

City of Los Banos 2020 Drinking Water Consumer Confidence Report

This report contains important information on your drinking water.

Este informe contiene información muy importante sobre su agua potable. Para una versión en español ir al www.LosBanos.org, menú de Enlaces Rápidos (Quick Links), Documentos de Public Works (Documents of Public Works). Usted también puede obtener una copia en la oficina principal del Departamento de Public Works, ubicado en el 411 Madison Avenue.

The information gathered here is compiled from the testing of all drinking water sources, which the City of Los Banos uses to provide potable drinking water to your homes and businesses. During the 2020 Calendar Year, your tap water was tested for all regulated Primary Maximum Contaminant Levels for EPA and State testing requirements for drinking water. The water system did exceed in one well the Secondary Contaminant Level for MTBE, which will be explained later in the report. This report includes information regarding where your water comes from, what it contains, and how it compares to State water quality standards. We are committed to providing you with information because informed customers are our best allies. Listed in the tables of this report are the contaminants found in your drinking water. If you would like additional water quality information or have any questions regarding the information covered in this report, you may contact the Public Works Department or Randy Williamson, Water Quality Specialist at (209) 827-7056.

As a resident, you may participate in decisions that affect drinking water quality. City Council meetings are scheduled at 7:00 P.M. on the first and third Wednesdays of each month. City Council meetings are open to the public, and are televised on Cable Channel 96 and available on the internet at www.LosBanos.org . For more information, call (209) 827-7056.

WHERE YOUR DRINKING WATER COMES FROM

The City of Los Banos owns and operates thirteen approved groundwater production wells that work in conjunction with each other to provide adequate pressure and volume to your location. These groundwater extraction wells draw water at various depths from water producing zones called “Aquifers.” Clay layers separate each of the zones. These wells are located in and around the City Limits at various locations. The City owns the land immediately around these wells and restricts any activity that could contaminate them.

A Source Water Assessment was conducted for the active water supply wells of the City of Los Banos Water System in December 2001. The sources are considered most vulnerable to the following activities associated with contaminants detected in the water supply:

Agricultural Drainage	Fleet/Truck/Bus Terminals	Rental Yards
Apartments & Condominiums	Food Processing	Hardware/Lumber Yards/Parts Stores
Automobile Body Shops	Housing (high density)	RV/Mini Storage
Automobile Car Washes	Machine Shops	Historic Gas Stations
Automobile Gas Stations	Medical/Dental Offices/Clinics	Septic Systems (Low Density)
Automobile repair Shops	Office Buildings/Complexes	Septic Systems (High Density)
Chemical/Petroleum Pipelines	Parks	Sewer Collection Systems
Drinking Water Treatment Plants	Pesticide/Fertilizer/Petroleum	Storage & Transfer Areas
Dry Cleaners	Photo Processing/Printing	Veterinary Offices/Clinics
Fertilizer/Pesticide/Herbicide App.	Schools	Wood/Pulp/Paper Processing

The sources are considered most vulnerable to the following activities not associated with any detected contaminants:

Airports	Historic Waste Dumps/Landfills
Concentrated Animal Feeding Operations	Known Contaminant Plumes
Wells (agricultural/irrigation)	

A copy of the complete assessment may be viewed at the City of Los Banos Public Works Department, 411 Madison Avenue. You may request a summary of the assessment be sent to you by contacting the Public Works Department at (209) 827-7056.

IS YOUR WATER TREATED WITH ANY CHEMICALS?

The answer is **Yes**. **Chlorine (Sodium Hypochlorite)** and **Fluoride (Sodium Fluoride)** are introduced to the system as the water is pumped from the wells. Chlorine is used to disinfect drinking water. Fluoride is added for dental health. Both chemicals are monitored daily to ensure concentrations are kept at regulated levels. For additional information on the internet regarding Fluoridation you may access:

http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.shtml

IMPORTANT HEALTH INFORMATION

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 USEPA'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, 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 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 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, 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:

- A.) **Microbial Contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- B.) **Inorganic Contaminants**, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining and farming.
- C.) **Pesticides and Herbicides**, which may come from a variety of sources such as agriculture and residential uses.
- D.) **Radioactive contaminants** that are naturally-occurring, or the result of oil and gas production and mining activities.
- E.) **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which 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.

In order to ensure that tap water is safe to drink, U.S. Environmental Protection Agency (USEPA) and the State Water Resources Control Board (SWRCB) 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.

The following tables are based on testing taken during the 2020 Calendar year. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old. Contaminant testing for certain unregulated contaminants and some radiological contaminants were only required to be tested once and the results are indicated. Some contaminants are tested more than once a year and each month a test was taken will be indicated in the tables.

TERMS AND ABBREVIATIONS USED IN THE TABLES:

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.

MAXIMUM RESIDUAL DISINFECTANT LEVEL (MRDL): The highest level of 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.

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.

PARTS PER MILLION (PPM): or milligrams per liter. It means one part per million parts.

PARTS PER BILLION (PPB): or micrograms per liter. It means one part per billion parts.

PARTS PER TRILLION (PPT): This means 1 part per trillion parts.

PICO CURIES PER LITER (pCi / L): A measure of radioactivity.

NONE DETECTED (N/D): Contaminant not detected.

NOT APPLICABLE (N/A): Does not apply.

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

COLIFORM BACTERIA-DISTRIBUTION SYSTEM					
Microbiological Contaminant	Highest Number of Detections	Number of Months in Violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria Tested Weekly 2020	21.8	2	More than one sample a month with a detection	0	Naturally present in the environment
Fecal Coliform or E. Coli	0	0	A routine sample and a repeat sample detect Total Coliform; either sample also detects Fecal Coliform or E. Coli	0	Human and animal fecal waste

FECAL BACTERIA INDICATOR-POSITIVE GROUND WATER SAMPLES					
Microbiological Contaminants	Total No. of Detections	Sample Dates	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
E. Coli	0	N/A	0	(0)	Human and animal fecal waste
Enterococci	0	N/A	TT	N/A	Human and animal fecal waste
Coliphage	0	N/A	TT	N/A	Human and animal fecal waste

DISINFECTION BY-PRODUCTS							
Contaminant	Date(s) Tested	Unit of Measurement	MCL or MRDL	PHG (MCLG) Or MRDLG	Average Detected Level	Range of Detection	Source of Contaminants
HAA5 (Haloacetic Acids)	Feb. May Aug. Nov. 2020	PPB	60	N/A	3.4	ND – 7.8	By-product of drinking water disinfection
TTHMS (Total Trihalomethanes)	Feb. May Aug. Nov. 2020	PPB	80	N/A	13.6	2 - 30	By-product of drinking water disinfection
Chlorine	Daily 2020	PPM	4.0 as CL2	4.0 as CL2	0.51	0.80 – 1.17	Drinking water disinfectant added for treatment

PRIMARY INORGANIC COMPOUNDS							
Contaminant	Date(s) Tested	Unit of Measurement	MCL	PHG (MCLG)	Average Detected Level	Range of Detection	Source of Contaminants
Arsenic	July 2020	PPB	10	4	6.6	4.8 – 8.7	Erosion of natural deposits; runoff from orchards
Barium	July 2020	PPM	1	2	0.10	0.058 – 0.12	Erosion of natural deposits
Total Chromium	July 2020	PPB	50	(100)	35	18 - 53	Erosion of natural deposits; discharge from steel and pulp mills and chrome plating
Nitrate + Nitrate as N	Jan. Apr. Jul. Oct. 2020	PPB	10	0	5.2	2.4 – 7.4	Leaching from livestock confinement areas; leaching from fertilizer use; leaching from septic tanks. Erosion of natural deposits.
Chromium VI	Jul. 2020	PPB	10	0	29.8	15 – 43	See Health Information on Chromium on Page 5 of this report.
Fluoride** (naturally-occurring)	Jul. 2020	PPM	2.0	1.0	0.10	ND – 0.55	Erosion of natural deposits

** Our water system treats your drinking water by adding fluoride to the naturally occurring fluoride, in order to promote dental health in consumers. The fluoride levels in the treated water are tested daily and maintained within a range of 0.6 to 1.2 ppm, as required by the SWRCB.

HEALTH STATEMENT ON ARSENIC

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.

HEALTH STATEMENT ON NITRATE

Your drinking water meets the State standard for Nitrate; however it does contain low levels of Nitrate. Nitrate in drinking water at levels above 45 parts per million 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 infants' blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of skin. Nitrate levels above 45 parts per million 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. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity.

HEALTH STATEMENT ON LEAD

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 Los Banos is responsible for providing high quality drinking water, but cannot control the variety of materials used in household or Private-property 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 the 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>.

HEALTH INFORMATION ON CHROMIUM

Chromium is a metallic element in the periodic table. It is odorless and tasteless. Chromium is found naturally in rocks, plants, soil and volcanic dust, humans and animals. The most common forms of chromium in the environment are trivalent (chromium-3), hexavalent (chromium-6) and the metal form, chromium-0. Chromium-3 occurs naturally in many vegetables, fruits, meats, grains and yeast. Chromium-6 is generally produced by industrial processes and can also be naturally-occurring. Chromium-0 is generally produced by industrial processes. Chromium-3 is a nutritionally essential element in humans and is often added to vitamins as a dietary supplement. Chromium-3 has relatively low toxicity and would be a concern in drinking water only at very high levels of contamination, unlike chromium-6 and -0, which are more toxic and pose potential health risks to people. Some people who use water containing chromium (total) well in excess of the maximum contaminant level (MCL) over many years could experience allergic dermatitis. Chromium-6(hexavalent chromium) is currently regulated under the 50-micrograms per liter ($\mu\text{g/L}$ or Parts Per Billion) maximum contaminant level (MCL) for total chromium. For more information regarding Chromium-6 you can go to the State Water Resources Control Board Website at: http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Chromium6.shtml.

RADIOACTIVE CONTAMINANTS

Contaminant	Date(s) Tested	Unit of Measurement	MCL	PHG (MCLG)	Average Detected Level	Range of Detection	Source of Contaminants
Gross Alpha Particle Activity	Jul. 2020	pCi/L	15	(0)	7.1	1.92– 21	Erosion of natural deposits
Uranium	Jul. 2020	pCi/L	20	0.43	6.0	ND - 19	Erosion of natural deposits
Radium 226	May 2006	pCi/L	5	0.05	0.09	ND – 0.19	Erosion of natural deposits

VOLATILE ORGANIC CONTAMINANTS

Contaminant	Date(s) Tested	Unit of Measurement	MCL	PHG (MCLG)	Average Detected Level	Range of Detection	Source of Contaminants
Tetrachloroethylene (PCE)	Jul. 2020	PPB	5	0.06	0.10	ND – 0.85	Discharge from factories, dry cleaners, and auto shops (metal degreaser)
Methyl-Tert-Butylether (MTBE)	Jul. 2020	PPB	Primary MCL 13 Secondary MCL 5	13	0.2	ND – 2.9	Gas additive Leaking underground Storage tanks

HEALTH INFORMATION ON 1, 2, 3-TRICHLOROPROPANE

1, 2, 3- TCP is a chlorinated hydrocarbon with high chemical stability. It is a manmade chemical found at industrial or hazardous waste sites. It has been used as a cleaning and degreasing solvent and also is associated with pesticide products. 1, 2, 3-TCP cause's cancer in laboratory animals (US EPA, 2009). It is reasonably anticipated to be a human carcinogen (NTP, 2014), and probably carcinogenic to humans, based on sufficient evidence of carcinogenicity in experimental animals (IARC, 1995). In 1992, 1,2,3-TCP was added to the list of chemicals known to the state to cause cancer, pursuant to California's Safe Drinking Water and Toxic Enforcement Act ([Proposition 65](#)). For more information regarding 1, 2, 3,-TCP you can go to the State Water Resources Control Board Website at: https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/123TCP.html

SYNTHETIC ORGANIC COMPOUNDS

Contaminant	Date(s) Tested	Unit of Measurement	MCL	Average Detected Level	Range of Detection	Source of Contaminants
1,2,3-Trichloroprane (1,2,3-TCP)	Jul. 2020	PPT	0.005	ND	ND	Manmade chemical found in industrial and hazardous waste sites

LEAD AND COPPER HOUSEHOLD TAP MONITORING

The State Water Resources Control Board requires our water system to test for lead and copper at household tap sources. The required testing is performed every three years at a representative amount of houses based on service connections and possible at risk household plumbing. The AL is based on the 90th percentile of the number of sites tested. The Regulatory Action Level is a concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

LEAD AND COPPER HOUSEHOLD TAP MONITORING							
Contaminant	Date(s) Tested	Unit of Measurement	Regulatory Action Level	Public Health Goal	Average Detected Level	Range of Detection	Source of Contaminants
Lead	Aug. 2020	PPB	5	0.2	90th Percentile; Detected Level is 0	Number of sites tested above the AL is 0 of 33	Internal corrosion of household plumbing systems
Copper	Aug. 2020	PPM	1.3	0.3	90th Percentile; Level is 0.32	Number of sites tested above AL is 0 of 33	Internal corrosion of household plumbing systems

UNREGULATED CONTAMINANTS

Unregulated contaminant monitoring helps EPA and the State Water Resources Control Board to determine where certain contaminants occur and whether the contaminants need to be regulated. While the following contaminants are unregulated, there are California notification levels. Notification levels are advisory levels and not enforceable.

UNREGULATED CONTAMINANTS						
Contaminant	Date(s) Tested	Unit of Measurement	Notification Level (PHG)	Average Detected Level	Range of Detection	Health Effects Language
Boron	Jul. 2020	PPM	1.0	0.90	0.48 – 2.0	The babies of some pregnant women who drink water-containing Boron in excess of the notification level may have increased risk of developmental effects, based on studies in laboratory animals.
Radon	July 2001	pCi/L	N/A	560	478 – 637	See Health Information on Radon
Vanadium	Jul. 2020	PPB	50	16.1	7.7 -24	The babies of some pregnant women who drink water-containing Vanadium in excess of the notification level may have increased risk of developmental effects, based on studies in laboratory animals.

HEALTH INFORMATION ON RADON

Radon is a radioactive gas that you cannot see, taste, or smell. It is found throughout the United States. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to Radon entering the home through soil, Radon entering the home through tap water will, in most cases, be a small source of Radon in indoor air. Radon is a known human carcinogen. Breathing air containing Radon can lead to lung cancer. Drinking water containing Radon may also cause increased risk of stomach cancer. If you are concerned about Radon in your home, test the air in your home. Testing is inexpensive and easy. You should pursue Radon removal for your home if the level of Radon in your air is 4 Pico curies per liter of air (pCi/L) or higher. There are simple ways to fix a Radon problem that are not too costly. For additional information, call your State Radon program (1-800-745-7236), the EPA Safe Drinking Water Act Hotline (1-800-426-4791), or the National Safety Council Radon Hotline (1-800-SOS-RADON).

SECONDARY INORGANIC CONTAMINANTS

Contaminant	Date(s) Tested	Unit of Measurement	MCL	Average Detected Level	Range of Detection	Source of Contaminants
Total Dissolved Solids (TDS)	July 2020	PPM	1000	681	410 - 1200	Runoff/leaching from natural deposits.
Specific Conductance	July 2020	uS/cm	1600	1111	720 - 1900	Substances that form ions when in water
Chloride	July 2020	PPM	500	136	85 – 240	Runoff/leaching from natural deposits
Sulfate	July 2020	PPM	500	125	49 - 300	Runoff/leaching from natural deposits
PH	July 2020	Standard Units	6.5 – 8.5	7.9	7.8 – 8.0	Leaching from natural deposits
Turbidity	July 2020	NTU	5	0.20	0.1 – 0.37	Soil runoff

SODIUM AND HARDNESS

Contaminant	Date(s) Tested	Unit of Measurement	MCL	Average Detected Level	Range of Detection	Source of Contaminants
Sodium	July 2020	PPM	N/A	94	50 - 210	Salt present in the water is generally naturally-occurring
Total Hardness	July 2020	PPM	N/A	342	230 - 590	Is the sum of polyvalent cations present in the water, generally calcium and magnesium. The cations are usually naturally-occurring.
Bicarbonate	July 2020	PPM	N/A	213	120 - 340	Leaching from natural deposits
Calcium	July 2020	PPM	N/A	71	49 - 120	Leaching from natural deposits
Alkalinity (Total)	July 2020	PPM	N/A	213	120 - 340	Leaching from natural deposits
Magnesium	July 2020	PPM	N/A	39	26 - 72	Leaching from natural deposits
Potassium	July 2020	PPM	N/A	2.7	2.4 – 3.4	Leaching from natural deposits

WATER CONSERVATION PROGRAM

The water conservation program is currently underway. The Public Works Department would like to take this opportunity to thank everyone for the success of last year's program. This year's program will be different than last year. The schedule is as follows:

- If your street address ends with an **odd** number, your watering days are Tuesday, Thursday and Saturday.
- If your street address ends with an **even** number, your watering days are Wednesday, Friday and Sunday.
- No watering is allowed on Mondays.
- No watering is allowed between the hours of 11:00 a.m. and 7:00 p.m.

If you have questions regarding this program or need assistance programming your sprinkler timers, contact the Public Works Department at (209) 827-7056.

WATER CONSERVATION TIPS FOR CONSUMERS

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Take short showers – a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons per month.
- Use a water-efficient shower head. They are inexpensive, easy to install, and can save up to 750 gallons per month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons per month.
- Water plants only when necessary and follow the Los Banos irrigation schedule.
- Fix leaking toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Pick up after your pets.
- Eliminate excess use of lawn and garden fertilizers and pesticides – they contain hazardous chemicals that can reach your drinking water source.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Teach your kids about water conservation to insure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!