



# 2021 Annual Water Quality Report

January through December

East Bay Municipal Utility District is pleased to report that in 2021 your drinking water quality met or surpassed every state and federal requirement that safeguards public health.

*Pardee Reservoir*

# EBMUD SERVICE AREA



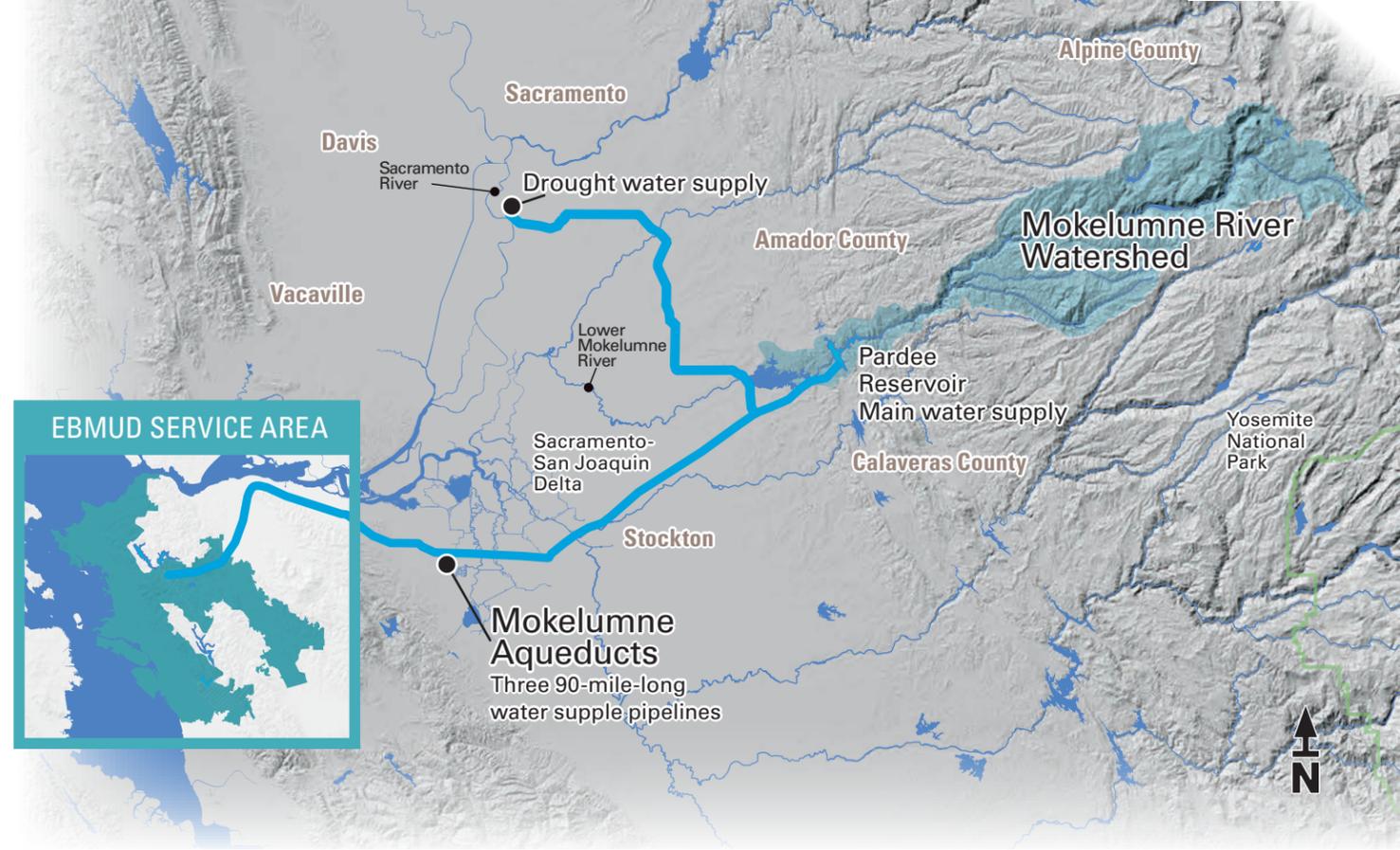
- Area served by Orinda WTP**
- Crockett
  - Rodeo
  - Hercules
  - Pinole
  - El Sobrante
  - San Pablo
  - Richmond
  - El Cerrito
  - Kensington
- also served as needed by Sobrante WTP*
- Area served by Walnut Creek WTP**
- Moraga
  - Lafayette
  - Pleasant Hill
  - Walnut Creek
  - Alamo
  - Danville
  - San Ramon
  - Castro Valley
- also served as needed by Lafayette WTP*
- Area served by Upper San Leandro WTP**
- Piedmont
  - Oakland
  - Alameda
  - San Leandro
  - San Lorenzo
  - Castro Valley
  - Hayward
  - Albany
  - Berkeley
  - Emeryville
- also served as needed by Upper San Leandro WTP*

*During times of high demand, maintenance, or for other operational needs, regions shown in more than one color or pattern may be served from a different treatment plant drawing from a different source reservoir.*

Water treatment plant (WTP)	Area served	Primary reservoir
Walnut Creek (Year-round WTP)	Blue shaded area	Pardee
Lafayette (Year-round WTP)	Blue shaded area with dots	Pardee
Orinda (Year-round WTP)	Green shaded area	Pardee, Briones
Sobrante (Year-round WTP)	Green shaded area with dots	San Pablo
Upper San Leandro (Year-round WTP)	Green shaded area with circles	Upper San Leandro
(Seasonal WTPs)	Green shaded area with circles	

\* San Pablo WTP is a standby plant and was not in operation during 2021

● Year-round WTPs    ● Seasonal WTPs



## FROM MOUNTAIN TOPS TO CUSTOMER TAPS

The high-quality water flowing to the taps of 1.4 million East Bay customers originates almost entirely from the 577-square mile Mokelumne River Watershed on the western slope of the Sierra Nevada. This area, which is largely protected from human activity, consists mostly of national forests and undeveloped lands.

Snowmelt from Alpine, Amador, and Calaveras counties flows into Pardee Reservoir near Valley Springs, CA. Three large aqueducts transport water 90 miles from Pardee Reservoir to our treatment facilities, then deliver it to every customer and hydrant in our distribution system. During drought, or for operational needs, EBMUD may draw water from watersheds in the East Bay area, or purchase water from other watersheds, like the Sacramento River to meet customer needs.

EBMUD's skilled employees operate a complex network of reservoirs, pipes, pumps, and water treatment plants. While many of our employees work behind the scenes to operate the public water system, our field crews are highly visible, especially during a year with continuing pandemic and quarantines, extreme storms, and a drought. EBMUD works around the clock to provide safe, reliable drinking water every day.

## SOURCE WATER PROTECTION

EBMUD evaluates our water sources to ensure great water quality with sanitary surveys of the Mokelumne River Watershed and East Bay watersheds at least every five years. The most recent surveys were completed in 2021 and include data for 2015 to 2019 for the Mokelumne River Watershed and 2015 to 2018 for the East Bay watersheds. The water quality surveys produce data on sanitary conditions. They also analyze the effectiveness of watershed

management practices and identify potential sources of contamination. Sources may include runoff from fire and fuels reduction efforts, geologic hazards, erosion, wildlife and livestock, sanitation facilities, recreation, urban storm water, and transportation corridors. Efforts to protect source waters from all potential contaminating activities are an integral part of EBMUD's water quality management. To review these reports, contact EBMUD or the State Water Resources Control Board.

## PROTECTING PUBLIC HEALTH ONE DROP AT A TIME

EBMUD samples and tests your water extensively to ensure it is safe to drink. We monitor for the presence of more than 100 substances including microorganisms, pesticides, herbicides, asbestos, lead, copper, petroleum products, and by-products of industrial and water treatment processes. More than 20,000 laboratory tests each year ensure the safety of your drinking water.

In 2021, EBMUD for the second time in its history, activated the Freeport Regional Water Facility to draw supplemental supplies from the Sacramento River. EBMUD treated and tested this emergency-source water to the highest standards to ensure it meets and surpasses all state and federal regulations for safe drinking water.

## ESSENTIAL SERVICES GUARANTEED

EBMUD is on the front lines responding to the greatest issues of our time: the COVID-19 pandemic, climate change, racial and environmental justice, equal access to water, and aging infrastructure. Water is vital to the health of our community, economy and environment. These challenges became even more evident during the second year of the pandemic as our essential employees provided continuous operations to protect public health.

As the COVID-19 virus spread, EBMUD's role in safeguarding public health became more prominent. Our Emergency Operations Team remained active to monitor our supply chain, adjust protocols to keep our employees safe and forge ahead with our long-term strategy to maintain and upgrade the aging infrastructure on which we rely.

More than half of EBMUD's 2,000-strong staff continued regular and emergency operations while sheltered at home, while the other half repaired, maintained, and replaced our critical infrastructure in public streets, at EBMUD facilities and in the watershed. EBMUD also continued to sample wastewater weekly for the presence of COVID-19 to inform local and state decision-making about pandemic response.

EBMUD regularly updated protocols based on emerging information on COVID-19, including transmission and vaccines. Employees rotated shifts to maintain low occupancy rates and limited access to sensitive facilities. Upgrades to office spaces improved our ability to maintain social distance while on site, and enhanced digital access allowed us to remotely perform essential service throughout multiple emergencies.

### WHERE YOUR WATER IS TREATED

Before reaching your tap, EBMUD treats the water at one of our water treatment plants in the East Bay. Some customers receive water from different treatment plants depending on the time of year. The taste

and odor of your tap water may change throughout the year because of operational changes (such as when a treatment plant is shut down for maintenance) or due to changes in the source water. These water treatment plant locations are shown on the map on page 2.

### WHAT WAS DETECTED AND REPORTED

In 2021, EBMUD treated raw water from multiple sources and consistently provided high-quality drinking water, meeting or surpassing every public health requirement set by the State Water Resources Control Board (State Water Board) and the U.S. Environmental Protection Agency (USEPA).

The tables on the following pages show the measured amounts of contaminants detected in 2021 or in the most recent year sampling was required. Samples were collected in EBMUD's source waters, at water treatment plants, in the distribution system, and at customer taps.

Although EBMUD tests for more than 100 substances, this report only lists those detected at or above the state or federal level required for reporting. In this case, no news is good news! See a full list of regulated containments.\*

### TABLE 1 – REGULATED FOR PUBLIC HEALTH

These contaminants are regulated to protect your health. They have maximum contaminant levels, known as primary MCLs, set by the State Water Board or the USEPA. These levels are set as close to the established public health goals as is economically and technologically feasible.

### TABLE 2 – REGULATED FOR DRINKING WATER AESTHETICS

These contaminants are regulated to maintain aesthetic qualities such as taste, odor, and appearance of drinking water. They have maximum contaminant levels, also known as secondary MCLs, set by the State Water Board.

### TABLE 3 – UNREGULATED CONTAMINANTS

These contaminants are not currently regulated. Unregulated contaminant monitoring helps the State Water Board and the USEPA determine where certain contaminants are present and whether the contaminants need to be regulated in the future. The results under the Unregulated Contaminant Monitoring Rule part 4 (UCMR4) must be reported, if detected. This table also includes other contaminants that have state notification levels and water agencies are encouraged—but not required—to report results to consumers.

### TABLE 4 – OTHER PARAMETERS OF INTEREST TO CUSTOMERS

These water measurements, such as pH, hardness and alkalinity, may be of interest to customers.

## How to read the water quality tables

Find your location on the map on page 2. Note which water treatment plant(s) serve that area.

Go to **column 1** in the tables on pages 6–8 to find the contaminant you are interested in. *Remember – no news is good news!*

**Column 2** lists the state or federal goal. At that amount or lower, there is no known or expected risk to health from the contaminant's presence in drinking water. Not all listed contaminants have state or federal goals.

**Column 3** notes the highest amount the State Water Board or the USEPA allows. This amount is usually not as low as the public health goal in **column 2**.

**Column 4** lists the average amount detected across the EBMUD service area or at designated locations.

Find the column that corresponds to the water treatment plant or plants that serve you. This is the range of concentration of the contaminant detected in your area's water.

The last column lists how the contaminant typically gets into your drinking water.



Manager of Water Supply, Roberto, at the Mokelumne Aqueducts.

	1	2	3	4	5					6
	Regulated for public health Primary MCL (Unit)	State or federal goal PHG, MCLG or MRDLG	Highest amount allowed MCL, MRDL or AL	System average	WATER TREATMENT PLANTS					Typical sources
					Walnut Creek	Lafayette	Orinda	Sobrante	Upper San Leandro	
Microbiological	Total Coliform <sup>A</sup>	0	TT	NA	0.3% was the highest percentage found in any month					Naturally present in the environment
	Turbidity (NTU)	NA	1	0.03	0.02 - 0.10	0.02 - 0.09	0.02 - 0.10	0.02 - 0.10	0.02 - 0.10	Soil runoff
Inorganic	Aluminum (ppb)	600	1000	<50	<50	<50	<50	<50 - 60	<50 - 101	Erosion of natural deposits; water treatment residue
	Fluoride <sup>B</sup> (ppm)	1	2	0.7	0.6 - 0.7	0.6 - 0.8	0.6 - 0.7	0.6 - 0.7	0.6 - 0.8	Erosion of natural deposits; water additive that promotes strong teeth
	Lead (ppb)	0.2	15	<5	2 sites out of 50 sites above action level					Internal corrosion of household water plumbing
	Bromate (ppb)	0.1	10	3.5 <sup>C</sup>	NA	NA	NA	<1 - 4.5	<1 - 2.6	By-product of drinking water disinfection
D/DBPs	Chloramine as chlorine <sup>D</sup> (ppm)	4	4	2.5 <sup>C</sup>	0.05 - 3.8					Drinking water disinfectant added for treatment
	Control of DBP precursors – TOC	NA	TT	NA	NA	NA	NA	met requirement		Various natural and man-made sources
	Halocetic acids, 5 species <sup>F</sup> (ppb)	NA	60	38 <sup>E</sup>	21 - 29	21 - 24	18 - 27	23 - 47	18 - 32	By-product of drinking water disinfection
										By-product of drinking water disinfection



Hydrographers perform maintenance on a weather station.

# EBMUD 2021 Annual Water Quality Report

In 2021, your drinking water was consistently the highest quality, surpassing every public health requirement set by the State Water Resources Control Board Division of Drinking Water and the U.S. Environmental Protection Agency.

1	Regulated for public health <i>Primary MCL (Unit)</i>	State or federal goal PHG, MCLG or MRDLG	Highest amount allowed MCL, MRDL or AL	System average	WATER TREATMENT PLANTS					Typical sources
					Walnut Creek	Lafayette	Orinda	Sobrante	Upper San Leandro	
Microbiological	Total Coliform <sup>A</sup>	0	TT	NA	0.3% was the highest percentage found in any month					Naturally present in the environment
	Turbidity (NTU)	NA	1	0.03	0.02 - 0.10	0.02 - 0.09	0.02 - 0.10	0.02 - 0.10	0.02 - 0.10	Soil runoff
Inorganic	Aluminum (ppb)	600	1000	<50	<50	<50	<50	<50 - 60	<50 - 101	Erosion of natural deposits; water treatment residue
	Fluoride <sup>B</sup> (ppm)	1	2	0.7	0.6 - 0.7	0.6 - 0.7	0.6 - 0.8	0.6 - 0.7	0.6 - 0.8	Erosion of natural deposits; water additive that promotes strong teeth
	Lead (ppb)	0.2	15	<5	2 sites out of 50 sites above action level					Internal corrosion of household water plumbing
D/DBPs	Bromate (ppb)	0.1	10	3.5 <sup>C</sup>	NA	NA	NA	<1 - 4.5	<1 - 2.6	By-product of drinking water disinfection
	Chloramine as chlorine <sup>D</sup> (ppm)	4	4	2.5 <sup>C</sup>	<0.05 - 3.8					Drinking water disinfectant added for treatment
	Control of DBP precursors – TOC	NA	TT	NA	NA	NA	NA	met requirement		Various natural and man-made sources
	Haloacetic acids, 5 species <sup>E</sup> (ppb)	NA	60	38 <sup>F</sup>	21 - 29	21 - 24	18 - 27	23 - 47	18 - 32	By-product of drinking water disinfection
	Trihalomethanes <sup>F</sup> (ppb)	NA	80	45 <sup>F</sup>	30 - 40	33 - 39	31 - 43	30 - 51	32 - 45	By-product of drinking water disinfection
2	Regulated for drinking water aesthetics <i>Secondary MCL (Unit)</i>	State or federal goal PHG, MCLG	Highest amount allowed MCL	System average	WATER TREATMENT PLANTS					Typical sources
					Walnut Creek	Lafayette	Orinda	Sobrante	Upper San Leandro	
	Aluminum (ppb)	NA	200	<50	<50	<50	<50	<50 - 60	<50 - 101	Erosion of natural deposits; water treatment residue
	Chloride (ppm)	NA	250	8	4 - 6	4 - 5	4 - 7	13 - 15	15 - 19	Runoff/leaching from natural deposits
	Color (color units)	NA	15	2	1	1	2	2	1	Naturally-occurring organic materials
	Odor (TON)	NA	3	<1	<1	<1	<1 - 2	1	<1	Naturally-occurring organic materials
	Specific conductance (µS/cm)	NA	900	140	70	69	72 - 120	234	403	Substances that form ions when in water
	Sulfate (ppm)	NA	250	10	1 - 2	1 - 2	1 - 18	22 - 26	36 - 46	Runoff/leaching from natural deposits
	Total dissolved solids (ppm)	NA	500	83	40 - 59	37 - 55	41 - 110	110 - 140	180 - 270	Runoff/leaching from natural deposits
	Turbidity (NTU)	NA	5	0.03	0.02 - 0.10	0.02 - 0.09	0.02 - 0.10	0.02 - 0.10	0.02 - 0.10	Soil runoff

## Notes

- A** For the period of January 1, 2021 to June 30, 2021, the MCL was 5% of monthly positive samples.
- B** See page 11 for additional information about fluoride in drinking water.
- C** Highest running annual average.
- D** Chloramine residuals in the distribution system are measured as an equivalent quantity of chlorine. When the chloramine residual cannot be detected, the sample is further analyzed to ensure that microbiological water quality is in compliance with regulations.
- E** This value is the highest locational running annual average, on which compliance is based. Water treatment plant values show the range of individual sample results.
- F** These data are collected in the distribution system. The sample locations are assigned to the most representative water treatment plant, but the data may also represent water from another plant.

## Key Terms

- AL** **Regulatory Action Level.** The concentration which, if exceeded, triggers treatment or other requirements that a water system must follow.
- DBP** **Disinfection By-Products.** These are formed when chlorine and/or ozone reacts with natural constituents in water. Trihalomethanes (THMs), haloacetic acids (HAAs), chlorate, and bromate are disinfection by-products.
- D/DBPs** **Disinfectants and Disinfection By-products.** Disinfectant residuals, disinfection byproducts and byproduct precursors.
- MCL** **Maximum Contaminant Level.** 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 address odor, taste and appearance of drinking water.
- MCLG** **Maximum Contaminant Level Goal.** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the USEPA.
- 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.
- NA** **Not Applicable.**
- Primary Drinking Water Standard** These standards regulate contaminants that affect health by setting MCLs, MRDLs, and Treatment Techniques (TT) 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 EPA.
- TOC** **Total Organic Carbon.** A measure of organic content in the water.
- Turbidity** A measure of the cloudiness of water. Turbidity is monitored because it is a good indication of the effectiveness of our filtration systems.
- TT** **Treatment Technique.** A required process intended to reduce the level of a contaminant in drinking water.

## Units

- gpg** **grains per gallon**
- NTU** **Nephelometric Turbidity Unit.** A measure of the cloudiness of water
- ppm** **parts per million.** One ppm is like 1 second in 11.5 days. (mg/L)
- ppb** **parts per billion.** One ppb is like 1 second in nearly 32 years. (µg/L)
- ppt** **parts per trillion.** One ppt is like 1 second in nearly 32,000 years. (ng/L)
- TON** **Threshold Odor Number.** A measure of odor in water
- µS/cm** **microsiemens per centimeter.** A measure of electrical conductance

3	Unregulated contaminants <i>No established MCL (Unit)</i>	Year sampled	State NL	System average	Water treatment plants				
					Walnut Creek	Lafayette	Orinda	Sobrante	Upper San Leandro
UCMR4	Bromide in source water (ppb)	2018-2019	NA	<5	<5	<5	<5	22 - 26	35 - 46
	Haloacetic acids, 5 species (ppb) <sup>F</sup>	2018-2019	NA	35	24 - 40	27 - 37	23 - 46	40 - 58	19 - 57
	Haloacetic acids, 9 species (ppb) <sup>F</sup>	2018-2019	NA	36	25 - 41	28 - 37	24 - 47	43 - 66	25 - 68
	Haloacetic acids, 6 brominated species (ppb) <sup>F</sup>	2018-2019	NA	2	0.3 - 2	0.4 - 1	0.4 - 2	3 - 10	0.6 - 12
	Manganese (ppb)	2018-2019	500	1	<0.4	<0.4	<0.4	0.4 - 13	2 - 4
	TOC in source water (ppm)	2018-2019	NA	2.5	1.5 - 2.3	1.5 - 2.3	1.5 - 3	3.4 - 5.5	5.3 - 7.2
Others <sup>6</sup>	Boron (ppb)	2021	1000	<100	<100	<100	<100	<100	136
	Chlorate (ppb)	2021	800	197	110	110	100 - 160	130 - 290	57 - 240
	N-Nitrosodimethylamine (NDMA) <sup>F</sup> (ppt)	2021	10	2	<1 - 1.0	1.1 - 1.8	<1 - 2.0	6.3 - 9.9	1.4 - 4.3

4	Other parameters of interest to customers <i>(Unit)</i>	Water treatment plants					
		Walnut Creek	Lafayette	Orinda	Sobrante	Upper San Leandro	
	Alkalinity, Total as CaCO <sub>3</sub> (ppm)	22 - 28	22 - 27	22 - 53	61 - 76	97 - 160	
	Calcium (ppm)	4 - 6	4 - 6	4 - 13	15 - 17	21 - 36	
	Hardness as CaCO <sub>3</sub>	(gpg) <sup>H</sup>	1	1	1 - 2	4 - 5	8 - 9
		(ppm)	15 - 22	14 - 20	16 - 48	48 - 66	100 - 160
	Magnesium (ppm)	1	1	1 - 3	5 - 6	10 - 15	
	pH (pH)	9.3 - 9.4	9.0 - 9.4	9.1 - 9.4	8.3 - 8.8	8.2 - 8.5	
	Potassium (ppm)	1	1	1	1	1 - 2	
	Silica (ppm)	8 - 9	8 - 9	7 - 9	7 - 10	8 - 12	
	Sodium (ppm)	5 - 7	6 - 7	6 - 14	18 - 23	23 - 32	

### Notes

**F** These data are collected in the distribution system. The sample locations are assigned to the most representative water treatment plant, but the data may also represent water from another plant.

**G** Parameters with a notification level.

**H** Grains Per Gallon (gpg) is a measure of water hardness. Knowing the amount can help improve the function of dishwashers, cooling equipment and other industrial processes. Refer to your appliance manufacturer's instruction manual for the optimum grains per gallon level.

### Key Terms

**NL Notification Level.** A health-based advisory level established by the State Water Board for contaminants in drinking water that lack MCLs.

**UCMR4** The federal unregulated contaminant monitoring rule part 4.

## WATER QUALITY REGULATIONS

This report reflects changes in drinking water regulatory requirements in 2021. On July 1, the California Revised Total Coliform Rule (RTCRR) became effective. The revisions include the new Coliform Treatment Technique requirement replacing the Total Coliform MCL, and a new *E. coli* MCL regulatory limit. The Revised Total Coliform Rule establishes a “find-and-fix” approach to investigate and correct causes of coliform problems within water distribution systems. Additional information on total coliform is available on the State Water Board website.\*

In order to ensure that tap water is safe to drink, the State Water Board and the USEPA prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. California Department of Public Health (CDPH) and United States Food and Drug Administration regulations establish limits for contaminants in bottled water that provide the same protection for public health. Additional information on bottled water is available on the CDPH website.°

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, bacteria and protozoa, such as *Cryptosporidium*, 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 stormwater 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 stormwater 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 stormwater runoff, agricultural application and septic systems.

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

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. Additional information about contaminants and potential health effects is available on the USEPA website.\* Contact your healthcare provider or visit the Centers for Disease Control and Prevention (CDC) website for guidelines on using tap water for health or medical purposes.

## VULNERABLE POPULATIONS

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 to infection.

These people should seek advice about drinking water from their health care providers. USEPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and *Giardia* and other microbial contaminants are available on the CDC website.♦

## CRYPTOSPORIDIUM AND GIARDIA

*Cryptosporidium* and *Giardia* are microbial contaminants that are naturally present in the environment and found in surface water throughout the United States. Filtration is highly effective in removing these contaminants; however, the most used filtration methods cannot guarantee 100 percent removal. In 2021 our monitoring did not detect any *Cryptosporidium* and one sample in our source water showed presence of *Giardia*, prior to reaching EBMUD water treatment plants.

❖ [www.waterboards.ca.gov/drinking\\_water/certlic/drinkingwater/rtcrr.html](http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/rtcrr.html)  
 ⦿ [www.cdph.ca.gov/Programs/CEH/DFDCS/Pages/FDBPrograms/FoodSafetyProgram/Water.aspx](http://www.cdph.ca.gov/Programs/CEH/DFDCS/Pages/FDBPrograms/FoodSafetyProgram/Water.aspx)  
 \* [www.epa.gov/ground-water-and-drinking-water](http://www.epa.gov/ground-water-and-drinking-water)  
 ♦ [www.cdc.gov/parasites/crypto/index.html](http://www.cdc.gov/parasites/crypto/index.html)

*Cryptosporidium* and *Giardia* must be ingested to cause disease, and it may spread through means other than drinking water. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people, infants and small children, and the elderly are at greater risk of developing life-threatening illness. We encourage these individuals to consult their physician regarding appropriate precautions to take to avoid infection.



Research Microbiologist, Melissa, tests wastewater for the COVID-19 virus.

## EMERGENCY DROUGHT MANAGEMENT

Faced with historically low reservoir water levels across the state, in April 2021 EBMUD declared a drought emergency and activated an updated Drought Emergency Contingency Plan. For the second time in history, EBMUD exercised a supplemental water right to pull water from the Sacramento River via the Freeport Regional Water Facility. From October through December, EBMUD drew nearly 21,000-acre feet of water into our transmission system via Clay Station Pumping Plant in the Northern California Delta, and Camanche Pumping Plant in the Sierra Nevada Foothills. Once transmitted into our raw water storage, we treated the supplemental water at Upper San Leandro and Sobrante water treatment plants, which include ozonation to remove tastes, odors and colors. We then delivered the supplemental supply to our customers.

Just months before that important draw of water, Vice President Kamala Harris visited Upper San Leandro Water Treatment Plant to promote the passage of the historic \$1 trillion Infrastructure Investment and Jobs Act of 2021. The plant served as a national backdrop for innovation in infrastructure and investment in the community. In 2021, EBMUD invested \$48 million into water treatment plants to improve our ability to treat water from different sources and adjust to impacts from climate change in traditional water sources.

## LAB INFORMATION MANAGEMENT SYSTEM

In 2021, investments in our laboratory empowered EBMUD to meet future regulatory requirements with upgraded water quality analyses and data management.

The EBMUD Laboratory takes great pride generating year-round analytical data for this Water Quality Report. In August 2021, EBMUD completed the migration from a 30-year-old Laboratory Information Management System (LIMS) to a modern system.

The migration to the new cloud-based LIMS enabled the lab to more efficiently meet certification requirements with better traceability of sample testing and streamline data transmission to the State. The new LIMS also allowed reduction of EBMUD's carbon footprint by generating and storing documentation electronically.

## LEAD IN DRINKING WATER

If present, elevated levels of lead can cause serious health problems. Pregnant women, infants and young children are typically more vulnerable to lead in drinking water than the general population.

Lead in drinking water is primarily from materials and components associated with lead in water distribution pipes and home plumbing. EBMUD replaced all known lead service pipes in its service area in the 1990s and continues to actively seek out and replace any remaining lead materials. We maintain an aggressive corrosion control program to reduce lead leaching from our water mains and customer piping. Still, lead may be present as a legacy of older plumbing, particularly older plumbing within homes. According to the USEPA, homes built before 1986 are more likely to have lead pipes or fixtures and solder that contain lead.

During 2021, the 90th percentile lead and copper results were below the regulatory detection limit at 50 customer homes. Due to low results, EBMUD samples for lead and copper every three years with the next monitoring in 2024.

If you are concerned about elevated lead levels in your home's water, you may have your water tested. EBMUD offers our customers one free lead test per year. More than 2,300 customers have requested a free lead test voucher since the program began in 2017. Lead concentrations from these customer samples are typically below 1 ppb. Request a lead test voucher by calling Customer Service at 866-403-2683 or email [customerservice@ebmud.com](mailto:customerservice@ebmud.com).

Also, if you suspect you have lead in your fixtures, any time your water has been sitting for several hours, you can minimize the potential for lead exposure by running your faucet for 30 seconds to 2 minutes before using water for drinking or cooking. Capture and reuse this water for other uses such as watering ornamental plants.

**REQUEST A FREE LEAD TEST VOUCHER**  
Call 866-403-2683 or email [customerservice@ebmud.com](mailto:customerservice@ebmud.com)

## FLUORIDATION

EBMUD is required by state law to add fluoride to drinking water to help prevent dental decay in consumers. Current regulations require fluoride levels in the treated water be maintained between 0.6 to 1.2 ppm with an optimum dose of 0.7 ppm. Our monitoring showed that fluoride levels in the treated water distribution system averaged 0.7 ppm.

According to the American Dental Association and CDC, it is safe to use optimally fluoridated water for preparing infant formula. If an infant is primarily fed infant formula prepared with fluoridated water, there may be an increased chance for mild enamel fluorosis, but enamel fluorosis does not affect the health of the infant or the health of the infant's teeth. To lessen this chance, deionized, purified, distilled or demineralized bottled water can be used.

If you have additional questions about fluoride, contact your health provider. Additional information is available on the State Water Board\* and CDC websites.\*

### REPORT A WATER QUALITY CONCERN

Do you have a question or concern about your water quality? Call 866-403-2683. EBMUD inspectors respond to calls within one business day regarding water which appears dirty, colored, has foreign particles or unusual taste or odor.



Senior Water Treatment Operator, Luis, conducts a water quality test.



375 Eleventh Street  
Oakland, CA 94607  
1-866-403-2683  
www.ebmud.com



Freemont Regional Water Facility in Sacramento.

## HOW TO CONTACT EBMUD

For more information about water quality or to report a water quality concern, call 866-403-2683 or visit [www.ebmud.com/waterquality](http://www.ebmud.com/waterquality).

If you would like this report mailed to you, email [customerservice@ebmud.com](mailto:customerservice@ebmud.com) or call 866-403-2683. View this report online at [www.ebmud.com/wqr](http://www.ebmud.com/wqr).

EBMUD has a seven-member Board of Directors publicly elected from wards within the EBMUD service area. We invite the public to participate in decisions affecting drinking water quality and other matters at its Board of Directors meetings held the second and fourth Tuesdays of each month. For more information, see [www.ebmud.com/board-meetings](http://www.ebmud.com/board-meetings).

**General Manager**  
Clifford C. Chan

## ADDITIONAL CONTACTS

State Water Resources Control Board  
Division of Drinking Water • 510-620-3474  
Alameda Public Health Department • 510-267-8000  
Contra Costa Public Health Division • 925-313-6712

PHOTO CREDITS: Karl Nielson, Elijah Nouvelage, Kingmond Young

PUB. 148 3/22 2M 30% Post-consumer waste

This is important information about your drinking water. Translate it, or speak with someone who understands it.

Este documento contiene información importante sobre el agua potable que usted consume. Tradúzcalo o hable con alguien que lo entienda.

這是有關您飲用水的重要資訊。請翻譯資訊，或與瞭解其內容的人討論。

Ito ay isang mahalagang impormasyon tungkol sa inyong iniinom na tubig. Isaling-wika ito, o makipag-usap sa isang tao na naiintindihan ito.

Đây là thông tin quan trọng về nước uống của quý vị. Hãy chuyển ngữ tài liệu này, hoặc nói chuyện với người có thể hiểu về thông tin này.

여러분의 식수에 대한 중요한 정보입니다. 본 안내문을 번역하거나 내용을 이해하는 사람과 이야기하십시오.

این متن حاوی اطلاعات مهمی درباره آب آشامیدنی شما است. آن را ترجمه کرده یا با فردی که آن را متوجه می شود صحبت کنید.

Ce sont des renseignements importants concernant votre eau potable. Traduisez-les ou parlez-en avec quelqu'un en mesure de les comprendre.

यह महत्वपूर्ण जानकारी आपके पीने के पानी के बारे में है। इसका अनुवाद करें, या किसी ऐसे व्यक्ति से बात करें जो इसे समझता हो।

هذه معلومات هامة حول مياه الشرب التي تتناولها. ترجمها، أو تحدث إلى شخص يستطيع فهمها.

Здесь представлена важная информация о качестве вашей питьевой воды. Переведите эту информацию или попросите человека, знающего английский язык, пересказать ее вам.

これは、あなたの飲料水に関する重要な情報です。翻訳するか、理解できる方にご相談ください。

Dies ist eine wichtige Information zu Ihrem Trinkwasser. Übersetzen Sie sie oder sprechen Sie mit jemandem, der die Information versteht.

Este documento contém informações importantes sobre a sua água para consumo. Traduza-o ou fale com alguém que o compreenda.

Queste sono informazioni importanti sulla vostra acqua potabile. Fatele tradurre o parlate con qualcuno in grado di comprenderle.

Oto ważna informacja dotycząca wody pitnej. Należy ją przetłumaczyć lub poprosić o to osobę, która ją rozumie.

یہ آپ کے پینے کے پانی کے بارے میں اہم معلومات ہے۔ اس کا ترجمہ کریں، یا اسے سمجھنے والے کسی شخص سے بات کریں۔

ဒါက သောက်ရန်အတွက် အရေးကြီးသော သတင်းအချက်အလက်ဖြစ်ပြီး အင်္ဂလိပ်ဘာသာဖြင့် ရှိနေပါက အင်္ဂလိပ်ဘာသာဖြင့် ပြန်ဆိုခြင်း သို့မဟုတ် အခြားကူညီပေးနိုင်သူထံသို့ တောင်းဆိုခြင်းဖြင့် ဖော်ပြပါ အချက်အလက်ကို ဖော်ပြနိုင်ပါသည်။

આ તમારા પીવાના પાણી વિશે મહત્વની માહિતી છે. તેનું ભાષાંતર કરો અથવા કોઈક એવી વ્યક્તિ સાથે વાત કરો જે તેને સમજતી હોય.

இது உங்கள் குடிநீர் பற்றிய முக்கியமான தகவல். அதை மொழிபெயர்க்கவும் அல்லது அதை புரிந்துகொண்ட ஒருவருடன் பேசவும்.

এটা আপনার পানি/জল পান করা সম্পর্কে তথ্য। এটা অনুবাদ করুন, অথবা এমন কারও সঙ্গে কথা বলুন যিনি এটা বোঝেন।

ਇਹ ਤੁਹਾਡੇ ਪੀਣ ਵਾਲੇ ਪਾਣੀ ਨਾਲ ਸੰਬੰਧਤ ਮਹੱਤਵਪੂਰਨ ਜਾਣਕਾਰੀ ਹੈ। ਇਸ ਦਾ ਅਨੁਵਾਦ ਕਰੋ, ਜਾਂ ਕਿਸੇ ਅਜਿਹੇ ਵਿਅਕਤੀ ਨਾਲ ਗੱਲ ਕਰੋ ਜੋ ਇਸ ਨੂੰ ਸਮਝਦਾ ਹੈ।

ಇದು ಮಿ ತ್ರಾಕುನಿಟಿ ಕುರಿತು ಮುಖ್ಯವಾಗಿ ಸಮಾಚಾರ. ದಿನಿನಿ ಅನುವಾದಿಸುವುದು ಅಥವಾ ದಿನಿನಿ ಅರ್ಥಮಾಡಿಕೊಳ್ಳುವುದು ಎಂಬುದನ್ನು ಮಾಡುವುದು.

Οι πληροφορίες είναι σημαντικές πληροφοροί σχετικά με το νερό που πίνετε. Μεταφράστε τις ή μιλήστε με κάποιον που τις καταλαβαίνει.