2020 Water Quality Report

The City of Lompoc Water Division is proud to present this information on drinking water quality testing performed in 2020. As in past years, our tap water met all United States Environmental Protection Agency and California State drinking water health standards. Detailed results are in the tables on the back page.

Through the tumultuous year of 2020, the Water Treatment Plant was able to provide consistent service, maintaining full staffing for treatment, maintenance and distribution. We are dedicated to providing clear, safe, good tasting water every time you turn on the tap. Call 805-736-1617 for questions, comments or leak reports.

Lompoc continues to work with other local water users in a group called the Western Management Area Groundwater Sustainability Agency. A management plan is being developed to balance levels of groundwater pumping with recharge. It will list sustainability goals, measurable objectives, minimum thresholds, undesirable results and monitoring networks. Public review and comments are invited. For more information, meeting announcements and draft documents, visit Santa Ynez River Valley Groundwater Basin (santaynezwater.org) or call 805-693-1156 ext. 403.

Para Información en Español

Este informe contiene información muy importante sobre su agua potable. Esta disponible en el Ayuntamiento y https://www.cityoflompoc.com/home/showpublisheddocument?id=24946

Lompoc's Water Sources and Treatment

The City of Lompoc's source of supply is from ten groundwater wells. The annual production of clean drinking water for the City in 2019 was 1.3 billion gallons or 3.6 million gallons per day (MGD). The Lompoc Water Treatment Plant uses a conventional treatment process that includes disinfection, coagulation, flocculation, sedimentation, and filtration. Originally constructed in 1964, with some enhancements and additions of filters, our production capability is approximately 10 MGD.

A few customers in Miguelito Canyon, including Santa Barbara County Miguelito Park, receive treated surface water from the Frick Springs treatment plant operated by the City of Lompoc. The water is collected from seven springs located in the upper hills of Miguelito Canyon and is treated using diatomaceous earth (DE) filtration and chlorine disinfection. Frick Springs water treatment plant must comply with the Surface Water Treatment Rule (SWTR). The annual production for Frick Springs was 3.1 million gallons, with a daily average of 8,500 gallons.

Water Management and Planning

The 2015 Urban Water Management Plan outlines objectives to maintain a sustainable, reliable, high-quality water supply for the long term. It is available on the City website at:

http://www1.cityoflompoc.com/utilities/water/UWMP2015.pdf

A sanitary survey was completed in 2019 to identify any health concerns related to the water system and to assess the overall construction, operation, maintenance, and management of the water system. The State Water Resources Control Board conducted a site inspection of the water sources, treatment facilities, storage reservoirs and pump stations. A review was also conducted of the distribution system, routine monitoring and reporting to the Department of Drinking Water, water system management and operations, and operator compliance with state requirements.

Source water assessments for wells one through nine and Frick Springs were completed in 2002 and well eleven in 2012. The City's water sources are considered most vulnerable to the following: sewer collection systems, storm water drainage points, high density housing, gas stations, auto-body and boat repair shops, dry cleaners, agricultural runoff, agricultural wells and low density septic systems.

Frick Springs is most vulnerable to animal grazing, feeding and manure piles, low density septic systems, wild animals and insects.

Information from the sanitary survey and source water assessments can be obtained by calling the Water Treatment Plant at 805-736-1617.

Protecting our Ground Water

You can help protect our ground water by bringing oil, paint, cleaners, pesticides, batteries and medicines to Lompoc's Household Hazardous Waste Collection Facility at 1585 North V Street. Appointments are available Tuesday through Saturday by calling the Solid Waste Division at 805-875-8024.

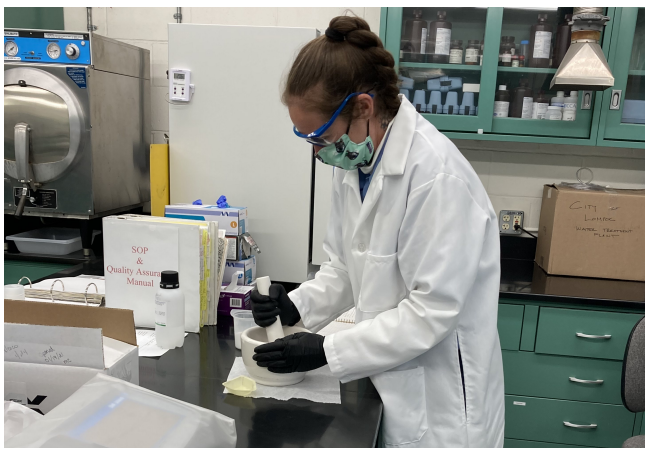
Community Participation

Included in the oversight of the Water Division are the City Council and Utility Commission. The Lompoc City Council meets the first and third Tuesdays of each month at 6:30 p.m. Remote participation is encouraged. Meetings are live streamed at www.cityoflompoc.com, aired on KPEG 100.9 FM radio and broadcast on TAP TV channel 23. Submit public comments to s_haddon@ci.lompoc.ca.us by 4:00 before meeting.

Please see https://www.cityoflompoc.com/government/committees-boards/utility-commission for updates on Utility Commission meetings, usually held on the second Monday of the month in Council Chambers, starting at 5:00 p.m. Meetings may be postponed due to COVID19 health guidelines.

Information Flows on the Website

To view this Consumer Confidence Report (CCR) online, please visit the following web sites:
English version:
https://www.cityoflompoc.com/home/showpublisheddocument?id=23811
Spanish version:
https://www.cityoflompoc.com/home/showpublisheddocument?id=24946
Hard copies will be available in English and Spanish at Lompoc City Hall, the Lompoc Library, Dick DeWees Community and Senior Center, Aquatic Center, Anderson Recreation Center and Lompoc Water Treatment Plant. For questions or to receive a copy in the mail, call Mimi Erland at 805-736-1617.



Water Testing

The Water Treatment Plant has two laboratory analysts to insure Lompoc's water meets all state and federal standards. They perform a number of chemical and bacterial analyses and calibrate water-monitoring sensors.

An important duty is collecting weekly samples throughout town to test for chlorine residual and coliform bacteria. Chlorine is important because it kills bacteria and viruses. The presence of coliforms would let us know if the system had contamination.

Copper and Lead

Every three years, the Water Division tests for copper and lead from homes determined to be at a higher risk. All of the homes tested below action levels for both copper and lead in the 2019 study. The next testing will be July, 2022.

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 Water Division 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 thirty 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 (1-800-426-4791) or at http://www.epa.gov/lead.

Important Notice for Sensitive Populations

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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the U.S. Environmental Protection Agency (USEPA) 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 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 can be particularly at risk for 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 microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Around the Clock Dedication

Five certified operators work varying shifts to keep the water softening process flowing smoothly 24 hours per day, 365 days per year. The operator on duty chooses a combination of wells to place in service and the volume to pump from each to meet the public's needs for the day. They control the addition of lime, sodium hydroxide and polymer that induce the clumping of contaminants into flock particles that drop to the bottom of the clarifiers for removal.

Operators monitor treatment with sensors placed throughout the plant and by collecting water samples from various points in the system to track pH, alkalinity, hardness, turbidity (clarity) and chlorine levels.

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. 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 storm water 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 storm water runoff, and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, agricultural application, and septic systems.

Radioactive contaminants can be naturally-occurring or be the result of oil and gas production and mining activities.

Regulated Limits

In order to ensure that tap water is safe to drink, the USEPA and the California State Water Resources Control Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

2020 Sampling Results

PWS ID# CA4210006

During the past year we have taken hundreds of water samples in order to determine the presence of any biological, inorganic, volatile organic, synthetic organic or radioactive contaminants. The tables below show only those contaminants that were detected in the water. The State Water Board allows us to monitor for certain contaminants less than once per year because their concentrations do not change frequently. In these cases, the most recent sample data is included, along with the year in which the sample was taken.

Terms Used in this Report

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 Public Health Goals (or MCLGs) as is economically and technologically feasible. Secondary MCLs (**SMCL**) 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 United States Environmental Protection Agency (USEPA).

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 detectable at testing limit

NS: no standard is set at this time

NTU: Nephelometric Turbidity Units. A measure of the clarity of water.

pCi/L: picocuries per liter. A measure of radiation.

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 Environmental Protection Agency.

ppb: parts per billion or micrograms per liter (µg/L)

ppm: parts per million or milligrams per liter (mg/L)

Primary Drinking Water Standards (PDWS): maximum levels and maximum level goals for contaminants that affect health along with their monitoring, reporting and water treatment requirements.

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

µS/cm: micro Siemens per centimeter. A measure of the electrical conductivity of a solution.

Primary Drinking Water Standards

	Unit	MCL	PHG	City of Lompoc Average	City of Lompoc Range	Frick Springs Average	Frick Springs Range	Typical Source
Arsenic	ppb	10	0.004	2.91	ND — 5	4	NA	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Cadmium	ppb	5	0.04	ND	NA	0.4	NA	Internal corrosion of galvanized pipes; erosion of natural deposits; discharge from electroplating and industrial chemical factories, and metal refineries; runoff from waste batteries and paints
Chlorine (as CL2)	ppm	MRDL = 4.0	MRDLG = 4	1.6	1.35 — 1.75	1.52	0.68 — 1.85	Drinking water disinfectant added for treatment
Chromium (Total)	ppb	50		0.63	ND — 3	ND	NA	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Fluoride	ppm	2.0		0.35	0.2— 0.5	0.2	NA	Erosion of natural deposits; discharge from fertilizer and aluminum factories
Gross Alpha Particles	pCi/L	15	0	2.78	1.05 — 6.17	3.22	NA	Erosion of natural deposits (testing performed on wells and spring influent 2008-2017)
Nickle	ppb	100	12	1.88	1 — 3	5	NA	Erosion of natural deposits; discharge from metal factories
Nitrate (as Nitrogen)	ppm	10	10	ND	NA	0.1	NA	Leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Selenium	ppb	50	30	12	NA	10	NA	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive)
Total Coliform Bacteria	% positive samples	More than 5% positive monthly	0	1	ND — 1	ND	NA	Naturally present in the environment
Uranium	pCi/L	20	0.43	2.27	1.44 —3.1	NA	NA	Erosion of natural deposits (testing performed on wells and spring influent 2008-2017)

Stage 2 Disinfection By-Products

	Unit	MCL	PHG	City of Lompoc Average	City of Lompoc Range	Frick Springs Average	Frick Springs Range	Typical Source
Haloacetic Acids (HAAs)	ppb	60	NA	1	ND — 1	5	NA	By-product of drinking water disinfection
Trihalomethanes (TTHMs)	ppb	80	NA	4.5	4 — 5	18	NA	By-product of drinking water disinfection

Secondary Drinking Water Standards

	Unit	SMCL	PHG	City of Lompoc Average	City of Lompoc Range	Frick Springs Average	Frick Springs Range	Typical Source
Chloride	ppm	500	NS	104	95—112	53	NA	Runoff/leaching from natural deposits; seawater influence
Manganese	ppb	50	NS	ND	NA	ND	NA	Leaching from natural deposits
Specific Conductance	µS/cm	1600	NS	1215	1085—1363	943	NA	Substances that form ions when in water; seawater influence
Sulfate	ppm	500	NS	422	378—461	76.8	NA	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids	ppm	1,000	NS	836	764—950	550	NA	Runoff/leaching from natural deposits
Turbidity	NTU	5	NS	0.08	0.04—0.21	0.05	0.02—0.38	Soil runoff. A measure of the cloudiness of the water. High turbidity can hinder disinfection.

Unregulated Substances

	Unit	Notification level	PHG	City of Lompoc Average	City of Lompoc Range	Frick Springs Average	Frick Springs Range	Typical Source, Health Effects
pH	units	NS	NS	8.42	7.87—8.82	7.45	7.33—7.57	pH is raised to aid in treatment and help prevent pipe corrosion
Sodium	ppm	NS	NS	146	126—172	42	NA	Leaching from natural deposits; disinfection and softening processes add sodium to the water. Consumers on sodium-restricted diets may wish to consult with their physicians.
Hardness as $CaCO_3$	ppm	NS	NS	301	274—355	389	NA	Leaching from natural deposits
Vanadium	ppb	50	NS	ND	NA	15	NA	Naturally occurring. The babies of some pregnant women who drink water containing Vanadium in excess of the 50 ppb notification level may have an increased risk of developmental effects.

2019 Copper and Lead Study - 37 Samples were collected from homeowners in August of 2019. Testing is every 3 years, so next testing is summer of 2022.

	Unit	Action Level	PHG	90 %	Sites Exceeding Action Level	Typical Source
Copper	ppm	1.3	0.3	< 0.05 (ND)	0	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	ppb	15	.02	< 0.05 (ND)	0	Internal corrosion of household plumbing systems; industrial manufacturing discharges; erosion of natural deposits

Unregulated Contaminant Monitoring Rule Part 4 Study (UCMR4) 2018-2019 (EPA designated certain tests for specific sites, so not all sites were tested for each contaminant)

	Unit	Minimum Reporting Level	City of Lompoc Raw	City of Lompoc Treated	City of Lompoc SS #3	City of Lompoc SS #16	City of Lompoc Range	Frick Springs Raw	Frick Springs Treated	Frick Springs SS #1	Frick Springs Range	Health Concerns
Cyanotoxins (2018)	ppb	0.3						ND		NA	NA	Under warm conditions they can produce algal blooms that can release toxins
Germanium	ppb	0.30							0.55		0.50— 0.59	
Manganese	ppb	0.40		1.2			1.0—1.4					Essential trace element, but high levels can stain laundry and cooking utensils
Bromide	ppb	5.0	300				290—310	175			170—190	Once used as sleep aid, but banned due to skin, thyroid, liver and kidney damage
Total Organic Carbon	ppm	0.30	2.25				2.2—2.3	1.1			0.8—1.6	May react with disinfectants to produce potentially toxic and carcinogenic compounds
Total HAA5	ppb	0.20			2.9	2.3	1.4—3.2			4.8	4.3—5.2	Disinfection byproduct. May be potentially toxic and carcinogenic
Total HAA6BR	ppb	0.20			1.2	1.2	0.87—1.6			11.6	9.6—14	Disinfection byproduct. May be potentially toxic and carcinogenic
Total HAA9	ppb	0.20			3.7	3.0	1.8—4.1			14.3	11—18	Disinfection byproduct. May be potentially toxic and carcinogenic
Tribromoacetic acid	ppb	2.0								4.5	3.8—4.8	Disinfection byproduct. May be potentially toxic and carcinogenic