# ANNUAL WATER QUALITY REPORT

Liberty Utilities has been committed to providing customers with safe, quality drinking water. 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 2019 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 the 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 DDW to verify compliance with all primary and secondary State and Federal water quality standards.

We know our customers rely on us to make sure the water at their tap is safe to drink, and we take this 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 800-727-5987. 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 información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.









## Where Does My Water Come From?

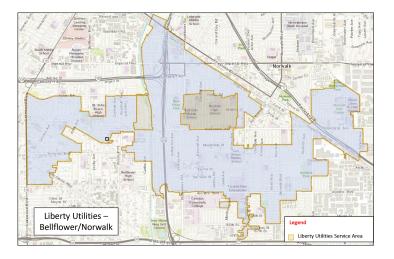
In 2019 Liberty Utilities – Bellflower / Norwalk system obtained 14% of its source water from the Metropolitan Water District of Southern California (MWD). The MWD imports water from the Colorado River Aqueduct and from the Sacramento-San Joaquin Delta by way of the State Water Project. An additional 86% 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. 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 its already diverse water supply portfolio to ensure 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 Bellflower / Norwalk system receives the majority of its water from the MWD Diemer Filtration Plant in Yorba Linda. In 2019, the Diemer Plant source water consisted of 64% State Water Project supply, and 36% Colorado River Water supply.



# 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, which 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. The U.S. Food and Drug Administration and California Law 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 less the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.



# 2019 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 (800)-727-5987.

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 an 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 well sources are considered most vulnerable to the following activities: landfills and dumps; sewer collection systems; gas stations; dry cleaners; metal plating/finishing/fabricating shops; military installations; chemical /petroleum processing and storage facilities; and leaking 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 562-805-2015; 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.

In 2019, Liberty Utilities found low levels of 1,4-dioxane in four active wells in the Bellflower/Norwalk system. SWRCB does not recommend Liberty remove these wells from service unless they exceed 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 city councils of the communities Liberty serves where 1,4-dioxane was found. This was done in January of 2003.

#### 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.

Per- and polyfluoroalkyl substances (PFAS)

Per- and polyfluoroalkyl substances (PFAS), sometimes called PFCs, are a group of chemicals that are resistant to heat, water, and oil. PFAS have been classified by the United States Environmental Protection Agency (U.S. EPA) as an emerging contaminant on the national landscape.

The U.S. EPA has not established enforceable drinking water standards, called maximum contaminant levels, for these chemicals. In February 2020, the State Water Board's Division of Drinking Water (DDW) updated the response levels for PFAS. A response level is a non-regulatory, precautionary health-based measure that represents a recommended level that water systems consider taking a water source out of service or provide treatment if that option is available to them. The new response levels for PFOA is 10 ng/L and for PFOS 40 ng/L. For information on PFOA, PFOS, and other PFAS, including possible health outcomes, you may visit these websites: https://www.epa.gov/pfas.

Sampling conducted on November 2019, indicated the presence of PFOA and PFOS in source water, with an average detection above the Response Levels in one of our wells. Liberty Utilities has proactively taken the well offline so no customers will receive water from this source. In addition, we are studying treatment options for all the wells to protect public health.

Who can I call if I have questions about PFAS in my drinking water?

If any resident has additional questions regarding this issue, Liberty Utilities can be contacted at (800)-727-5987. You may also contact the Production Department at (562) 805-2066 Monday through Friday, 7:00 AM to 3:00 PM.

## **Drinking Water Fluoridation**

Fluoride has been added to U.S. drinking water supplies since 1945. Of the 50 largest cities in the U.S., 43 fluoridate their drinking water. Liberty Utilities treats your water by adding fluoride to the naturally occurring level to help prevent dental caries in consumers. State regulation require the fluoride levels in the treated water be maintained within a range of 0.6 mg/L to 1.2 mg/L with an optimum dose of 0.7 mg/L. Our monitoring showed that the fluoride levels in the treated water ranged from 0.44 mg/L to 1.1 mg/L with an average of 0.67 mg/L. Information about fluoridation, oral health, and current issues is available from https://www.waterboards.ca.gov/drinking\_water/certlic/drinking water/Fluoridation.html

# Unregulated Contaminant Monitoring Regulation (UCMR4)

The Safe Drinking Water Act requires the USEPA to identify unregulated contaminants for potential regulation. Every five years, the USEPA identifies a list of unregulated chemicals to be monitored by the nation's water utilities over a three-year period. The current monitoring cycle (UCMR-4) is from 2018 – 2020. Liberty Utilities has begun monitoring, and current results are included in this report. Once the USEPA has obtained this occurrence data nationally, they are required to determine if there is a meaningful opportunity for increased health protection of drinking water through regulation of these contaminants.



Primary Standards - Health Based (units)	Primary MCL	PHG (MCLG)	Range of Detection for MWD	Average Level for MWD	Range of Detection for LU Sources	Average Level for LU Sources	Most Recent Sampling Date <sup>(b)</sup>	Typical Source of Constituent
Turbidity (a)								
Highest single measurement of the treated surface water (NTU)	TT = 1.0	n/a	0.05	n/a	n/a	n/a	2019	Soil runoff
Lowest percent of all monthly readings less than 0.3 NTU (%)	TT = 95	n/a	100	n/a	n/a	n/a	2019	Soil runoff
Inorganic Constituents								
Aluminum (mg/L)	1	0.60	ND-0.065	0.124	ND - 0.0051	0.0025	2019	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic (μg/L)	10	0.004	ND	ND	2.0	2.0	2019	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes.
Barium (mg/L)	1	2	ND	ND	0.06 - 0.08	0.07	2019	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Chromium, Total (µg/L)	50	(100)	ND	ND	0.58-0.88	0.73	2019	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Fluoride (mg/L)	2.0	1	0.1 - 0.9	0.7	0.35 - 0.38	0.36	2019	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Nickel (μg/L)	100	12	ND	ND	1.9 - 2.1	2.0	2019	Erosion of natural deposits; discharge from metal factories
Nitrate [as N] (mg/L)	10	10	0.5	0.5	2.7	2.7	2019	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Selenium (μg/L)	50	30	ND	ND	0.92 - 1.0	0.96	2019	Discharge from petroleum, glass and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additives).
Synthetic Organic Constituents			•					
Atrazine (µg/L)	1	0.15	ND	ND	ND - 0.14	0.06	2019	Runoff from herbicide used on row crops and along railroad and highway right-of-ways
Simazine (μg/L)	4	4	ND	ND	ND - 0.19	0.12	2019	Herbicide runoff
Volatile Organic Constituents								
1,1-Dichloroethylene (µg/L)	6	10	ND	ND	ND - 1.4	0.26	2019	Discharge from industrial chemical factories
Tetrachloroethylene [PCE] (µg/L)	5	0.06	ND	ND	ND - 0.70	0.16	2019	Discharge from factories, dry cleaners, and auto shops (metal degreaser)
Radioactive Constituents								
Combined Radium 226/228 (pCi/L)	5	(0)	ND	ND	1.09 - 1.71	1.43	2019	Erosion of natural deposits
Gross Alpha Activity (pCi/L)	15	(0)	ND	ND	ND - 5	ND	2017	Erosion of natural deposits
Uranium (pCi/L)	20	0.43	ND	ND	2.2	2.2	2019	Erosion of natural deposits
Secondary Standards - Aesthetic (units)	Secondary MCL	PHG (MCLG)	Range of Detection for MWD	Average Level for MWD	Range of Detection for LU Sources	Average Level for LU Sources	Most Recent Sampling Date	Typical Source of Constituent
Aluminum (µg/L)	200	n/a	ND-65	124	ND - 5.1	2.5	2019	Erosion of natural deposits; residue from some surface water treatment processes
Color (units)	15	n/a	ND-1	ND	ND	ND	2019	Naturally-occurring organic materials
Chloride (mg/L)	500	n/a	53-58	56	83 - 84	83.5	2019	Runoff/leaching from natural deposits; seawater influence
Copper (mg/L)	1	n/a	ND	ND	ND - 0.00051	0.00025	2019	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
OdorThreshold (units)	3	n/a	ND-1	1	1	1	2019	Naturally-occurring organic materials
Specific Conductance (μS/cm)	1600	n/a	508-521	514	790 - 820	805	2019	Substances that form ions when in water, seawater influence
Sulfate (mg/L)	500	n/a	89-93	91	120 - 130	125	2019	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (mg/L)	1000	n/a	296-312	304	440 - 510	475	2019	Runoff/leaching from natural deposits



Other Parameters (units)	Notification Level	PHG (MCLG)	Range of Detection for MWD	Average Level for MWD	Range of Detection for LU Sources	Average Level for LU Sources	Most Recent Sampling Date	Typical Source of Constituent
Aggressive Index (units) [C]	n/a	n/a	12.1-12.2	12.1	12.2-12.3	12.25	2019	
Alkalinity (mg/L)	n/a	n/a	69-74	72	160-170	165	2019	Runoff or leaching from natural deposits
Calcium (mg/L)	n/a	n/a	29-30	30	69.6-85.4	77.5	2019	Runoff or leaching from natural deposits
Hardness [as CaCO3] (mg/L) (d)	n/a	n/a	124-130	127	230-280	255	2019	Runoff or leaching from natural deposits
Magnesium (mg/L)	n/a	n/a	13-14	14	13.6-16.3	14.95	2019	Runoff or leaching from natural deposits
pH (pH units)	n/a	n/a	8.4-8.5	8.4	7.73	7.73	2019	Hydrogen ion concentration
Potassium (mg/L)	n/a	n/a	2.6-2.9	2.8	4.2-4.4	4.3	2019	Runoff or leaching from natural deposits
Sodium (mg/L) <sup>[e]</sup>	n/a	n/a	54-57	56	57-63	60	2019	Refers to the salt present in the water and is generally naturally occurring
Unregulated Drinking Water Constituents (units)	Notification Level	PHG (MCLG)	Range of Detection for MWD	Average Level for MWD	Range of Detection for LU Sources	Average Level for LU Sources	Most Recent Sampling Date	
1,4-Dioxane (μg/L)	1	n/a			1.2-3.2	2.48	2019	
Hexavalent Chromium (μg/L)	RL = 1	0.02	ND	ND	ND-1.1	ND	2016	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits
Perfluorooctanesulfonate Acid (PFOS) (ng/L)	6.5	n/a	ND	ND	46.3-63.0	52.3	2019	· ·
Perfluorooctanoic Acid (PFOA) (ng/L)	5.1	n/a	ND	ND	9.96-13.67	11.7	2019	
Perfluorononanoic Acid (PFNA) (ng/L)	n/a	n/a	ND	ND	1.43-2.03	1.8	2019	
Perfluorohexanesulfonic Acid (PFHxS) (ng/L)	n/a	n/a	ND	ND	9.7-11.0	10.4	2019	
Perfluoroheptanoic Acid (PFHpA) (ng/L)	n/a	n/a	ND	ND	ND-1.43	0.71	2019	
Perfluorohexanoic Acid (PFHxA) (ng/L)	n/a	n/a	2.2 - 2.3	2.3	ND-2.3	1.3	2019	
Perfluorobutanesulfonic Acid (PFBS) (ng/L)	n/a	n/a	ND	ND	1.96-3.77	2.59	2019	
UCMR4 - Additional Chemicals								
Manganese (µg/L) (f)	n/a	n/a	n/a	n/a	0.96-2.4	1.52	2019	
HAA5	n/a	n/a	n/a	n/a	0.38-5.3	1.17	2019	
HAA6Br	n/a	n/a	n/a	n/a	0.38-6.2	1.60	2019	4
HAA9Br	n/a	n/a	n/a	n/a	0.38-10.4	2.12	2019	

Microbiological Constituents - Distribution System	Primary MCL	PHG (MCLG)	Va	lue		Most Recent Sampling Date	Typical Source of Constituent
Total Coliform Bacteria ≥40 Samples/Month (Present / Absent)	More than 5% of monthly samples are positive	(0)	Highest percent of monthly samples positive was 1.05 %			2019	Naturally present in the environment
Disinfection Byproducts and Disinfectant Residuals (units)	Primary MCL (MRDL)	PHG (MRDLG)	Range of Detection for LU Sources			Most Recent Sampling Date	Typical Source of Constituent
Fluoride (mg/L)	2.0	1.0	0.44-1.1	0.67		2019	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Chlorine [as Cl <sub>2</sub> ] (mg/L)	(4.0)	(4)	ND-2.17	0.81		2019	Drinking water disinfectant added for treatment
HAA5 [Total of Five Haloacetic Acids] (μg/L)	60	n/a	0-7.2	5.5		2019	Byproduct of drinking water disinfection
TTHMs [Total of Four Trihalomethanes] (µg/L)	80	n/a	1.1-26.0	21.5		2019	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
Copper (mg/L)	1.3	0.3	1 of the 30 samples collected exceeded the action level 0.2		0.2	2019	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (µg/L)	15	0.2	1 of the 30 samples collected exceeded the action ND level			2019	Internal corrosion of household plumbing systems; discharges from industrial manufacturers; erosion of natural deposits





# **Terms To Know**

#### **DEFINITIONS**

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.

**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, MRDLs and treatment techniques (TTs) for contaminants that affect health, along with their monitoring and reporting requirements.

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

**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

**Regulatory Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

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

#### **KEY TO ABBREVIATIONS AND FOOTNOTES**

mg/L or ppm = milligrams per liter or parts per million  $\mu$ g/L or ppb = micrograms per liter or parts per billion ng/L or ppt = nanograms per liter or parts per trillion  $\rho$ Ci/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 the 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)
- (d) = Hardness is the sum of polyvalent cations present in the water, generally magnesium and calcium. The cations are usually naturally occurring.
- [e] = Sodium refers to the salt present in the water and is generally naturally occurring.
- (f) = Manganese monitored at the system interconnection not at the source