy of press release)
- ☐ Publication of the CCR in a local newspaper of general circulation (attach a copy of the published notice, including name of newspaper and date published)
- ☒ Posted the CCR in public places (attach a list of locations): **Woodlake City Hall**
- ☐ Delivery of multiple copies of CCR to single-billed addresses serving several persons, such as apartments, businesses, and schools
- ☐ Delivery to community organizations (attach a list of organizations)

☐ Other (attach a list of other methods used)

☐ *For systems serving at least 100,000 persons*: Posted CCR on a publicly-accessible internet site at the following address: www._____

☐ *For investor-owned utilities*: Delivered the CCR to the California Public Utilities Commission

This form is provided as a convenience for use to meet the certification requirement of the California Code of Regulations, section 64483(c).