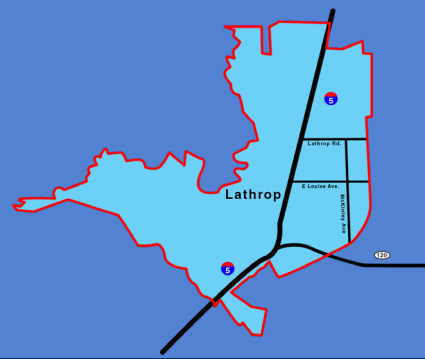


Water Update 2017



A summary of how the City of Lathrop is meeting or exceeding all EPA and State drinking water health standards

2017

Drinking Water Consumer Confidence Report

For additional information about your water, or to answer any questions about this report, please contact Greg Gibson, Senior Civil Engineer at the City of Lathrop (209) 941-7200.

This report contains important information about your drinking water. Translate it, or speak with someone who understands it.

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



Water Conservation Measures

On November 6, 2017 amendments to the City's water conservation ordinance were adopted to be consistent with State mandates, the City of Lathrop's Urban Water Management Plan 2015 update (UWMP 2015) and associated Water Shortage Contingency Plan. Information on the City's amended water conservation measures and the City's UWMP 2015 is available on the City's website at: <http://www.ci.lathrop.ca.us/lathrop/pwd/UWMPandWaterConservation.aspx>

Capital Improvement Projects

Every year, the City of Lathrop Public Works Department implements numerous projects and programs to deliver safe, pure, clean water to your faucet. Here is a summary of some of the projects the City has recently completed or have planned for the near future for the City's water system:

PW 17-04 Louise Avenue Water Treatment Facility (LAWTF) Solids Handling Improvements (Est. Cost = \$350,000)

Solids Handling Improvements to install drying beds to better facilitate sludge dewatering and disposal at the LAWTF. These improvements will reduce operation and maintenance costs and eliminate the need for disposal of the dewatered solids at a hazardous waste landfill.

PW 08-09 Well 21 Improvements (Est. Cost = \$2.3M)

The Well 21 Improvements project is needed to meet compliance with drinking water standards for arsenic and uranium and to complete regulatory permitting requirements for Well 21.

PW 10-10 Integrated Water Resources Master Plan Update (Est. Cost = \$572,000)

Periodic updates to the City's Water Resources Master Plan are needed for effective planning and management of the City's water, wastewater and recycled water systems.

The IWRMP is used to plan future capital improvement projects and serves as the basis for regulatory compliance documents and as the planning document used to provide water resources infrastructure needed for the City to develop according to its General Plan.

PW 18-04 Citywide Water System Repairs (Est. Cost = \$150,000)

This project is for the replacement and repairs of deficiencies in the City's water network. Approximately 8 water valves have been identified throughout the City which are in need of cleaning, repair or replacement.

PW 13-08 Water Meter Improvements (Cost = \$1,282,167)

This project is for the replacement of water meters that are obsolete and no longer producing accurate readings with new meters and endpoints that include automated meter reading capabilities. The new replacement meters increase the accuracy of metered water consumption and helps Staff assist customers with questions on their water bills and consumption.

Regulatory Compliance Programs

PW 16-04 Sustainable Groundwater Management Act Compliance (Est. Cost = \$295,000)

The Sustainable Groundwater Management Act (SGMA) was signed into law in 2014 to provide a framework for sustainable, local groundwater management in California. The legislation requires the City to form a Groundwater Sustainability Agency by 2017 and to develop a Groundwater Sustainability Plan by 2020.

PW 10-09 Urban Water Management Plan Implementation (Est. Cost = \$693,748)

The Urban Water Management Planning Act requires urban water suppliers to prepare an Urban Water Management Plan (UWMP) to describe and evaluate sources of water supply, efficient uses of water, demand management measures, implementation strategy and schedule, and other relevant information and programs. The UWMP needs to be updated every five years in accordance with Guidelines published by the Department of Water Resources.

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. More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. U.S. EPA/Centers for Disease Control (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 (1-800-426-4791)**.

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, radio-active material, and can pick up substances resulting from the presence of animals or from human activity.

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 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, 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; 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 (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 State Board regulations also establish limits for contaminants in bottled water that 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. The City of Lathrop 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/lead>. 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 (SWRCB-DDW) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

Definitions

Maximum Contaminant Level (MCL)

The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the Public Health Goal 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.

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.

Primary Drinking Water Standard (PDWS)

MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Regulatory Action Level (AL)

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

*** Information for Arsenic below MCL of 10 ppb but above 5 ppb (or 50% of the MCL):**

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 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 is linked to other health effects such as skin damage and circulatory problems.

**** Information for Nitrate above 5 ppm (50% of the MCL), but below 10 ppm (the MCL):**

Nitrate in drinking water at levels above 10 ppm 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 above 10 ppm 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.

***** Information for Odor over MCL of 3 Units:**

SSJID supplies the City of Lathrop with Surface Water. The result for Odor of the SSJID Surface Water was measured at 4 Units and includes the detection of odor coming from the chlorine present as part of SSJID's surface water treatment process. Odor is an aesthetic standard and does not present a health concern.

2017 Water Quality Report

Water Sources: The water supplied to you by the City of Lathrop includes ground-water from 5 wells that are treated at the City's Louise Avenue Water Treatment Facility and surface water that is treated and delivered by South San Joaquin Irrigation District (SSJID) to the City's water service area.

GROUNDWATER						SURFACE WATER			Water quality data based on data years 2010 to 2017	
Constituent	Units	MCL	PHG (MCLG)	Range	AVG	Range	AVG	Typical Sources		
PRIMARY DRINKING WATER STANDARDS: Mandatory Health-Related Standards by State Water Resources Control Board, Division of Drinking Water.										
MICROBIOLOGICAL CONTAMINANTS (Note: The following results are reported for the City's Service Area)										
Total Coliform Bacteria	#Tests	>5% or 1	(0)	0 out of 303	0%	0 out of 10	0%	Naturally present in the environment	Abbreviations µS/cm: Specific Conductance Units LI: Langelier Index mo: Monitored Only n/a: Not Applicable ND: Non Detectable Ntu: Turbidity Units pCi/L: picocuries per liter (a measure of radiation) ppb: parts per billion or micrograms per liter (ug/L) ppm: parts per million or milligrams per liter (mg/L)	
RADIOACTIVE CONTAMINANTS										
Gross Alpha particle activity	pCi/L	15	(0)	3.0 - 9.6	6.3			Erosion of natural deposits		
Gross Beta particle activity	pCi/L	50	(0)	ND - 5.2	1.9			Decay of natural and man-made deposits		
Uranium	pCi/L	20	0.43	ND - 8.0	4.3			Erosion of natural deposits		
INORGANIC CHEMICALS										
Aluminum	ppm	1	0.6	ND	ND		ND	Erosion of natural deposits; residual from surface water treatment processes		
Arsenic	ppb	10	0.004	6.2 - 9.1	7.7 *		ND	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes		
Barium	ppm	1	2	0.22 - 0.33	0.28		ND	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits		
Chromium (Total Cr)	ppb	50	(100)	ND - 3.8	2.7		ND	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits		
Fluoride	ppm	2	1	0.11 - 0.13	0.12		ND	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories		
Nitrate (as N)	ppm	10	10	2.9 - 5.7 **	4.0		ND	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits		
Nitrite (as N)	ppm	1	1	ND	ND		ND	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits		
DISINFECTION BYPRODUCTS, DISINFECTANT RESIDUALS, AND DISINFECTION BYPRODUCT PRECURSORS (Note: The following results are reported for the City's Service Area)										
TTHMs (Total Trihalomethanes)	ppb	80	n/a	9.2 - 57	32		42	By-product of drinking water chlorination		
Haloacetic Acids	ppb	60	n/a	ND - 36	12			By-product of drinking water disinfection		
Chlorine	ppm	4	4	0.21 - 1.16	0.6	0.6 - 1.1	0.84	Drinking water disinfectant added for treatment		
SECONDARY STANDARDS: Aesthetic Standards Established by State Water Resources Control Board, Division of Drinking Water.										
Aluminum	ppb	200	n/a	ND	ND		ND	Erosion of natural deposits; residual from some surface water treatment processes		
Chloride	ppm	500	n/a	27 - 82	59		3.3	Runoff/leaching from natural deposits; seawater influence		
Color	Units	15	n/a	ND	ND		ND	Naturally-occurring organic materials		
Corrosivity (Langelier Index @ 60 C)	LI	Non-corrosive	n/a	0.78 - 0.9	0.9			Natural or industrial influenced balance		
Iron	ppb	300	n/a	ND	ND		ND	Leaching from natural deposits; industrial wastes		
Manganese	ppb	50	n/a	ND - 28	5		ND	Leaching from natural deposits		
Odor	Units	3	n/a	1	1		4 ***	Naturally-occurring organic materials		
Specific Conductance	µS/cm	1,600	n/a	500 - 700	610		112	Substances that form ions when in water; seawater influenced		
Sulfate	ppm	500	n/a	15 - 27	21		3.9	Runoff/leaching from natural deposits; industrial wastes		
Total Dissolved Solids (TDS)	ppm	1,000	n/a	320 - 430	382		42	Runoff/leaching from natural deposits		
Turbidity	ntu	5	n/a	ND - 0.22	0.06		ND	Soil runoff		
ADDITIONAL CONSTITUENTS ANALYZED										
Bicarbonate	ppm	mo	n/a	210 - 270	224		76	Naturally present in the environment		
Calcium	ppm	mo	n/a	47 - 68	60		22	Naturally present in the environment		
Hardness (as CaCO3)	ppm [grains]	mo	n/a	160 - 240	212 [12.5]		77 [4.5]	Erosion of natural deposits		
Magnesium	ppm	mo	n/a	11 - 17	15		3.4	Naturally present in the environment		
pH	Units	mo	n/a	7.2 - 7.4	7.3		7.3	Measurement of acidity (Neutral= 7.0)		
Potassium	ppm	mo	n/a	3.8 - 4.4	4.2		ND	Naturally present in the environment		
Sodium	ppm	mo	n/a	48 - 54	50		5	Erosion of natural deposits		
Total Alkalinity	ppm	mo	n/a	170 - 220	183		62	Measurement of water to neutralize acids		
SERVICE AREA										
CONSTITUENT	UNITS	AL	PHG (MCLG)	SAMPLES COLLECTED	90% LEVEL DETECTED	NO. OF SITES EXCEEDING AL	TYPICAL SOURCES			
Lead	ppb	15	0.2	31	0	0	Internal corrosion of household plumbing systems; discharges from industrial manufactures; erosion of natural deposits			
Copper	ppm	1.3	0.3	31	0.22	0	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives			