

2018 Consumer Confidence Report Water Report

Is my water safe? - We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies. Your water is tested daily, weekly, monthly, quarterly and annually as required by the Oregon Drinking Water Program. Test samples are analyzed by an independent testing laboratory and the results are sent to the Oregon Drinking Water Program by your utility. At this time, your water meets all EPA and state standards, and in many cases, residual chemicals in the water were not detected by the independent testing laboratory Umpqua Research.

Do I need to take special precautions? - 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. EPA/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 Water Drinking Hotline (800-426-4791). Your water system has elected to integrate a new ultraviolet light reactor which will be used to enhance the drinking water quality making the City of Oakland water plant a log 5 water system. This means that the water quality is extremely clean, 99.999% contaminant removal, based on theoretical models, at the time it leaves the water plant's clear well, but prior to entering the City of Oakland's distribution system. Independent test results show that (45) chemicals such as Volatile Organics were Non-Detectable or had too little chemical present to be detected by test equipment.

Where does my water come from? - Our drinking water comes from a combination of sources: groundwater under the influence of surface water and surface water from the Calapooya Creek. The City of Oakland also has large water shed with several environmental hazards that must be treated by your water treatment system prior to entry into the distribution system.

Source Water Assessment and its availability? - A Source water assessment is available for review and a copy may be requested at City Hall located at 637 NE Locust Street, Oakland, Oregon 97462

Why are there contaminants in my drinking water? - 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 Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (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: 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, which 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, which 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, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems; and radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Additional Information for 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. City of Oakland 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 <http://www.epa.gov/safewater/lead>.

Oakland is an old city. Please consider an upgrade of your water and sewer lines to current code and help protect everyone.

2018 Water Test Results - The City of Oakland water department routinely monitors for constituents in your drinking water according to Federal and State laws. The following table shows the results of our monitoring for the period of January 1st to December 31st, 2018. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk. The following table shows many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person. The turbidity sensors minimum detection level 0.020 NTU.

Variances & Exemptions (V&E) - State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

Action Level - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT) - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level - The "Maximum Allowed" (MCL) is 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.

Maximum Contaminant Level Goal - The "Goal" (MCLG) is 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.

TEST RESULTS						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants						
1. Total Coliform Bacteria	N	O	Number of colonies per 100 milliliters	0	presence of coliform bacteria in 5% of monthly samples	Naturally present in the environment and/or it was determined the cause was operator error and the follow up samples were found negative.
2. Fecal Coliform and E. coli	N	O	Number of colonies per 100 milliliters	0	a routine sample and repeat sample are total coliform positive, and one is also fecal coliform or E. coli positive	Human and animal fecal waste
3. Turbidity	N	< 0.1	NTU's	n/a	TT	Soil runoff
Inorganic Contaminants						
14. Copper	Y	0.166	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
17. Lead	Y	0.002	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits.

Microbiological Contaminants:

(1) Total Coliform. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

(2) Fecal Coliform/E.Coli. Fecal Coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.

(3) Turbidity. Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

(14) Copper. Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's disease should consult their personal doctor.

(17) Lead. Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure. The lead level detected in the table above was detected at a private home tap but was not present in the distribution system which indicates lead in the home owners plumbing system. The City of Oakland has instituted an informal line flushing program to increase the water quality for residence on dead end main locations.

Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites, which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. The Water department has included the previous table of contaminants and test results to insure our customers of how serious we are about providing quality water. The contaminants listed in the table had detects or detectable levels, all other contaminants that we test for were non-detected. The City's staff is constantly improving procedures to insure the quality will continue in the future. If you have any questions please call Mr. James Hart at (541) 459-4351, Monday thru Friday 9:00 am to 3:00 pm.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Thank you for allowing us the privilege of providing your family with clean and high-quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding. The City of Oakland Water Department works around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future. We thank you for your help and consideration and we look forward to answering any questions. Chemical test results are attached. Please note that most or all of the chemical samples were (ND) Non-detectable which means that the water is clean and safe to drink under EPA and state standards and the independent test laboratory could not detect any level of trace chemical in the water because the instruments used had a minimum detection level limitation.

Contact Name:	James Hart, Director of Public Works
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811072202-V	11/7/2018	11/21/2018	DICHLOROMETHANE	EP-A	ND	0.005	MG/L
811072202-V	11/7/2018	11/21/2018	ETHYLBENZENE	EP-A	ND	0.7	MG/L
811072202-V	11/7/2018	11/21/2018	O-DICHLOROBENZENE	EP-A	ND	0.6	MG/L
811072202-V	11/7/2018	11/21/2018	P-DICHLOROBENZENE	EP-A	ND	0.075	MG/L
811072202-V	11/7/2018	11/21/2018	STYRENE	EP-A	ND	0.1	MG/L
811072202-V	11/7/2018	11/21/2018	TETRACHLOROETHYLENE	EP-A	ND	0.005	MG/L
811072202-V	11/7/2018	11/21/2018	TOLUENE	EP-A	ND	1	MG/L
811072202-V	11/7/2018	11/21/2018	TRANS-1,2-DICHLOROETHYLENE	EP-A	ND	0.1	MG/L
811072202-V	11/7/2018	11/21/2018	TRICHLOROETHYLENE	EP-A	ND	0.005	MG/L
811072202-V	11/7/2018	11/21/2018	VINYL CHLORIDE	EP-A	ND	0.002	MG/L
811072202-V	11/7/2018	11/21/2018	XYLENES, TOTAL	EP-A	ND	10	MG/L
1810288-01	10/24/2018	10/26/2018	CYLINDROSPERMOPHORE	SRC-AA	ND	0.7	UG/L
1810288-01	10/24/2018	10/26/2018	TOTAL MICROCYSTINS	SRC-AA	ND	0.3	UG/L
810111402-I	10/11/2018	11/5/2018	NITRATE	EP-A	ND	10	MG/L

ND = Not Detected at the Minimum Reporting Level							
Spreadsheet							
Latest Chemical Results - PWS ID: 00581 ---- OAKLAND, CITY OF							
Sample ID	Sample Date	Receive Date	Chemical	Source ID	Results	Current MCL	UOM
811072202-V	11/7/2018	11/21/2018	1,1,1-TRICHLOROETHANE	EP-A	ND	0.2	MG/L
811072202-V	11/7/2018	11/21/2018	1,1,2-TRICHLOROETHANE	EP-A	ND	0.005	MG/L
811072202-V	11/7/2018	11/21/2018	1,1-DICHLOROETHYLENE	EP-A	ND	0.007	MG/L
811072202-V	11/7/2018	11/21/2018	1,2,4-TRICHLOROBENZENE	EP-A	ND	0.07	MG/L
811072202-V	11/7/2018	11/21/2018	1,2-DICHLOROETHANE	EP-A	ND	0.005	MG/L
811072202-V	11/7/2018	11/21/2018	1,2-DICHLOROPROpane	EP-A	ND	0.005	MG/L
811072202-V	11/7/2018	11/21/2018	BENZENE	EP-A	ND	0.005	MG/L
811072202-V	11/7/2018	11/21/2018	CARBON TETRACHLORIDE	EP-A	ND	0.005	MG/L
811072202-V	11/7/2018	11/21/2018	CHLOROBENZENE	EP-A	ND	0.1	MG/L

1810121-01	10/9/2018	10/15/2018	CYLINDROSPERM OPSIN	SRC-AA	ND	0.7 UG/L
1810121-01RE1	10/9/2018	10/15/2018	TOTAL MICROCYSTINS	SRC-AA	ND	0.3 UG/L
1809267-01	9/26/2018	10/5/2018	CYLINDROSPERM OPSIN	SRC-AA	ND	0.7 UG/L
1809267-01	9/26/2018	10/5/2018	TOTAL MICROCYSTINS	SRC-AA	ND	0.3 UG/L
1809101-01	9/11/2018	9/18/2018	CYLINDROSPERM OPSIN	SRC-AA	ND	0.7 UG/L
1809101-01RE1	9/11/2018	9/18/2018	TOTAL MICROCYSTINS	SRC-AA	ND	0.3 UG/L
1808292-01	8/28/2018	8/31/2018	CYLINDROSPERM OPSIN	SRC-AA	ND	0.7 UG/L
1808292-01	8/28/2018	8/31/2018	TOTAL MICROCYSTINS	SRC-AA	ND	0.3 UG/L
1808139-01	8/16/2018	8/30/2018	CYLINDROSPERM OPSIN	SRC-AA	ND	0.7 UG/L
1808139-01	8/16/2018	8/30/2018	TOTAL MICROCYSTINS	SRC-AA	ND	0.3 UG/L
808092901	8/9/2018	8/23/2018	COPPER	DIST-A	0.336	1.3 MG/L
808092901	8/9/2018	8/23/2018	LEAD	DIST-A	ND	0.015 MG/L
808092902	8/9/2018	8/23/2018	COPPER	DIST-A	0.018	1.3 MG/L
808092902	8/9/2018	8/23/2018	LEAD	DIST-A	ND	0.015 MG/L
808092903	8/9/2018	8/23/2018	COPPER	DIST-A	0.012	1.3 MG/L
808092903	8/9/2018	8/23/2018	LEAD	DIST-A	ND	0.015 MG/L
808092904	8/9/2018	8/23/2018	COPPER	DIST-A	ND	1.3 MG/L
808092904	8/9/2018	8/23/2018	LEAD	DIST-A	ND	0.015 MG/L
808092905	8/9/2018	8/23/2018	COPPER	DIST-A	0.188	1.3 MG/L
808092905	8/9/2018	8/23/2018	LEAD	DIST-A	ND	0.015 MG/L
808092906	8/9/2018	8/23/2018	COPPER	DIST-A	0.046	1.3 MG/L
808092906	8/9/2018	8/23/2018	LEAD	DIST-A	ND	0.015 MG/L
808092907	8/9/2018	8/23/2018	COPPER	DIST-A	0.053	1.3 MG/L
808092907	8/9/2018	8/23/2018	LEAD	DIST-A	ND	0.015 MG/L
808092908	8/9/2018	8/23/2018	COPPER	DIST-A	0.079	1.3 MG/L
808092908	8/9/2018	8/23/2018	LEAD	DIST-A	ND	0.015 MG/L
808092909	8/9/2018	8/23/2018	COPPER	DIST-A	0.047	1.3 MG/L
808092909	8/9/2018	8/23/2018	LEAD	DIST-A	ND	0.015 MG/L
808092910	8/9/2018	8/23/2018	COPPER	DIST-A	ND	1.3 MG/L
808092910	8/9/2018	8/23/2018	LEAD	DIST-A	ND	0.015 MG/L
808092911	8/9/2018	8/23/2018	COPPER	DIST-A	0.056	1.3 MG/L
808092911	8/9/2018	8/23/2018	LEAD	DIST-A	ND	0.015 MG/L
808092912	8/9/2018	8/23/2018	COPPER	DIST-A	0.057	1.3 MG/L
808092912	8/9/2018	8/23/2018	LEAD	DIST-A	0.002	0.015 MG/L