

PWS ID #: 2410004

PERFORMED IN 2017
WATER TESTING

ANNUAL WATER QUALITY REPORT

Presented By
City of Livingston



Quality First

Once again, we are pleased to present our annual water quality report. As in years past, we are committed to delivering the best-quality drinking water possible. To that end, we remain vigilant in meeting the challenges of new regulations, source water protection, water conservation, and community outreach and education while continuing to serve the needs of all our water users. Thank you for allowing us the opportunity to serve you and your family.

We encourage you to share your thoughts with us on the information contained in this report. After all, well-informed customers are our best allies.

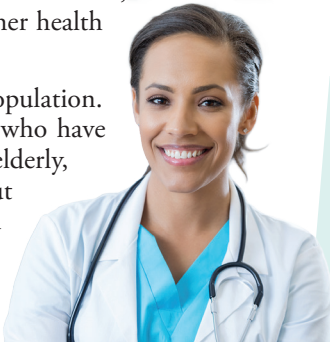
Community Participation

You are invited to participate in our public forum and address the City Council about your concerns about drinking water. The City Council meets every first and third Tuesday of the month beginning at 7:00 p.m. in the City Council Chambers at 1416 "C" Street, Livingston, CA 95334. You may also visit the City of Livingston on the Internet at www.livingstoncity.com for more information, or contact City staff directly by phone at (209) 394-8044 x130.

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. 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 is 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/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>.



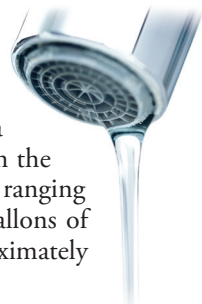
Where Does My Water Come From?

The City of Livingston currently utilizes local ground water as its sole source of supply. The City's municipal water system extracts its water supply from underground aquifers via ground water wells located throughout the City. The City's water system facilities include nine active ground water wells, a 1.0 million gallon (MG) potable water storage tank, and a distribution system. Water is conveyed from the wells to our customers via the distribution system, which consists of nearly 40 miles of pressurized pipes, ranging in size from 2 to 16 inches in diameter. For 2017, the City of Livingston delivered 2,037,492,241 gallons of water, with up to 215 million gallons in a single month, or more than 7 million gallons per day to approximately 3,100 residential, commercial, and industrial customers.

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 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 or at www.epa.gov/lead.

Water treatment is a complex, time-consuming process.



Water Conservation Tips

You can play a role in conserving water and saving yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water-using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call the City of Livingston Water Division Superintendent, Mr. Tony Avina, at (209) 394-8044 x130, or City Manager, Mr. Jose Antonio Ramirez, at (209) 394-8041 x113.

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 regulates 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. Inorganic contaminants, such as salts and metals, which 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, which 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, which 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.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.
ਇਹ ਸੂਚਨਾ ਮਹੱਤਵਪੂਰਣ ਹੈ।
ਕਿ੍ਰਆ ਕਰਕੇ ਕਿਸੀ ਤੋਂ ਇਸ ਦਾ ਅਨਵਾਦ ਕਰਾਉ।

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City of Livingston
1416 "C" Street
Livingston, CA 95334

Test Results

Our water is monitored for many different kinds of contaminants on a very strict sampling schedule. The information below represents only those substances that were detected; 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 participated in the 3rd stage of the EPA's Unregulated Contaminant Monitoring Rule (UCMR3) program by performing additional tests on our drinking water. UCMR3 benefits the environment and public health by providing the EPA with data on the occurrence of contaminants suspected to be in drinking water, to determine if the EPA needs to introduce new regulatory standards to improve drinking water quality. Contact us for more information on this program.

REGULATED SUBSTANCES									
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG [MCLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE		
Arsenic (ppb)	2017	10	0.004	9	<2–23	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes	No	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Barium (ppm)	2017	1	2	<0.1	<0.1–0.3	No	Drinking water disinfectant added for treatment	No	Drinking water disinfectant added for treatment
Chlorine (ppm)	2017	[4.0 (as Cl2)]	[4 (as Cl2)]	<0.1	<0.1–1.3	No	Banned nematocide that may still be present in soils due to runoff/leaching from former use on soybeans, cotton, vineyards, tomatoes, and tree fruit	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Dibromochloropropane [DBCP] (ppt)	2017	200	1.7	<21	<10–190	No	Erosion of natural deposits; that may still be present in soils due to runoff/leaching from former use on soybeans, cotton, vineyards, tomatoes, and tree fruit	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Fluoride (ppm)	2017	2.0	1	<0.1	<0.1–0.1	No	Erosion of natural deposits	No	Erosion of natural deposits
Gross Alpha Particle Activity (pCi/L)	2017	15	(0)	<3	<3–6	No	Erosion of natural deposits	No	Erosion of natural deposits
Haloacetic Acids (ppb)	2017	60	NA	<2	<2–2	No	By-product of drinking water disinfection	No	By-product of drinking water disinfection
Hexavalent Chromium (ppb)	2014	10	0.02	<1	1–1	No	Discharge from electroplating factories; leather tanneries; wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits	No	Discharge from electroplating factories; leather tanneries; wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits
Nitrate [as nitrogen] (ppm)	2017	10	10	3	<0.4–9	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewages; erosion of natural deposits	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewages; erosion of natural deposits
THMs [Total Trihalomethanes] (ppb)	2017	80	NA	<1	2–11	No	By-product of drinking water disinfection	No	By-product of drinking water disinfection
Uranium (pCi/L)	2017	20	0.43	<1	<1–9	No	Erosion of natural deposits	No	Erosion of natural deposits
Tap water samples were collected for lead and copper analyses from sample sites throughout the community									
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL (MCLG)	PHG DETECTED (90TH%TILE)	AMOUNT DETECTED	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE	Copper (ppm)	Lead (ppb)
Copper (ppm)	2016	1.3	0.3	<0.05	0/30	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	2016	2016
Lead (ppb)	2016	15	0.2	<5	0/30	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits	2016	2016

SECONDARY SUBSTANCES									
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL (MCLG)	PHG DETECTED	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE	Chloride (ppm)	Manganese (ppb)
	2017	500	NS	38	5–81	No	Runoff/leaching from natural deposits; seawater influence	2017	2017
	2017	50	NS	27	<20–69	No	Leaching from natural deposits	2017	2017
	2017	1,600	NS	391	317–528	No	Substances that form ions when in water; seawater influence	2017	2017
	2017	500	NS	14	4–41	No	Runoff/leaching from natural deposits; industrial wastes	2017	2017
	2017	1,000	NS	287	134–366	No	Runoff/leaching from natural deposits	2017	2017
	2017	5	NS	0.2	<0.1–2.1	No	Soil runoff	2017	2017
	2017	166	106–248				Naturally occurring	2017	2017
	2017	63	40–90				Salt present in the water and is generally naturally occurring	2017	2017

UNREGULATED CONTAMINANT MONITORING RULE - PART 3 (UCMR3)									
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE	1,2,3-Trichloropropane (ppb)	2016	0.01	0.01–0.8	Discharge from industrial and agricultural chemical factories; leaching from hazardous waste sites; cleaning and maintenance solvent, paint and varnish remover, and degreasing agents; byproduct from production of other compounds and pesticides
	2016	0.01	0.01–0.8	Discharge from industrial and agricultural chemical factories; leaching from hazardous waste sites; cleaning and maintenance solvent, paint and varnish remover, and degreasing agents; byproduct from production of other compounds and pesticides	Hardness (ppm)	2017	166	106–248	Naturally occurring
	2017	63	40–90	Salt present in the water and is generally naturally occurring	Sodium (ppm)	2017	63	40–90	Salt present in the water and is generally naturally occurring

A Drinking Water Source Assessment was completed for the City of Livingston wells by the California Department of Public Health - Merced District in September 2002. The City's sources are considered most vulnerable to the following activities associated with contaminants detected in the water supply: parks, chemical/petroleum pipelines, lagoons/liquid wastes, machine shops, wastewater treatment plants, hardwre/umber/parts stores, crops, irrigated (berries, hops, orchards, sod, greenhouses), fertilizer/pesticide/herbicide application, and condominiums, crops, non-irrigated (e.g., Christmas trees, grass seeds, hay), sewer collection systems, automobile - body shops, repair shops, fleet/truck/bus terminals, RV/mini storage, and schools. The sources are also considered most vulnerable to the following activities not associated with any detected contaminants: automobiles - gas stations, historic gas stations, dry cleaners, injection wells/dry wells/sumps, septic systems - low density (<1/acre), wells - agricultural/irrigation, and agricultural drainage.

A Drinking Water Source Assessment is available at our office. This plan is an assessment of the delineated area around our listed sources through which contaminants, if present, could migrate and reach our source water. It also includes an inventory of potential sources of contamination within the delineated area and determination of the water supply's susceptibility to contamination by the identified potential sources.

If you would like to review the Drinking Water Source Assessment, please feel free to contact our office at 1416 “C” Street, Livingston, California 95334 or by phone at (209) 394-8044 during regular business hours.



Source Water Assessment

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH
1,2,3-Trichloropropane (ppb)	2014	0.03	0.03–0.6
Chlorate (ppb)	2014	<20	<20–170
Chromium [Total] (ppm)	2014	<0.2	<0.2–<1
Molybdenum (ppb)	2014	2	2–11
Strontium (ppb)	2014	210	210–240
Vanadium (ppb)	2014	<0.2	<0.2–18

Definitions

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

A unit expressing the amount of electrical conductivity of a solution.

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 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

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.

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

PDWS (Primary Drinking Water Standard): MCLs and MRDLs for contaminants that affect health 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).

ppt (parts per trillion): One part substance per trillion parts water (or nanograms per liter).

BY THE NUMBERS

The number of gallons of water produced daily by public water systems in the U.S. **34 BILLION**

The number of miles of drinking water distribution mains in the U.S. **1 MILLION**

The amount of money spent annually on maintaining the public water infrastructure in the U.S. **135 BILLION**

The number of Americans who receive water from a public water system. **300 MILLION**

The age in years of the world's oldest water found in a mine at a depth of nearly two miles. **2 BILLION**