2019 CONSUMER CONFIDENCE REPORT ON WATER QUALITY FOR 2018

ANNUAL WATER QUALITY REPORT

Providing customers with safe, quality drinking water is a top priority for Liberty Utilities, and we are proud to present this Water Quality Report (Consumer Confidence Report) that shares detailed information regarding local water service and our compliance with state and federal quality standards during the 2018 calendar year.

Liberty Utilities makes significant investments each year to ensure the water we deliver to customers meets all safety standards established by the State Water Resources Control Board's Division of Drinking Water (DDW), California Public Utilities Commission (CPUC) and United States Environmental Protection Agency (USEPA). We invest responsibly in order to maintain the local water infrastructure, because a strong infrastructure is a key factor in delivering quality water. Additionally, we have a top-notch water quality program that ensures the water delivered to your home or business is thoroughly tested by independent laboratories and data is provided to the state to verify compliance with all applicable safety regulations.

We know our customers rely on us to make sure the water at their tap is safe to drink, and we take that responsibility seriously.

At Liberty Utilities, the words "Local and Responsive. We Care." are more than a tagline. Our employees live in the local community and take great pride in providing quality water and reliable service to you and your neighbors.

If you have any questions about the information within this report, please don't hesitate to contact us anytime at 562-923-0177. We encourage you to visit our website at www.LibertyUtilities.com to sign up for our email distribution list, so we can keep you informed with timely updates regarding your water service. Also, follow us on Facebook (@LibertyParkH2O) to stay up-to-date.

On behalf of the entire Liberty Utilities family, thank you for being a valued customer and neighbor. We are proud to be your water provider.

Sincerely,

Chris Alario President, Liberty Utilities-California

Este informe contiene informacion muy importante sobre su agua potable. Traduzcalo o hable con alguien que lo entienda bien.







Where Does My Water Come From?

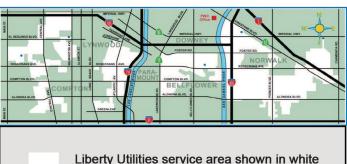
In 2018 Liberty Utilities – Lynwood/Rancho Dominguez system obtained 29% of its source water from the Metropolitan Water District of Southern California (MWD). The MWD imports water from the Colorado River Aqueduct and from the Sacramento-San Joaquin Delta by way of the State Water Project. An additional 71% came from deep wells that pump ground water from the Central Basin Aquifer.

About the Metropolitan Water District of Southern California

MWD is a consortium of 26 cities and water districts that provides drinking water to nearly 19 million people in parts of Los Angeles, Orange, San Diego, Riverside, San Bernardino, and Ventura counties. MWD currently delivers an average of 1.7 billion gallons of water per day to a 5200 square-mile service area. The mission of the MWD is to provide its service area with adequate and reliable supplies of high-quality water to meet present and future needs in an environmentally and economically responsible way. MWD continues to add storage and conservation resources to it already diverse water supply portfolio to insure a reliable water supply well into the future. Further, MWD continues to invest in water quality improvements, including the addition of ozone as a treatment process, and the expansion of its treatment capacity that will provide excellent quality water. For more information about MWD, visit their website at www.mwdh2o.com.

Two Sources of Imported Water

The Lynwood / Rancho Dominguez system receives the majority of its water from the MWD Diemer Filtration Plant in Yorba Linda. In 2018, the Diemer Plant source water consisted of 34% State Water Project supply, and 66% Colorado River Water supply.



Liberty Offilities service area shown in white

MWD Interconnection

From The United States Environmental Protection Agency (USEPA)

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

In order to ensure that tap water is safe to drink, the 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. SWRCB regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

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 USEPAs Safe Drinking Water Hotline at 1-800-426-4791.

Sensitive Populations May Be More Vulnerable

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 disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water form their health care providers. The USEPA and 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 at 1-800-426-4791.

2018 ANNUAL WATER QUALITY REPORT

What Are The Drinking Water Standards?

Drinking water standards are the regulations set by the USEPA to control the level of contamination in the nation's drinking water. The USEPA and the SWRCB are the agencies responsible for establishing drinking water quality standards in California. These standards are part of the Safe Drinking Water Act's "multiple barrier approach" to drinking water protection. This approach includes assessing and protecting drinking water sources; protecting wells and surface water; making sure water is treated by qualified operators; ensuring the integrity of the distribution system; and making information about water quality available to the public. The water delivered to your home meets the standards required by the USEPA and the SWRCB.

If you would like more information about water quality, or to find out about upcoming opportunities to participate in public meetings, please call Liberty Utilities' Downey office at 562-299-5117.

This report describes those contaminants that have been detected in the analyses of almost 200 different potential contaminants, nearly 100 of which are regulated by the USEPA and the SWRCB. Liberty is proud to tell you that there have been no contaminants detected that exceed any federal or state drinking water standards. Hundreds of samples are collected every month by Liberty to assure that all primary (health-related) and secondary (aesthetic) drinking water standards are being met. Sample results are available on the Table that is part of this report.

This report is intended to provide information for all water users. If received by and absentee landlord, a business, or a school, please share the information with tenants, employees or students. We are happy to make additional copies of this report available. You may also access this report on the Liberty Utilities web page at www.libertyutilities.com.

Source Water Assessment

The 1996 Safe Drinking Water Act amendments required states to perform an assessment of potentially contaminating activities near drinking water sources of all water utilities. Liberty Utilities updated the Source Water Assessment in 2017. Liberty's wells are considered most vulnerable to the following activities: landfills and dumps; irrigated crops; sewer collection systems; gas stations; dry cleaners; metal plating/finishing/fabricating shops; military installations; chemical /petroleum processing and storage facilities; and underground storage tanks.

A copy of the complete assessment is available at Liberty Utilities' Downey office, and at the SWRCB office in Glendale. You may request a summary of the assessment by contacting Mr. Frank Heldman of Liberty Utilities at 562-299-5117; or by contacting Ms. Lillian Luong, SWRCB sanitary engineer, at 818-551-2038.

Important Health Information

1,4 - Dioxane

In 2011, Liberty Utilities, along with other water utilities in the Central Basin aquifer, sampled all wells for 1,4-dioxane at the request of the SWRCB. While 1,4-dioxane is not a regulated chemical, SWRCB had set a Notification Level (NL) of 1 part per billion (ppb) in 2010. Liberty found 1,4-dioxane in one active well in the Lynwood / Rancho Dominguez system at 1.8 ppb. SWRCB does not recommend Liberty remove this well from service until it exceeds 10 times the NL. Little scientific data are available on the long-term effects of 1,4-dioxane on human health, although the USEPA has listed it as a probable human carcinogen. Besides this notice, the only action required was notification of the Lynwood City Council and the County Board of Supervisors. This was done in January of 2012.

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 the drinking water. The USEPA 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 other circulatory problems.

Lead

While there have never been any problems with lead in our water system, the USEPA and the SWRCB require the following information be presented in this report. 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. Liberty Utilities 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/lead.

Lead Testing in Schools

Regulation was passed requiring the testing of public schools for lead. During 2018, one school requested and received testing for lead on its campus.



	Lynwoo	d-Rancl	no Domi	nguez 2	018 Annu	al Water C	Quality Repo	ort
Primary Standards - Health Based	Primary MCL	PHG (MCLG)	Range of Detection for MWD	Average Level for MWD	Range of Detection	Average Level	Most Recent Sampling Date (b)	Typical Source of Constituent
Turbidity (a)								
Highest single measurement of the treated surface water (NTU)	TT = 1.0	n/a	n/a	0.07	n/a	n/a	2018	Soil runoff
owest percent of all monthly readings less. - owest percent of all monthly readings less.	TT = 95	n/a	n/a	100	n/a	n/a	2018	Soil runoff
norganic Constituents								•
Aluminum (mg/L)	1	0.6	ND - 0.31	0.12	ND	ND	2018	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic (µg/L)	10	0.004	ND	ND	2.3 - 6.9	3.9	2018	Erosion of natural deposits; runoff from orchards, glass and electronics production wastes
Barium (mg/L)	1	2	0.12	0.12	0.12	0.12	2018	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Bromate (μg/L)	10	0.1	ND - 4.7	2.0	n/a	n/a	2018	Byproduct of drinking water disinfection
Fluoride (mg/L) [Naturally occurring]	2.0	1	0.6 - 0.9	0.7	0.3 - 0.4	0.3	2018	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Volatile Organic Constituents								
Tetrachloroethylene [PCE] (μg/L)	5	0.06	ND	ND	ND - 0.58	ND	2018	Discharge from factories, dry cleaners, and auto shops (metal degreaser)
Radioactive Constituents								
Gross Alpha Activity (pCi/L)	15	(0)	ND	ND	3.1 - 3.2	3.2	2017	Erosion of natural deposits
Jranium (pCi/L)	20	0.43	ND	ND	ND - 2.5	ND	2017	Erosion of natural deposits
Secondary Standards - Aesthetic	Secondary MCL	PHG (MCLG)	Range of Detection for MWD	Average Level for MWD	Range of Detection	Average Level	Most Recent Sampling Date	Typical Source of Constituent
Aluminum (μg/L)	200	n/a	ND - 310	124	ND	ND	2018	Erosion of natural deposits; residue from some surface water treatment processes
Chloride (mg/L)	500	n/a	92 - 95	94	36	36	2018	Runoff/leaching from natural deposits; seawater influence
Color (units)	15	n/a	ND - 1	ND	ND	ND	2018	Naturally-occurring organic materials
ron (μg/L)	300	n/a	ND	ND	ND - 700	76	2018	Leaching from natural deposits; industrial wastes
Manganese (µg/L)	50	n/a	ND	ND	ND - 49	ND	2018	Leaching from natural deposits
OdorThreshold (units)	3	n/a	1 - 4	2	1	1	2018	Naturally-occurring organic materials
Specific Conductance (μS/cm)	1600	n/a	852 - 961	906	610	610	2018	Substances that form ions when in water; seawate influence
Sulfate (mg/L)	500	n/a	178 - 220	199	74	74	2018	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (mg/L)	1000	n/a	523 - 607	565	370	370	2018	Runoff/leaching from natural deposits
Other Parameters	Notification Level	PHG (MCLG)	Range of Detection for MWD	Average Level for MWD	Range of Detection	Average Level	Most Recent Sampling Date	Typical Source of Constituent
Aggressive Index (units) [c]	n/a	n/a	12.2 - 12.4	12.3	12.4	12.4	2018	
Alkalinity (mg/L)	n/a	n/a	99 - 114	106	190	190	2018	
Calcium (mg/L)	n/a	n/a	52 - 65	58	68	68	2018	
Hardness [as CaCO3] (mg/L)	n/a	n/a	219 - 262	240	226	226	2018	The sum of polyvalent cations present in the wate generally magnesium and calcium; the cations are usually naturally occurring
Hardness [as CaCO3] (grains/gal)	n/a	n/a	13 - 15	14	13	13	2018	
Magnesium (mg/L)	n/a	n/a	21 - 25	23	14	14	2018	
pH (pH units)	n/a	n/a	8.1	8.1	7.9	7.9	2018	4
Potassium (mg/L) Sodium (mg/L)	n/a n/a	n/a n/a	4.0 - 4.8 86 - 98	92	3.0	3.0	2018	Refers to the salt present in the water and is
Unregulated Drinking Water Constituents	Notification Level	PHG (MCLG)	Range of Detection for MWD	Average Level for MWD	Range of Detection	Average Level	Most Recent Sampling Date	generally naturally occurring
1,4-Dioxane (μg/L)	1	n/o			ND 10	1		
	1000	n/a	n/a	n/a	ND - 1.9	1	2018	-
Boron (μg/L)	1000	n/a	130	130	n/a	n/a	2018	1



Lynwood - Rancho Dominguez System - Distribution Water Quality										
Distribution System	Primary MCL (MRDL)	PHG (MRDLG)	Range of Detection	Average Level	Most Recent Sampling Date	Typical Source of Constituent				
Fluoride (mg/L) [Treatment added]	0.7 - 1.3	1.0	0.6 - 1.0	0.8	2018	Treatment added.				
Chlorine [as Cl ₂] (mg/L)	(4.0)	(4)	ND - 2.2	1.2	2018	Drinking water disinfectant added for treatment				
HAA5 [Total of Five Haloacetic Acids] (µg/L)	60	n/a	ND - 5.3	2.4	2018	Byproduct of drinking water disinfection				
TTHMs [Total of Four Trihalomethanes] (µg/L)	80	n/a	1.1 - 36	14.6	2018	Byproduct of drinking water disinfection				
Lead and Copper Rule	Action Level	PHG (MCLG)	Sample Data	90th % Level	Most Recent Sampling Date	Typical Source of Constituent				
Lead and Copper Rule Copper (mg/L)		(MCLG)	•	Level	Sampling	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives				

KEY TO ABBREVIATIONS AND FOOTNOTES:

mg/L or ppm = milligrams per liter or parts per million μ g/L or ppb = micrograms per liter or parts per billion ng/L or ppt = nanograms per liter or parts per trillion pCi/L - picoCuries per liter

NA or n/a - Not Applicable or Not Required

ND = Not detected

TT = Treatment Technique

NL = Notification Level

NTU = Nephelometric Turbidity Units. This is a measure of suspended material in water.

- (a) = Turbidity is a measure of the cloudiness of the water and is a good indicator of water quality and filtration performance.
- (b) = The state allows us to monitor for some parameters less than once per year because the concentrations of these parameters in groundwater sources do not change frequently. Some of the data, though representative, are more than one year old.
- [c] = An Aggressive Index of 11 or greater indicates the water is non-aggressive (non-corrosive)

DEFINITIONS:

- **MCL Maximum Contaminant Level:** The highest level of a contaminant allowed in drinking water. Secondary MCLs 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 are no known or expected risks to health. MCLGs are set by the US Environmental Protection Agency.
- **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.
- **NL Notification Level:** Health-based advisory levels established by the Division of Drinking Water (DDW) for chemicals in drinking water that lack MCLs.
- **AL Regulatory Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
- **PDWS Primary Drinking Water Standard:** MCLs, MRDLs, and TTs for contaminants that affect health, along with their monitoring and reporting requirements.
- **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.
- TT Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.



FOR MORE INFORMATION

- LIBERTYUTILITIES.COM
- 562-923-0177
- GulbertyParkH20

