

2020 Water Quality Report

Lewiston Orchards Irrigation District

L.O.I.D.

LOID (State Water System ID#: 230015) presents this water quality Consumer Confidence Report (CCR) for the 2019 calendar year. This report contains important information for you, the consumer, to stay up to date on the condition and quality of your drinking water, as part of the requirements set forth in the federal 1996 Safe Drinking Water Act (SDWA). Required by the EPA, LOID regularly samples the Lewiston Orchard's water sources and distribution system to monitor the quality of your drinking water. Test results can be found on the Idaho Department of Environmental Quality (IDEQ) website. IDEQ is responsible for regulating drinking water systems in Idaho.



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“Our goal is to continue providing you with safe drinking water and excellent customer service every day of the year.”



WATER SOURCE

The domestic water source for the Lewiston Orchards consists of three wells (Well #2, Well #3, and Well #4). Well #2 is located near Mann Lake, Well #3 on Warner Avenue, and Well #4 in Hereth Park. Well #2 and Well #4 provide most of your drinking water. Well #3 provides a small portion, approximately 28 million gallons of the roughly 599 million gallons pumped in 2019. LOID has one back-up source intertie connection with the City of Lewiston’s water system at the 13th Street and Warner Avenue intersection. This intertie is only used in emergencies and is periodically used to flush the water line.



SOURCE WATER ASSESSMENT

Source water assessments can be found on the DEQ website:

www2.deq.idaho.gov/water/swaOnline/Search

DEQ assesses the Lewiston Orchards drinking water sources by scoring the sources susceptibility to the following contaminant groups:

- Inorganic Chemicals (IOC)
- Volatile Organic Chemicals (VOC)
- Synthetic Organic Chemicals (SOC)
- Microbials

The score for hydrologic sensitivity and system construction is low, land use susceptibility scores are moderate (IOC, VOC, and SOCs), and microbial bacteria potential contamination is moderate for Well #2 and Well #4, and low for Well #3. See the source water assessment for further details.



SHARE INFORMATION

EPA requires LOID to provide the following educational information.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

EPA and FDA, both provide regulations to protect public health.



SPECIAL NEEDS CONSUMERS

EPA requires LOID to provide the following educational information. Some people may be more vulnerable to contaminants in drinking water than the general population. **LOID contaminant levels are far below EPA level requirements.** Anyone who is immunocompromised, such as someone with cancer undergoing chemotherapy, 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. EPA/CDC guidelines on appropriate means to lessen the risk of infection by microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).



CONTAMINANTS

EPA requires the following educational information on general contaminants. Drinking water, including bottled water, is reasonably expected to contain at least small amounts of some contaminants. **LOID drinking water holds to a higher standard than EPA requires. LOID contaminant levels are far lower than regulation standards, whereas bottled water may only meet minimum contaminant level requirements.**

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 EPA’s Safe Drinking Water Hotline (1-800-426-4791).

LOID performs rigorous testing to monitor and treat your drinking water. LOID drinking water contaminant levels are either undetectable or far below EPA and FDA requirements.

The general 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 general source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which 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, 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 byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.



WATER HARDNESS

Water hardness is a combination of dissolved minerals (calcium and magnesium) naturally found in our aquifer. These minerals interfere with the sudsing action of soap. Water hardness varies throughout the Lewiston Orchards depending on which wells are operating. LOID’s water hardness measures from 19-81 ppm (2005-2006), correlating to slightly hard to moderately hard. See the table below.

Grains Per Gallon	mg/L or ppm	Rating
Less than 1.0	Less than 17.1	Soft
1.0 - 3.5	17.1 - 60	Slightly Hard
3.5 - 7.0	60 - 120	Moderately Hard
7.0 - 10.5	120 – 180	Hard
Over 10.5	Over 180	Very Hard



WATER DISCOLORATION

Naturally occurring iron and manganese can cause rusty or discolored water. As water moves through the water mains that supply your home, these minerals and sediment settle to the bottom and form deposits. A sudden flow change, such as a fire hydrant being turned on or a main break will disturb these deposits and temporarily discolor the water. Although it is aesthetically unappealing, this discoloration is not harmful, and your water will clear with some flushing. If your water suddenly becomes discolored, wait 15-30 minutes, then turn your COLD water tap on your lowest bathtub or shower and let it run for 5-20 minutes. Typically, this will clear your water and flush the deposits from your service line and plumbing. If this does not clear your line, please call us.



FLUORIDE (BELOW EPA LIMITS)

Fluoride is a naturally occurring compound found in rocks and minerals in the soil, entering our drinking water as it passes through the ground. At low levels fluoride can help prevent cavities. The U.S. Department of Health and Human Services recommends drinking water with 0.7 mg/L of fluoride for optimal oral health. However, if children drink water with more than 2 mg/L of fluoride over long periods of time, they may develop cosmetic discoloration of their permanent teeth (dental fluorosis). In more severe cases dental fluorosis may result in brown staining or pitting in permanent teeth, occurring only in developing teeth that have not yet grown through the gums.

The EPA fluoride limit for drinking water is 4 mg/L. Consuming fluoride for an extended period of time over this limit increases your risk of developing bone disease. Your drinking water comes from three sources, Well #2, Well #3, and Well #4. Well #3 has a fluoride concentration of 3.010 ppm, while Well #2 and #4 are 0.458 and 1.60 ppm, respectively. Although above 2 mg/L, Well #3 is not the primary source of drinking water and is only used as a contingency, providing less than the 4.7 percent of your total

drinking water in 2019. We continue to monitor fluoride levels and will inform you if they exceed the limit of 4 mg/L.

Consider providing children under nine years old with alternate sources of drinking water, or water that has been treated to remove fluoride to avoid the possibility of dental fluorosis. You may also want to contact your dentist about proper use by young children of fluoride-containing products. Older children and adults may safely drink the water. Some home water treatment units are also available to remove fluoride from drinking water. To learn about available home water treatment units, you may call NSF International at 1-877-8-NSF-HELP.



LEAD (NOT DETECTED)

Lead was not detected in your source drinking water. **EPA requires the following educational information on lead contaminates.** Generally, lead in drinking water is primarily from materials and components associated with service lines and home plumbing. **LOID does not have lead service lines. LOID service lines are made of copper, PVC, and galvanized iron. Detected lead contaminants come from within home plumbing systems. Detected levels within tested homes are low and well below the EPA action limit.** If present, levels exceeding EPA requirements can cause serious health problems, especially for pregnant women and young children. LOID 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 www.epa.gov/safewater/lead.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Monitoring Requirements Not Met for the Lewiston Orchards Irrigation District

Our water system did not meet the 2019 sampling frequency requirements for the synthetic organic contaminants. Although not an emergency, as our customers, you have a right to know what happened and what we did to correct the situation.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether our drinking water meets health standards. During the 2017-2019 sampling period we did not submit a second set of sample results for Well #2, Well #3, and Well #4 for the synthetic organic chemicals group (SOCs¹). The samples taken previously and after the sampling period did not detect contaminants in the SOC group. Therefore, it is reasonable to believe that the missed samples also did not have detectable SOC levels.

There is nothing you need to do at this time. The samples collected during the second quarter of 2020, all resulted in non-detectable levels. Additionally, another set of samples was taken during the third quarter of 2020 and we are awaiting the results. The table below lists the contaminant(s) we did not properly test for during the last year, how often we are supposed to sample for synthetic organic contaminants, how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date on which follow-up samples were taken.

Lewiston Orchards Irrigation District 2019 Sampling Deficiency				
Contaminant	Required sampling frequency	No. of samples taken	When samples should have been taken	When samples were taken
SOCs	2 samples every 3 years, in the same year in separate	1	Quarter 4 of 2019	August 2019

¹SOCs, also known as synthetic organic contaminants, are tested by collecting one sample and testing that sample for all the regulated SOC's. SOC's are commonly used in agriculture, urban stormwater runoff, or industrial activities. SOC's include Alachlor, Atrazine, Carbofuran, Chlordane, EDB (ethylene dibromide), DBCP (1,2-dibromo-3-chloropropane), Heptachlor, Heptachlor epoxide, Lindane, Methoxychlor, Toxaphene, PCBs, 2,4-D, 2,4,5-TP, Pentachlorophenol, Aldicarb², Aldicarb sulfone², Aldicarb sulfoxide², Benzo(a)pyrene, Dalapon, Di(ethylhexyl)-adipate, Di(ethylhexyl)-phthalate, Dinoseb, Diquat, Endothall, Endrin, Glyphosate, Hexachlorobenzene, Hexachlorocyclo-pentadiene, Oxamyl, Picloram, and Simazine.

²Aldicarb, aldicarb sulfone, and aldicarb sulfoxide are considered regulated chemicals. However, their MCLs are stayed and no monitoring is required (57 FR 22178, May 27, 1992).

DETECTED CONTAMINANT TABLE

In the following table you will find the detected contaminants for the 2019 calendar year. During recent years we have sampled and conducted a wide range of tests and found very little contamination. As a result, IDEQ allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not frequently change. Therefore, the table also includes the most recent test results for the contaminants not tested in 2019. It is important to understand, the presence of detected contaminant does not necessarily indicate a health risk. For the full list of regulated contaminants please visit the EPA website at: <https://www.epa.gov/ground-water-and-drinking-water/national-primary-drinking-water-regulations>. This table does not provide a comprehensive list of test results but only the results with a detectable concentration. For a comprehensive list of test results please visit the IDEQ website switch board: <http://www.deq.idaho.gov/water-quality/drinking-water/pws-switchboard/>.

Detected Contaminant Table Notes/Definitions

Note 1: Definitions

- **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 allow for a margin of safety and are non-enforceable public health goals.
- **Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to MCLGs as feasible using the best available treatment technology and taking cost into consideration. MCLs are enforceable standards.
- **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.
- **Maximum Residual Disinfectant Level (MRDL):** 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.
- **Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.
- **Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Note 2: Total Coliforms

No more than 5.0 percent of total coliform (TC)-positive samples in a month. (For water systems that collect fewer than 40 routine samples per month, no more than one sample can be total coliform-positive per month.) Every sample that has total coliform must be analyzed for either fecal coliforms or E. coli. If two consecutive TC-positive samples, and one is also positive for E. coli or fecal coliforms, system has an acute MCL violation.

Note 3: Units

- **MG/L** = milligrams per liter = part per million (ppm)
- **UG/L** = micrograms per liter = parts per billion (ppb)

Note 4: Haloacetic Acids & Trihalomethane

Although there is no collective MCLG for this contaminant group, there are individual MCLGs for some of the individual contaminants:

- Haloacetic acids: dichloroacetic acid (zero); trichloroacetic acid (0.3 mg/L)
- Trihalomethanes: bromodichloromethane (zero); bromoform (zero); dibromochloromethane (0.06 mg/L)

Note 5: Lead & Copper

Lead and copper are regulated by a Treatment Technique that requires systems to control the corrosiveness of their water. If more than 10 percent of tap water samples exceed the action level, water systems must take additional steps. For copper, the action level is 1.3 mg/L, and for lead is 0.015 mg/L.

Lewiston Orchards Irrigation District 2019 Detected Drinking Water Contaminants										
Contaminants	Units	MCL ⁽¹⁾	MCLG ⁽¹⁾	Your Water				Date	Violation	Typical Source
				Well #2	Well #3	Well #4	System			
Microorganisms										
Total Coliforms	--	1 positive sample/month ⁽²⁾	0	--	--	--	1 positive sample	April 2019	No	Naturally present in the environment
Disinfectants										
Chlorine Residual (as Cl ₂)	MG/L ⁽³⁾ or ppm	MRDL=4.0 ⁽¹⁾	MRDLG=4.0 ⁽¹⁾	--	--	--	1.6	January 2019	No	Water additive used to control microbes
Disinfectant Byproducts										
Haloacetic Acids (HAA5)	ug/L or ppb	60	N/A ⁽⁴⁾	--	--	--	0.0 - 1.5	August 2019	No	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHMs)	ug/L or ppb	80	N/A ⁽⁴⁾	--	--	--	1.42 - 13.6	August 2019	No	Byproduct of drinking water disinfection
Inorganic Chemicals										
Arsenic	ug/L or ppb	10	0	1.350	1.150	0	--	August 2019	No	Erosion of natural deposits; runoff from orchards; runoff from glass & electronics production wastes
Barium	MG/L or ppm	2	2	0.011	0.015	0	--	August 2019	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium (total)	ug/L or ppb	100	0.1	1.590	1.660	--	--	August 2019	No	Discharge from steel and pulp mills; erosion of natural deposits
Copper	MG/L or ppm	TT ^(1,5) ; AL=1.3	1.3	--	--	--	0.018	July 2018	No	Corrosion of household plumbing systems; erosion of natural deposits
Fluoride	MG/L or ppm	4	4	0.458	3.010	1.600	--	July 2018	No	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
Lead	ug/L or ppb	TT ⁽⁵⁾ ; AL=15	0	--	--	--	1	August 2015	No	Corrosion of household plumbing systems; erosion of natural deposits
Organic Chemicals - Not Detected										
Radionuclides										
Alpha particles	PCI/L	15	0	0	0.093	0.146	--	August 2016	No	Erosion of natural deposits of certain minerals that are radioactive and may emit a form of radiation known as alpha radiation
Radium (combined)	PCI/L	5	0	0.768	0	0	--	August 2019	No	Erosion of natural deposits
Radium (-226)	PCI/L	--	--	0	0	0	--	--	--	Erosion of natural deposits
Radium (-228)	PCI/L	--	--	0.768	0	0	--	August 2019	No	Erosion of natural deposits

WHAT CAN YOU DO TO HELP?

Protect & conserve our drinking water!

Protecting & conserving drinking water is everyone's responsibility. You can support your community's drinking water source in several ways:

PROTECT

- Eliminate excess use of lawn and garden fertilizers and pesticides – they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
 - If you have your own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public water system.



- Volunteer. Find a watershed or wellhead protection organization in your community to volunteer. If there are no active groups, consider starting one. Use EPA's Adopt Your Watershed to locate groups in your community or visit the Watershed

Information Network's How to Start a Watershed Team.



- Dispose of chemicals properly; take used motor oil to a recycling center.
- Organize a storm drain

stenciling project with your local government or water supplier. Stencil a message next to the street drain reminding people "Dump No Waste - Drains to River" or "Protect Your Water". Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.

Small changes can make a big difference – try one TODAY!



Visit www.epa.gov/watersense for more information.

CONSERVE

- 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 a month.
- Use a water-efficient showerhead. They are inexpensive, easy to install, and can save you up to 750 gallons a month.



- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaky 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.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!