





# ANNUAL WATER QUALITY REPORT

Reporting Year 2023



Presented By



Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien. **PWS ID#: 3910015** 



#### Our Commitment

We are pleased to present to you this year's annual water quality report. This report is a snapshot of last year's water quality covering all testing performed between January 1 and December 31, 2023. Included are details about your sources of water, what it contains, and how it compares to standards set by regulatory agencies. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water and providing you with this information because informed customers are our best allies.

#### **Important Health Information**

While your drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The U.S. Environmental Protection Agency (U.S. EPA) continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and linked to other health effects such as skin damage and circulatory problems.

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/Centers for Disease Control and Prevention (CDC) 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 water. epa.gov/drink/hotline.



#### **Community Participation**

You are invited to participate in our citizens' forum during our city council meetings and voice your concerns about your drinking water. The city council's meeting agenda and schedule are posted on ci.lathrop. ca.us/meetings. The city council typically meets the second Monday of each month at 7:00 p.m. at City Hall, 390 Towne Centre Drive.

#### Where Does My Water Come From?

The water supplied to you by the City of Lathrop is from groundwater and surface water sources. Groundwater from four wells located within city limits is treated at the Louise Avenue Water Treatment Facility (LAWTF). A fifth well (Well 9) has been offline since 2018 due to water quality concerns. Surface water is treated and delivered by the South San Joaquin Irrigation District (SSJID) to the city's water service area.

#### 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 Resources Control Board (SWRCB) 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 Safe Drinking Water Hotline at (800) 426-4791.

## **QUESTIONS?**

For more information about this report, or for any questions relating to your drinking water, please contact Greg Gibson, P.E., Senior Civil Engineer, Public Works Department, at (209) 941-7442.

#### Source Water Assessment

A source water assessment for Well 6 was completed in January 2001 and for Wells 7, 8, and 9 in May 2001. A source water assessment for Well 10 was completed in April 2008. These sources are considered most vulnerable to the following activities: septic systems, airport maintenance and fuel areas, wastewater treatment plants, metal plating, finishing, and fabrication facilities.

A copy of the complete assessment is available at SWRCB, Drinking Water Division, Field Operations Branch, District 10, 3021 Reynolds Ranch Parkway, Suite 260, Lodi or at the City of Lathrop, Public Works Department, 390 Towne Centre Drive. You may request a summary by contacting Bhupinder Sahota, District Engineer, at (209) 948-7696 or Public Works Engineering, City of Lathrop, at (209) 941-7430.

#### 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 <u>epa.gov/safewater/lead</u>.

## Table Talk

Get the most out of the Testing Results data table with these simple suggestions. In less than a minute, you will know all there is to know about your water.

- For each substance listed, compare the value in the Amount Detected column against the value in the MCL (or AL or SMCL) column. If the Amount Detected value is smaller, your water meets the health and safety standards set for the substance.
- Verify that there were no violations of the state or federal standards in the Violation column. If there was a violation, you will see a detailed description of the event in this report.

If there is an ND or a less-than symbol (<)

The Range column displays the lowest and highest sample readings. NA means only a single sample was taken to test for the substance (assuming there is a reported value in the Amount Detected column).

If there is sufficient evidence to indicate from where the substance originates, it will be listed under Typical Source.

## Water Treatment Process

All groundwater from the city's online groundwater wells is pumped to the LAWTF, where it is treated using a coagulation/filtration process to remove arsenic to meet drinking water standards. Surface water purchased from SSJID is treated at the DeGroot Water Treatment Plant, which is located near Woodward Reservoir and uses a submerged membrane filtration process.

#### What Are PFAS?

Per- and polyfluoroalkyl substances (PFAS) are a group of manufactured chemicals used worldwide since the 1950s to make fluoropolymer coatings and products that resist heat, oil, stains, grease, and water. During production and use, PFAS can migrate into the soil, water, and air. Most PFAS do not break down; they remain in the environment, ultimately finding their way into drinking water. Because of their widespread use and their persistence in the environment, PFAS are found all over the world at low levels. Some PFAS can build up in people and animals with repeated exposure over time.

The most commonly studied PFAS are perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS). PFOA and PFOS have been phased out of production and use in the United States, but other countries may still manufacture and use them.

Some products that may contain PFAS include:

- Some grease-resistant paper, fast food containers/wrappers, microwave popcorn bags, pizza boxes
- Nonstick cookware
- Stain-resistant coatings used on carpets, upholstery, and other fabrics
- Water-resistant clothing
- Personal care products (shampoo, dental floss) and cosmetics (nail polish, eye makeup)
- Cleaning products
- Paints, varnishes, and sealants

Even though recent efforts to remove PFAS have reduced the likelihood of exposure, some products may still contain them. If you have questions or concerns about products you use in your home, contact the Consumer Product Safety Commission at (800) 638-2772. For a more detailed discussion on PFAS, please visit <u>bit.ly/3Z5AMm8</u>.

## Think before You Flush!

Flushing unused or expired medicines can be harmful to your drinking water. Properly disposing of unused or expired medication helps protect you and the environment. Keep medications out of our waterways by disposing responsibly. To find a convenient drop-off location near you, please visit bit.ly/3IeRyXy.

## **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.

We are participating in the fifth stage of the U.S. EPA's Unregulated Contaminant Monitoring Rule (UCMR5) program by performing additional tests on our drinking water. UCMR5 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 to determine if it needs to introduce new regulatory standards to improve drinking water quality. Unregulated contaminant monitoring data is 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**

				LAWTF-Tr	eated GW	Distribution System (Combined GW and SSJID-Treated SW SW)			City Wells <sup>.</sup>	-Raw GW				
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	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE	
Arsenic (ppb)	2023	10	0.004	7.3	4–9	NA	NA	NA	NA	NA	NA	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes	
Barium (ppm)	2023	1	2	NA	NA	NA	NA	NA	NA	0.4	NA	No	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits	
Chlorine (ppm)	2022	[4.0 (as Cl2)]	[4 (as Cl2)]	NA	NA	NA	NA	0.8	0.2–1.1	NA	NA	No	Drinking water disinfectant added for treatment	
Gross Alpha Particle Activity (pCi/L)	2022	15	(0)	NA	NA	NA	NA	NA	NA	7.2 <sup>1</sup>	5.2-8.3 <sup>1</sup>	No	Erosion of natural deposits	
HAA5 [sum of 5 haloacetic acids]– Stage 2 (ppb)	2023	60	NA	NA	NA	NA	NA	51.69	4–81	NA	NA	No	By-product of drinking water disinfection	
Nitrate [as nitrogen] (ppm)	2023	10	10	NA	NA	NA	NA	NA	NA	4.1	1.4–6.7	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits	
Radium 228 (pCi/L)	2018	5	0.019	NA	NA	NA	NA	NA	NA	0.8 <sup>2</sup>	NA	No	Erosion of natural deposits	
TTHMs [total trihalomethanes]– Stage 2 (ppb)	2023	80	NA	NA	NA	NA	NA	36.88	13–60	NA	NA	No	By-product of drinking water disinfection	
Uranium (pCi/L)	2022	20	0.43	NA	NA	NA	NA	NA	NA	4.2 <sup>3</sup>	$2.1-6.4^3$	No	Erosion of natural deposits	
Tan water samples were collected for lead and	l conner analy	ses from sau	Tap water samples were collected for lead and cooper analyses from sample sites throughout the community <sup>4</sup>											

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SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	PHG (MCLG)	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2021	1.3	0.3	0.13	0/31	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

SECONDARY SUBSTANCES													
	LAWTF-Tr	eated GW	SSJID-Treated SW		Distribution System (Combined GW and SW)		City Wells-Raw GW						
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloride (ppm)	2023	500	NS	NA	NA	12	NA	NA	NA	105	NA	No	Runoff/leaching from natural deposits; seawater influence
Specific Conductance (µS/cm)	2023	1,600	NS	NA	NA	93	NA	NA	NA	827	NA	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2023	500	NS	NA	NA	2.9	NA	NA	NA	30.3	NA	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2023	1,000	NS	NA	NA	63	NA	NA	NA	500	NA	No	Runoff/leaching from natural deposits

#### UNREGULATED SUBSTANCES 5

		LAWTF-Tr	eated GW	SSJID-Tre	eated SW	Distribution System (Combined GW and SW)		City Wells-Raw GW		
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Bromodichloromethane (ppb)	2023	NA	NA	NA	NA	2.69	1–4	NA	NA	By-product of drinking water disinfection
Bromoform (ppb)	2023	NA	NA	NA	NA	4.56	ND-8	NA	NA	By-product of drinking water disinfection
Chloroform (ppb)	2023	NA	NA	NA	NA	31.40	ND-57	NA	NA	By-product of drinking water disinfection
Dibromochloromethane (ppb)	2023	NA	NA	NA	NA	3.18	ND-4	NA	NA	By-product of drinking water disinfection
Hardness, Total [as CaCO3] (ppm)	2023	NA	NA	42	NA	NA	NA	269	NA	Erosion of natural deposits
Sodium (ppm)	2023	NA	NA	4.6	NA	NA	NA	54	NA	Erosion of natural deposits
Vanadium (ppb)	2023	NA	NA	NA	NA	NA	NA	12	NA	Erosion of natural deposits

#### OTHER UNREGULATED SUBSTANCES <sup>5</sup>

		LAWTF-Tre	ated GW	SSJID-Tre	ated SW	Distributio (Combined G		City Wells-Raw GW		
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Alkalinity, Total (ppm)	2023	NA	NA	46	NA	NA	NA	200	NA	Naturally present in the environment
Bicarbonate (ppm)	2023	NA	NA	56	NA	NA	NA	240	NA	Naturally present in the environment
Calcium (ppm)	2023	NA	NA	12	NA	NA	NA	78	NA	Naturally present in the environment
Chloroacetic Acid (ppb)	2023	NA	NA	NA	NA	2.50	ND-3	NA	NA	By-product of drinking water disinfection
Dibromoacetic Acid (ppb)	2023	NA	NA	NA	NA	1.9	ND-4	NA	NA	By-product of drinking water disinfection
Dichloroacetic Acid (ppb)	2023	NA	NA	NA	NA	24	ND-39	NA	NA	By-product of drinking water disinfection
Magnesium (ppm)	2023	NA	NA	2.9	NA	NA	NA	18	NA	Naturally present in the environment
Monochloroacetic Acid (ppb)	2023	NA	NA	NA	NA	2.1	ND-3	NA	NA	By-product of drinking water disinfection
Perfluorobutanesulfonic Acid [PFBS] (ppt)	2023	NA	NA	NA	NA	NA	NA	2.36	2.0–2.7 <sup>6</sup>	Fire training/fire response sites; industrial sites; landfills; wastewater treatment plants/biosolids
Perfluorohexanesulfonic Acid [PFHxS] (ppt)	2023	NA	NA	NA	NA	NA	NA	2.36	ND-3.9 <sup>6</sup>	Fire training/fire response sites; industrial sites; landfills; wastewater treatment plants/biosolids
Perfluorooctanesulfonic Acid [PFOS] (ppt)	2023	NA	NA	NA	NA	NA	NA	5.76	3.3–8.7 <sup>6</sup>	Fire training/fire response sites; industrial sites; landfills; wastewater treatment plants/biosolids
pH (units)	2023	NA	NA	8.13	NA	NA	NA	7.63	NA	Measurement of alkalinity/acidity (Neutral = 7.0)
Trichloroacetic Acid (ppb)	2023	NA	NA	NA	NA	25.4	ND-43	NA	NA	By-product of drinking water disinfection

<sup>1</sup> Wells 6, 9, and 10 sampled in 2022; Wells 7 and 8 sampled in 2020.
<sup>2</sup> Wells 6, 7, 8, and 9 sampled in 2006; Well 10 sampled in 2018.
<sup>3</sup> Wells 7 and 8 sampled in 2020; Wells 6, 9, and 10 sampled in 2022.
<sup>4</sup> Lead and copper monitoring is required every three years. Monitoring will occur next in 2024.

#### What's a Cross-Connection?

Cross-connections that contaminate drinking water distribution lines are a major concern. A crossconnection is formed at any point where a drinking water line connects to equipment (boilers), systems containing chemicals (air-conditioning systems, fire sprinkler systems, irrigation systems), or water sources of questionable quality. Cross-connection contamination can occur when the pressure in the equipment or system is greater than the pressure inside the drinking water line (backpressure). Contamination can also occur when the pressure in the drinking water line drops due to fairly routine occurrences (main breaks, heavy water demand), causing contaminants to be sucked out from the equipment and into the drinking water line (backsiphonage).

Outside water taps and garden hoses tend to be the most common sources of cross-connection contamination at home. The garden hose creates a hazard when submerged in a swimming pool or attached to a chemical sprayer for weed killing. Garden hoses that are left lying on the ground may be contaminated by fertilizers, cesspools, or garden chemicals. Improperly installed valves in your toilet could also be a source of cross-connection contamination.

Community water supplies are continuously jeopardized by cross-connections unless appropriate valves, known as backflow prevention devices, are installed and maintained. We have surveyed industrial, commercial, and institutional facilities in the service area to make sure that potential cross-connections are identified and eliminated or protected by a backflow preventer. We also inspect and test backflow preventers to make sure that they provide maximum protection. For more information on backflow prevention, contact the Safe Drinking Water Hotline at (800) 426-4791. <sup>5</sup>Unregulated contaminant monitoring helps U.S. EPA and the SWRCB determine where certain contaminants occur and whether the contaminants need to be regulated.

<sup>6</sup> Wells 6, 8, and 10 sampled in 2023; Well 7 sampled in 2022.

#### FOG (Fats, Oils, and Grease)

You may not be aware of it, but every time you pour fat, oil, or grease (FOG) down your sink (e.g., bacon grease), you are contributing to a costly problem in the sewer collection system. FOG coats the inner walls of the plumbing in your house as well as the walls of underground piping throughout the community. Over time, these greasy materials build up and form blockages in pipes, which can lead to wastewater backing up into parks, yards, streets, and storm drains. These backups allow FOG to contaminate local waters, including drinking water. Exposure to untreated wastewater is a public health hazard. FOG discharged into septic systems and drain fields can also cause malfunctions, resulting in more frequent tank pump-outs and other expenses.

Communities spend billions of dollars every year to unplug or replace grease-blocked pipes, repair pump stations, and clean up costly and illegal wastewater spills. Here are some tips that you and your family can follow to help maintain a well-run system now and in the future.

#### **NEVER:**

Pour FOG down the house or storm drains.

Dispose of food scraps by flushing them.

Use the toilet as a wastebasket.

#### **ALWAYS:**

Scrape and collect FOG into a waste container such as an empty coffee can, and dispose of it with your garbage.

Place food scraps in waste containers or garbage bags for disposal with solid wastes.

Place a wastebasket in each bathroom for solid wastes like disposable diapers, creams and lotions, and personal hygiene products, including nonbiodegradable wipes.

## 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.

pCi/L (picocuries per liter): A measure of radioactivity.

**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 (μg/L) (parts per billion):** One part substance per billion parts water (or micrograms per liter).

**ppm (mg/L) (parts per million):** One part substance per million parts water (or milligrams per liter).

**ppt (ng/L) (parts per trillion):** One part substance per trillion parts water (or nanograms per liter).

 $\mu$ S/cm (microsiemens per centimeter): A unit expressing the amount of electrical conductivity of a solution.