2022 Consumer Confidence Report on Water Quality for 2021

Annual Water Quality Report

Apple Valley (PWS ID# 3610003)

Liberty

Message from the President

Liberty is 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 2021 calendar year.

Liberty makes appropriate investments each year to deliver water that meets 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 (EPA). We invest responsibly to maintain the local water infrastructure because a strong infrastructure is key to delivering quality water. The water we deliver to your home or business is thoroughly tested by independent laboratories, and data is provided to DDW to verify compliance with primary and secondary state and federal water quality standards.

We know our customers rely on us for water that is safe to drink, and we take this responsibility seriously. At Liberty, "Energy and Water for Life" are more than a tagline. Our employees live in the community and take pride in providing quality water and reliable service to you and your neighbors.

If you have any questions about this report, please don't hesitate to contact us at 800-727-5987.

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

Sincerely,

Edward Jackson

President, Liberty - California

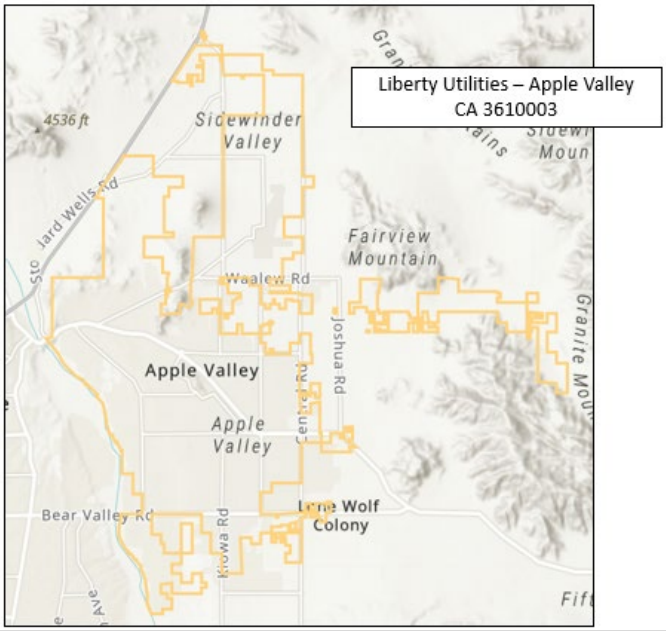
This report contains important information about your drinking water. Please contact Liberty at (800) 727-5987 for assistance in Spanish.

Este informe contiene información muy importante sobre su agua para beber. Favor comunicarse con Liberty al (800) 727-5987 para asistirlo en Español.

Where Does My Water Come From?

In 2021 Liberty -Apple Valley system obtained 100% of its source water from 18 deep wells owned by Liberty and 1 Well owned by Mojave Water Agency. These wells draw water from the deep Alto sub-unit of the Mojave groundwater basin. This high-quality aquifer is recharged from snowmelt from the San Bernardino Mountains to the south, and the Mojave River to the west. Also, the Mojave Water Agency (MWA) imports water from the California State Water Project to spread in the Mojave River to help recharge the groundwater. Some of the water we pump has been age-dated close to 10,000 years old by the United States Geologic Survey. That means it has been protected and naturally filtered for a very long time.

Liberty-Apple Valley has provided dedicated service to its customers for 70 years. In 2021 we produced 10,045 acre-feet of high-quality potable drinking water for over 21,000 residential and business customers. This equates to over 3.2 billion gallons of water served over an area of approximately 50 square miles that encompasses approximately 81 % of the Town of Apple Valley and portions of the surrounding area through a network of 475 miles of underground pipe.



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 completed the Source Water Assessment in 2002. Liberty's wells are considered most vulnerable to the following activities: high-density housing; septic systems - low and high density; parks; irrigated crops; golf courses; sewer collection systems; gas stations; roads and streets; railroads; stormwater injection wells; storm drain discharge points; stormwater detention facilities; agricultural and irrigation water wells; historic grazing; historic waste dumps and landfills; machine shops; and leaking underground storage tanks.

A copy of the complete assessment is available at Liberty's Apple Valley office and the SWRCB office in San Bernardino. You may request a summary of the assessment by contacting Jeremy Caudell at Liberty Utilities at 760-240-8334; or by contacting the SWRCB office in San Bernardino at 909-383-4328.

What are 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. 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.

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 analyzed every month by Liberty's contract certified laboratory assures 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 Consumer Confidence Report (CCR) reflects changes in drinking water regulatory requirements during 2021. These revisions add the requirements of the federal Revised Total Coliform Rule, effective since April 1, 2016 to the existing state Total Coliform Rule. The revised rule maintains the purpose to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of microbials (i.e., total coliform and E. coli bacteria). The U.S. EPA anticipates greater public health protection as the rule requires water systems that are vulnerable to microbial contamination to identify and fix problems. Water systems that exceed a specified frequency of total coliform occurrences are required to conduct an assessment to determine if any sanitary defects exist. If found, these must be corrected by the water system. The state Revised Total Coliform Rule became effective July 1, 2021.

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 web page at is www.libertyenergyandwater.com.

Substances That Could be in Water

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, 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.

In order to ensure that tap water is safe to drink, the USEPA and the SWRCB prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration (USFDA) also establishes 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 USEPA Safe Drinking Water Hotline at 1-800-426-4791 or visiting their website at https://www.epa.gov/ground-water-and-drinking-water/national-primary-drinking-water-regulations. For information on bottled water visit the USFDA website at www.fda.gov.

Do I Need to Take Special Precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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. 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.

Important Health Information

Lead - Lead, in drinking water, is primarily from materials and components associated with service lines and home plumbing. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. We are responsible for providing high-quality drinking water, but we 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. 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 https://www.epa.gov/lead.

Nitrate - Nitrates in drinking water at levels above 10 ppm are a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

How Might I Become Actively Involved?

If you would like to observe the decision-making process that affect drinking water quality or if you have any further questions about your drinking water report, please call us at 1-800-727-5987 to inquire about scheduled meetings or contact persons.

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Primary Standards - Health Based (units)	Primary MCL	PHG (MCLG)	Range of Detection for LU Sources	Average Level for LU Sources	Most Recent Sampling Date [a]	Typical Source of Constituent
Inorganic Constituents						
Arsenic (µg/L)	10	0.004	2.4-3.0	2.7	2021	Erosion of natural deposits; runoff from orchards, glass and electronics production wastes
Fluoride (mg/L) [Naturally occurring]	2.0	1	0.21-0.68	0.49	2021	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories

Primary Standards - Health Based (units)	Primary MCL	PHG (MCLG)	Range of Detection for LU Sources	Average Level for LU Sources	Health Effects	Most Recent Sampling Date [b]	Typical Source of Constituent
Nitrate [as N] (mg/L)	10	10	0.43-5.8	1.7	Infants below the age of six months who drink water containing nitrate in excess of the MCL may quicly become seriously ill and, if untreated, may die because high nitrate levels can interfere with the capacity of the infant's blood to carry oxygen. Symptoms include shortness of breath and blueness of the skin. High nitrate levels may also affect the oxygen-carrying ability of the blood of pregnant women.	2021	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits

Secondary Standards - Aesthetic (units)	Secondary MCL	PHG (MCLG)	Range of Detection for LU Sources	Average Level for LU Sources	Most Recent Sampling Date	Typical Source of Constituent
Chloride (mg/L)	500	n/a	7.4-130	41	2021	Runoff/leaching from natural deposits; seawater influence
Specific Conductance (µS/cm)	1600	n/a	190-970	430	2021	Substances that form ions when in water; seawater influence
Sulfate (mg/L)	500	n/a	12-200	70	2021	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (mg/L)	1000	n/a	130-620	270	2021	Runoff/leaching from natural deposits

Other Parameters (units)	Notification Level	PHG (MCLG)	Range of Detection for LU Sources	Average Level for LU Sources	Most Recent Sampling Date	Typical Source of Constituent
Alkalinity (mg/L)	n/a	n/a	67-94	77	2021	Runoff or leaching from natural deposits
Calcium (mg/L)	n/a	n/a	11-71	26	2021	Runoff or leaching from natural deposits
Hardness [as CaCO3] (mg/L) [b]	n/a	n/a	35-240	113	2021	Runoff or leaching from natural deposits
Hardness [as CaCO3] (grains/gallon)	n/a	n/a	2.0-14.0	6.8	2021	Runoff or leaching from natural deposits
Magnesium (mg/L)	n/a	n/a	1.1-16	6.4	2021	Runoff or leaching from natural deposits
pH (pH units)	n/a	n/a	7.4-8.2	7.9	2021	Hydrogen ion concentration
Sodium (mg/L) [c]	n/a	n/a	16-110	45	2021	Refers to the salt present in the water and is generally naturally occurring

Radioactive Contaminants	Primary MCL	PHG (MCLG)	Range of Detection for LU Sources	Average Level for LU Sources	Most Recent Sampling Date	Typical Source of Constituent
Gross Alpha Activity (pCi/L)	15	(0)	1.66-3.94	3.08	2021	Erosion of natural deposits

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Unregulated Drinking Water Constituents (units)	Notification Level	PHG (MCLG)	Range of Detection for LU Sources	Average Level for LU Sources	Most Recent Sampling Date	Typical Source of Constituent
Haxavalent Chromium (µg/L)	10	0.02	0.6-7.1	3.4	2020	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits
Bromide (µg/L)	n/a	n/a	26-330	132	2019	
Manganese (µg/L)	n/a	n/a	ND-5.9	1	2019	

Microbiological Constituents (units) - Distribution System	Primary MCL	PHG (MCLG)	Value	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%	2021	Naturally present in the environment

Distribution System	Primary MCL (MRDL)	PHG (MRDLG)	Range of Detection	Average Level	Most Recent Sampling Date	Typical Source of Constituent
Chlorine [as Cl_2] (mg/L)	(4.0)	(4)	0.26 - 1.48	0.84	2021	Drinking water disinfectant added for treatment
TTHMs [Total of Four Trihalomethanes] (µg/L)	80	n/a	5.5	5.5	2021	Byproduct of drinking water disinfection

Lead and Copper Rule	Action Level	PHG (MCLG)	Sample Data	Range of Detection	90th % Level	Most Recent Sampling Date	Typical Source of Constituent
Copper (mg/L)	1.3	0.3	0 of the 30 samples collected exceeded the action level.	ND-0.24	ND	2019	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (µg/L)	15	0.2	0 of the 30 samples collected exceeded the action level.	ND	ND	2019	Internal corrosion of household plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

(a) = 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.

(b) = Hardness is the sum of polyvalent cations present in the water, generally magnesium and calcium. The cations are usually naturally occurring.

[c] = Sodium refers to the salt present in the water and is generally naturally occurring.

Definitions, Terms and Abbreviations

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

HAA5: Haloacetic Acids (mono-, di- and tri-chloracetic acid, and mono- and di- bromoacetic acid) as a group.

LRAA: Locational Running Annual Average, or the locational average of sample analytical results for samples taken during the previous four calendar quarters.

MCLG: Maximum Contaminant Level Goal, or 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.

MCL: Maximum Contaminant Level, or 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.

MRDL: Maximum Residual Disinfectant Level, or the highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG: Maximum Residual Disinfectant Level Goal, or 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.

NA: not applicable.

ND: not detectable at testing limits.

NTU: Nephelometric Turbidity Unit, used to measure cloudiness in drinking water.

pCi/L: picocuries per liter, a measure of radioactivity

ppb: parts per billion or micrograms per liter.

ppm: parts per million or milligrams per liter.

ppt: parts per trillion or nanograms per liter.

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 healt, along with their monitoring and reporting requirements.

RAA: Running Annual Average, or the average of sample analytical results for samples taken during the previous four calendar quarters.

Range of Results: Shows the lowest and highest levels found during a testing period, if only one sample was taken, then this number equals the Highest Test Result or Highest Value.

SMCL: Secondary Maximum Contaminant Level, or the secondary standards that are non-enforceable guidelines for contaminants and may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as

taste, odor or color) in drinking water. EPA recommends these standards but does not require water systems to comply

TT: Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water.

TTHM: Total Trihalomethanes (chloroform, bromodichloromethane, dibromochloromethane, and bromoform) as a group.

Conservation Tips for Consumers

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference – try one today and soon it will become second nature.

- ✓ Take short showers – a 5 minutes 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 leaking 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!
- ✓ Visit https://www.epa.gov/watersense for more information.

Violations

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During the calendar year 2021, we did not monitor for nitrate from Well 34 and therefore, cannot be sure of the quality of our drinking water during that time. You should be informed that this source has been offline since April 2021 so you haven't received water from the well since then. This source was sampled for nitrate in July of 2020 with a result of 1.9 mg/L; and most recently on February 10, 2022, with a result of 2.7 mg/L. Both of these results are well below the State and Federal Maximum Contaminant Level (MCL) of 10 mg/L for nitrate. Liberty is being diligent with all the water quality monitoring to ensure that all Federal and State health standards are met.

Contact Information

For information about this report, or your water quality in general, please contact Liberty's office at 1-800-727-5987 or Jeremy Caudell, Water Quality Control Specialist at (760) 240-8334.