

The Lewiston Orchards Irrigation District (LOID)



is proud to provide you with water that meets or surpasses all the standards for safe drinking water. These health and safety standards are established by the United States Environmental Protection Agency (EPA) and the Idaho Department of Environmental Quality (ID DEQ). Our goal is to continue to provide you with safe drinking water and excellent customer service every day of the year.

To ensure the safety of your water, we monitor before, during, and after the treatment process. LOID's drinking water source consists of three groundwater wells and is monitored and tested regularly. We continually sample and test water from our distribution system. Test results are on file with the ID DEQ, the agency that monitors and regulates drinking water quality in Idaho.

This Water Quality Report provides important information about your drinking water including compliance with government standards during 2017. Please take a moment to review this information. If you have questions or would like additional information, please call the LOID offices at (208) 746-8235 or visit our website at www.loid.net or you can call the EPA Safe Drinking Water Hotline at 800-426-4791.

*Barney Metz, Manager
Lewiston Orchards Irrigation District*

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Elevated Fluoride Levels Detected in the Lewiston Orchards Irrigation District's (LOID) Potable Water Supply

This is an alert about your drinking water and a cosmetic dental problem that might affect children under nine years of age. At low levels, fluoride can help prevent cavities, but children drinking water containing more than 2 milligrams per liter (mg/l) of fluoride may develop cosmetic discoloration of their permanent teeth (dental fluorosis). The drinking water provided by the LOID, specifically Well #3, has a fluoride concentration of 3.1 mg/l. Well#3 is not the primary source of drinking water for the LOID and is used on contingency basis, in 2017 Well #3 provided less than 2.5% of the 519 million gallons of water provided for domestic use. Fluoride contamination is rarely due to human activity. Fluoride occurs naturally in some areas and is found in high concentrations in the aquifer of our source water.

Dental fluorosis in its moderate or severe forms may result in a brown staining and or pitting of the permanent teeth. This problem occurs only in developing teeth, before they erupt from the gums. Children under nine should be provided with alternative sources of drinking water or water that has been treated to remove the fluoride to avoid the possibility of staining and pitting of their permanent teeth. 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.

Drinking water containing more than 4 mg/l of fluoride (the US Environmental Protection Agency's drinking water standard) can increase your risk of developing bone disease. Your drinking water does not contain more than 4 mg/l of fluoride, but we're required to notify you when we discover that the fluoride levels in your drinking water exceed 2 mg/l because of this cosmetic dental problem. We are continuing to monitor fluoride levels. We will inform you if they exceed the limit of 4 mg/l. For more information, please call the front office of the LOID at 208-746-8235. Some home water treatment units are also available to remove fluoride from drinking water. To learn more about available home water treatment units, you may call NSF International at 1-877-8-NSF-HELP.

State Water System ID#: 2350015

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How often does LOID test the drinking water?

The L.O.I.D. conducts over 500 bacteriological tests annually and tests for over 100 potential chemical contaminants.

The EPA sets maximum contaminant levels at a one-in-a-million level in most cases. This means that if a person drinks two liters (approximately half a gallon) of water containing a contaminant at the maximum contaminant level (MCL) per day for 70 years, the risk for developing an adverse reaction to the substance is one in one million.

Your drinking water comes from ground water. We have wells located on Warner Avenue (Well #3), near Mann Lake (Well #2), and in Hereth Park (Well #4). Well #1 at 1520 Powers Avenue has been out of production since 1998.

The L.O.I.D. Board of Directors meet at 7:00 p.m. on the third Wednesday of each month and at 7:00 p.m. for a work session on the Monday preceding the Wednesday evening meeting. Please feel free to join us in these meetings.

What is water hardness?

Hardness refers to dissolved minerals (calcium and magnesium) in your water that are naturally found in our aquifer that interfere with the sudsing action of soap, the harder the water, the less the sudsing action. The hardness varies throughout the Orchards depending on which wells are operating. LOID's water hardness measures from 19-81 ppm. If you look at the table below, your water ranges from lightly hard to a few cases of moderately hard water. If you have questions, please feel free to contact our Water Production Supervisor at the LOID offices, (208) 746-8235.

<i>Grains Per Gallon</i>	<i>Miligrams Per Liter (mg/l) or Parts Per Million (ppm)</i>	<i>Rating</i>
<i>less than 1.0</i>	<i>less than 17.1</i>	<i>Soft</i>
<i>1.0 - 3.5</i>	<i>17.1 - 60</i>	<i>Slightly Hard</i>
<i>3.5 - 7.0</i>	<i>60 - 120</i>	<i>Moderately Hard</i>
<i>7.0 - 10.5</i>	<i>120 - 180</i>	<i>Hard</i>
<i>over 10.5</i>	<i>over 180</i>	<i>Very Hard</i>

What should I do if my water suddenly discolors?

Naturally occurring iron and manganese in the water cause rusty or discolored water. As water moves through the mains that supply your home, these minerals and sediment settle to the bottom and form deposits. A sudden flow change, a fire hydrant being turned on or a main break will disturb these deposits and sediments 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. Normally this will clear your water and flush the sediment from your service line and plumbing. If this does not clear your line, please call us.

Contaminants that may be present include:

Both tap water and bottled water originate as surface water from rivers and lakes or as ground water from springs and wells. As water travels over the surface of land or through the ground, it dissolves naturally occurring minerals and, in some cases,

radioactive material. Water picks up wastes from both human and animal activities. Surface water must be carefully filtered and disinfected to remove bacteria, viruses, and protozoa. Ground water is usually filtered naturally.

Contaminants that may be present include:

Microbial contaminants such as bacteria, viruses, and protozoa are very small living creatures that may be natural and harmless, or harmful if originating from septic systems, agricultural livestock operations or wildlife.

Inorganic contaminants, such as heavy metals and salts, can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, mining, oil or gas production, or farming.

Pesticides and Herbicides may come from agriculture and residential uses.

Radioactive contaminants are naturally occurring, or can be a result of mining activities or gas and oil production.

Organic contaminants are usually man-made (synthetic) and vaporize (volatilize) easily. Petroleum products and degreasers are examples of gas station and dry cleaner waste transported by storm water and sewers.

In order to ensure that the water is safe to drink, the

EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish the limits for bottled water which must provide the same protection for public health. If bottled water and tap water meet the federal standards, they are both safe to drink. However, your tap water is substantially less expensive than bottled water and safely delivered to your home.

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. EPA/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 800-426-4791.





2018 Drinking Water Report – 2017 Sampling Report

During recent years we have sampled and tested for a wide range of chemicals and have found very little contamination. Contamination is anything other than pure water. We sample total coliform bacteria at least 40 times monthly as an indicator of microorganisms that should not be present. The table below lists all the drinking water contaminants that we detected during the 2017 calendar year or in our most recent test as noted. 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 a health risk. More information about contaminants and potential health effects can be obtained by calling our office at (208) 746-8235 or the U. S. Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

Terms and abbreviations used below:

- **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.
- **Maximum Contaminant Level (MCL):** the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- **Action Level (AL):** the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
- **n/a:** not applicable • **nd:** not detectable at testing limit • **ppb:** parts per billion or micrograms per liter • **ppm:** parts per million or milligrams per liter
- **pCi/L:** picocuries per liter (a measure of radiation) • **TT:** Treatment Technique

Regulated Contaminant	MCLG	MCL	Our Water	Sample Date	Violation	Typical Source of Contaminant	Comments
Total Coliform Bacteria	0	TT	NA	2017	NO	Naturally present in the environment	Tested Monthly
Nitrate as N (ppm)	10	10	0	2017	NO	Run off from fertilizer	Not Detected
Lead (ppb) (1)	0	15 AL	0.001	2015	NO	Home Plumbing	Normal
Copper (ppm) (2)	1.3	1.3 AL	0.018	2015	NO	Home Plumbing	Normal
Alpha / Radiation (pCi/L)	0	15	0.00 - 0.15	2016	NO	Erosion of natural deposits	Normal
Fluoride (ppm)	4	4	0.55 - 3.10	2017	NO	Naturally occurring (1.0 considered ideal)	Good for Teeth
Chlorine (as Free CL ₂) (ppm)	4	4	0.6 - 1.0	2017	NO	Water additive used to control microbes	Normal
Total Trihalomethanes (ppb)	NA	80	0.56- 6.39	2017	NO	By-product of drinking water chlorination	Normal
Total Haloacetic	NA	60	0.00-	2017	NO	By-Product of drinking water chlorination)	Normal
Arsenic (ppb)	NA	10	0.00 - 1.31	2010	NO	Erosion of Natural Deposits	Normal
Radium (Combined 226-228) (pCi/l)	0	5	0.00 - 0.025	2016	NO	Naturally Occurring Isotopes	Normal
Hardness (Combination of Calcium & Magnesium)	NA	NA	19 – 81 (ppm)	2005/2006		Naturally occurring	Normal
Sodium – (79ppm – 2001) unregulated – (20ppm recommended for low salt diet)							

Total Coliform: Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

During the past year, one Level 2 assessment was required to be completed for our water system. The level 2 assessment was completed. No corrective action was required.

The Source Water Assessment (SWA) has been completed by DEQ and may be viewed at www2.deq.idaho.gov/water/ccrtool/mainpage