



# 20 23

## **ANNUAL WATER QUALITY REPORT** JANUARY THROUGH DECEMBER

East Bay Municipal Utility District is pleased to report that in 2023 your drinking water quality met or surpassed every state and federal requirement that safeguards public health.

*Rocky Ridge Trail near the Upper San Leandro Reservoir border with Las Trampas Regional Wilderness.*



# A century of water service

EBMUD's drinking water makes an incredible journey to arrive at our taps.

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

Snowmelt from Alpine, Amador, and Calaveras counties remains our primary water source as it has for nearly a century. Water from the Mokelumne River flows into Pardee Reservoir near Valley Springs, CA. Three large aqueducts transport the water 90 miles from Pardee Reservoir to our treatment facilities and East Bay reservoirs (Briones, San Pablo, and Upper San Leandro reservoirs) where some of it blends with

local runoff before it is treated. The treated water is delivered to every customer in our distribution system. During dry years, EBMUD may purchase water from other watersheds, like the Sacramento River, to meet customer needs.

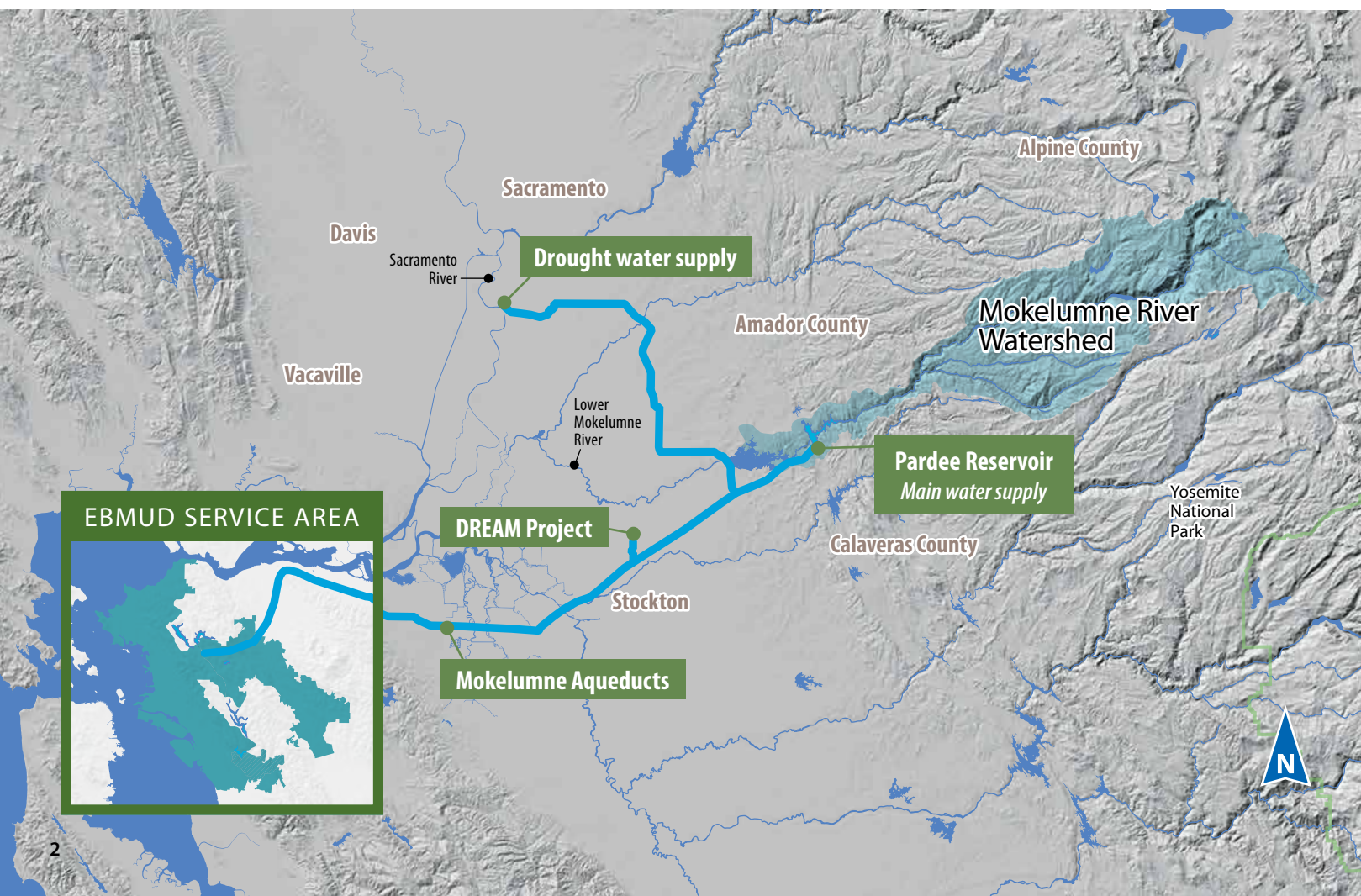
In 2023, the centennial celebration of EBMUD provided an opportunity to highlight our work, employees and commitment to the community. For the milestone, EBMUD engaged with our community in new ways, including a time capsule to be opened in another 100 years, a partnership to brew a centennial beer and a community fair at Lake Temescal. EBMUD shared the agency's dedicated history of serving the East Bay through innovation and investment, and inspired confidence in our commitment to the preservation of our watersheds now and for future generations.

## Historic problems, visionary solutions

Drought and climate change have generated renewed interest in the reliability of our water supplies. As weather patterns change and multi-year droughts pose ever-greater challenges, EBMUD plans far ahead for our region's water needs – currently through 2050 – and has outlined actions to manage uncertainties. Our diversified water supply portfolio makes the most of our region's resources.

In February 2023, EBMUD conducted start-up testing for the Demonstration Recharge, Extraction and Aquifer Management or DREAM Project facilities, which resulted in the extraction and delivery of a small quantity

of water (0.02% of the EBMUD water supply in 2023). Water from the DREAM project was blended with EBMUD's Mokelumne River water supply. This pilot project was conducted in collaboration with partners in San Joaquin County where EBMUD supplies Mokelumne River water that can be used by growers instead of pumped groundwater. As a result, the groundwater is banked for future use. The DREAM Project improves water supply reliability and resiliency in both San Joaquin County and the East Bay. For additional information on the DREAM project, visit [ebmud.com/dream](http://ebmud.com/dream).



- Area served by Orinda WTP**
- Crockett
  - Rodeo
  - Hercules
  - Pinole
  - El Sobrante
  - San Pablo
  - Richmond
  - El Cerrito
  - Kensington
  - Orinda
  - Moraga
  - Piedmont
  - Oakland
  - Alameda
  - San Leandro
  - San Lorenzo
  - Castro Valley
  - Hayward
- also served as needed by*
- Sobrante WTP**
  - Upper San Leandro WTP**
  - San Pablo WTP**

- Area served by Walnut Creek WTP**
- Orinda
  - Moraga
  - Lafayette
  - Pleasant Hill
  - Walnut Creek
  - Alamo
  - Danville
  - San Ramon
  - Castro Valley
- also served as needed by*
- Lafayette 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	[Blue with dots pattern]	Pardee
Lafayette	[Blue with circles pattern]	Pardee
Orinda	[Green with dots pattern]	Pardee, Briones
San Pablo	[Green with pluses pattern]	San Pablo
Sobrante	[Green with pluses pattern]	San Pablo
Upper San Leandro	[Green with circles pattern]	Upper San Leandro

● Year-round WTPs   
 ● Seasonal WTPs



## Source water protection

EBMUD conducts sanitary surveys of the Mokelumne River Watershed and East Bay watershed at least every five years to ensure the great quality of our water sources. These surveys identify potential sources of contaminants in the watersheds, analyze trends, and recommend watershed management practices to protect raw water quality. The most recent surveys were completed in 2021. Sources of potential contamination may include runoff following wildfires, 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.

## 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 time of year, shown on the map on page 2. The taste and odor of your tap water may change seasonally.

## What was detected and reported

In 2023, 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 2023 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.

To ensure the safety of your drinking water, the water delivered to customers is treated and monitored continuously at the water treatment plants. In addition, more than 20,000 laboratory tests are conducted each year, testing 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. 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! A complete list of all monitored parameters and results is available for download at [ebmud.com/water-quality](http://ebmud.com/water-quality). Scroll down to the Annual Water Quality Report section where you will find a link to the *2023 All Parameters Data Table.pdf*.

### 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.

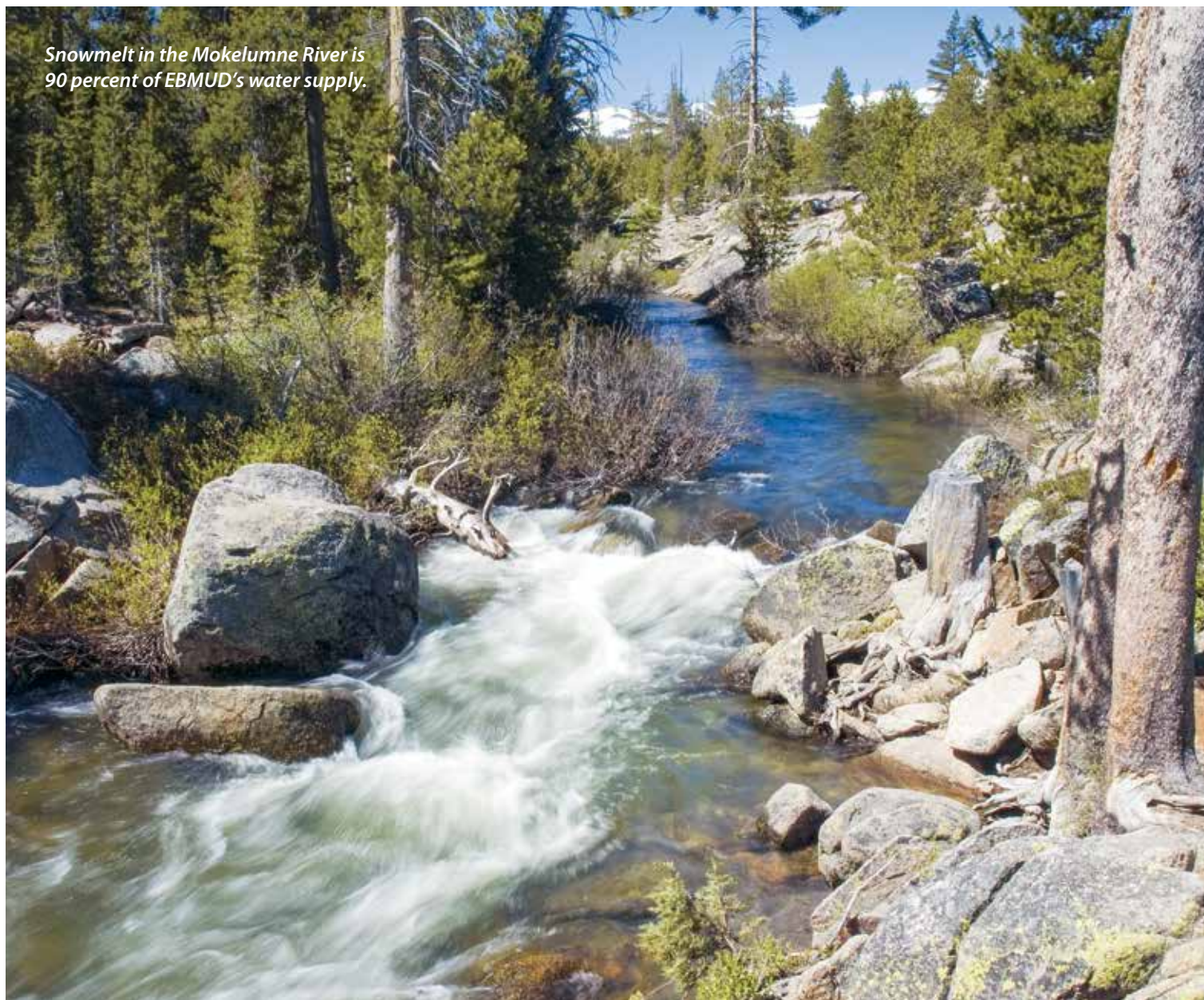
### Table 3 Unregulated contaminants

These contaminants are not currently regulated. Some were sampled under the 5th Unregulated Contaminants Monitoring Rule (UCMR5) and must be reported, if detected. UCMR monitoring helps regulators determine where certain contaminants are present and whether the contaminants need to be regulated in the future. This table also includes other contaminants that have state notification levels, also known as NLs. NLs are health-based advisory levels established by the State Water Board for chemicals in drinking water that water agencies are not required to monitor for and that lack maximum contaminant levels (MCLs). When chemicals are found at concentrations greater than their NL, certain requirements and recommendations apply.

### Table 4 Other parameters of interest to customers

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

Snowmelt in the Mokelumne River is 90 percent of EBMUD's water supply.



## How to read the water quality tables

Find your location on the map on page 3. 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.

Contaminant	1	2	3	4	5					6
	Regulated for public health Primary MCL (State)	State or federal goal PAC, MCL, or MCLG	Highest amount allowed MCL, MCLG, or A	System average	EBMUD Results WATER TREATMENT PLANTS (Individual Sample Results)					Typical sources
				Walnut Creek	Lafayette	Orinda	Sobranite	Upper San Leandro	San Pablo	
<b>Microbiological</b>										
Total Coliforms, highest % found any month	0	0*	0*	0%			0.6%			Naturally present in the Environment
Turbidity Max (NTU)	NA	1	1	0.01	0.10	0.10	0.07	0.10	0.10	Runoff
Turbidity <0.3 NTU, lowest % of any month (%)	NA	0%	0%	100%	100%	100%	>99.9%	100%	100%	
<b>Chemical</b>										
Aluminum (ppb)	0.05	0.05	0.05	0.0	0.0	0.0	0.0-0.1	0.0	0.0-0.1	Erosion of natural deposits, water treatment residue
Fluoride* (ppm)	1.5	1.5	1.5	1.7-0.8	0.7	0.8	0.6-0.8	0.7	0.6-0.7	Erosion of natural deposits, water additive that promotes strong teeth
Lead (ppb)	0.01	0.01	0.01	0.0	0.0	0.0	0.0	0.0	0.0	Internal corrosion of household water plumbing
Residual Chlorine	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	By-product of drinking water disinfection



# EBMUD 2023 ANNUAL WATER QUALITY REPORT

In 2023, 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.

## Units

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



Laboratory Technician II Tarah prepares samples for metals testing.

1	Regulated for public health <i>Primary MCL (Unit)</i>	State or federal goal <i>PHG, MCLG or MRDLG</i>	Highest amount allowed <i>MCL, MRDL or AL</i>	EBMUD Results						Typical sources	
				System average	WATER TREATMENT PLANTS (Individual Sample Results)						
				Walnut Creek	Lafayette	Orinda	Sobrante	Upper San Leandro	San Pablo		
Microbiological	Total Coliform, highest % found any month	0	TT <sup>A</sup>	NA	0.6%					Naturally present in the Environment	
	Turbidity Max (NTU)	NA	1	0.03	0.10	0.10	0.10	0.67	0.10	0.20	Soil runoff
	Turbidity ≤0.3 NTU, lowest % of any month (%)	NA	TT <sup>B</sup>	100%	100%	100%	100%	> 99.99%	100%	100%	
Inorganic	Aluminum (ppb)	600	1000	ND	ND	ND	ND	ND - 67	ND	ND - 63	Erosion of natural deposits; water treatment residue
	Fluoride <sup>C</sup> (ppm)	1	2	0.7	0.7 - 0.8	0.7	ND - 0.8	0.6 - 0.8	0.7	0.6 - 0.7	Erosion of natural deposits; water additive that promotes strong teeth
	Lead (ppb)	0.2	15	ND <sup>D</sup>	2 sites out of 50 sites above action level					Internal corrosion of household water plumbing	
D/DBPs	Bromate (ppb)	0.1	10	1.2 <sup>E</sup>	NA	NA	NA	ND - 2.4	ND - 1.1	NA	By-product of drinking water disinfection
	Chloramine as chlorine <sup>F</sup> (ppm)	4	4	2.5 <sup>E</sup>	ND - 9.1					Drinking water disinfectant added for treatment	
	Control of DBP precursors/TOC (NA)	NA	TT <sup>G</sup>	NA	NA	NA	NA	met requirement		Various natural and man-made sources	
	Haloacetic acids, 5 species (ppb) <sup>I</sup>	NA	60	47 <sup>H</sup>	29 - 60	34 - 40	25 - 50	23 - 71	15 - 48	25 - 41	By-product of drinking water disinfection
	Trihalomethanes (ppb) <sup>I</sup>	NA	80	61 <sup>H</sup>	42 - 92	37 - 54	50 - 92	29 - 82	29 - 74	54 - 80	By-product of drinking water disinfection

2	Regulated for drinking water aesthetics <i>Secondary MCL (Unit)</i>	State or federal goal <i>PHG, MCLG</i>	Highest amount allowed <i>MCL</i>	EBMUD Results						Typical sources	
				System average	WATER TREATMENT PLANTS (Individual Sample Results)						
				Walnut Creek	Lafayette	Orinda	Sobrante	Upper San Leandro	San Pablo		
	Aluminum (ppb)	600	200	ND	ND	ND	ND	ND - 67	ND	ND - 63	Erosion of natural deposits; water treatment residue
	Chloride (ppm)	NA	250	7	3 - 6	3 - 5	3 - 6	14 - 18	10 - 15	13 - 14	Runoff/leaching from natural deposits
	Specific conductance (µS/cm)	NA	900	117	52	51	57 - 110	310	300	280	Substances that form ions when in water
	Sulfate (ppm)	NA	250	9	1 - 2	1 - 2	1 - 10	27 - 46	43 - 53	37	Runoff/leaching from natural deposits
	Manganese (ppb)	NA	50	ND	ND	ND	ND	ND - 44	ND	ND	Runoff/leaching from natural deposits
	Total dissolved solids (ppm)	NA	500	69	32 - 54	34 - 54	34 - 65	140 - 210	66 - 200	160 - 170	Runoff/leaching from natural deposits

## Notes

- A** The Treatment Technique for total coliform triggers follow-up actions if percent of samples positive for total coliform in any month exceeds 5%.
- B** The treatment technique for turbidity requires that at least 95% of water samples collected each month at each water treatment plant be less than 0.3 NTU.
- C** See **Pg 10** for additional information about fluoride in drinking water.
- D** 90th percentile value at 50 customer taps. Lead monitoring was last completed in 2021. See **Pg 10** for additional lead information.
- E** This value is the highest running annual average, on which compliance is based. The values shown under Water Treatment Plants are the range of individual sample results.
- F** Chloramine residuals in the distribution system are measured as an equivalent quantity of chlorine. When chloramine residual cannot be detected, the sample is further analyzed to ensure that the microbiological water quality is in compliance with regulations.
- G** Sobrante, USL, and San Pablo water treatment plants are required to remove TOC.
- H** This value is the highest running annual average at a single location, on which compliance is based.
- I** 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.**
- ND** **Not Detected.**
- 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.



3	Unregulated Contaminants <i>No established MCL (Unit)</i>	State Notification level	EBMUD Results						
			System average	WATER TREATMENT PLANTS (Individual Sample Results)					
			Walnut Creek	Lafayette	Orinda	Sobrante	Upper San Leandro	San Pablo	
UCMR5	Perfluorobutanoic acid - PFBA (ppt)	NA	ND	ND	ND	ND	ND - 5.1	ND - 5.2	ND
Others <sup>1</sup>	Chlorate (ppb)	800	112	71	79	81 - 180	110 - 220	74 - 140	66 - 180
	N-Nitrosodimethylamine - NDMA <sup>1</sup> (ppt)	10	1.8	ND - 2.4	ND - 2	ND - 2.7	3.4 - 4.4	ND - 4.4	NA

4	Other parameters of interest to customers (Unit)	EBMUD Results					
		WATER TREATMENT PLANTS (Individual Sample Results)					
		Walnut Creek	Lafayette	Orinda	Sobrante	Upper San Leandro	San Pablo
Alkalinity, Total as CaCO3 (ppm)		16 - 29	16 - 28	16 - 35	69 - 95	66 - 110	74 - 81
Calcium (ppm)		4 - 6	4 - 6	4 - 9	17 - 26	21 - 27	20 - 21
Hardness as CaCO3	(gpg) <sup>k</sup>	1	1	1 - 2	4 - 7	5 - 7	5
	(ppm)	12 - 24	12 - 24	12 - 33	64 - 120	88 - 120	85
Magnesium (ppm)		1 - 2	1 - 2	1 - 2	6 - 9	8 - 10	7
pH (pH)		9.2 - 9.4	9.1 - 9.4	8.8 - 9.4	8.0 - 8.8	8.2 - 8.5	8.2 - 9.1
Potassium (ppm)		1	1	1	2	2	2
Silica (ppm)		8 - 12	8 - 12	8 - 13	7 - 13	12 - 14	8
TOC in source water (ppm)		1.2 - 3.4	1.2 - 1.9	1.2 - 3.4	3.7 - 8.6	4.3 - 8.6	3.8
TOC in treated water <sup>l</sup> (ppm)		-	-	-	2.2 - 5.0	2.4 - 4.0	2.6
Sodium (ppm)		5 - 7	5 - 6	5 - 11	22 - 29	25 - 31	27

### Notes

- I** 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.
- J** Parameters with a notification level.
- K** Grains per gallon (gpg) is a measure of water hardness. Knowing the amount can help improve the function of dishwasher, cooling equipment and other industrial processes. Refer to your appliance manufacturer's instruction manual for the optimum grains per gallon level.
- L** Walnut Creek, Lafayette, and Orinda water treatment plants are not required to monitor TOC. Their treated water TOC values are similar to or less than their source water.

## Water quality regulations

This report reflects changes in drinking water regulatory requirements in 2023. 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. ([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))

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.

State and Federal regulatory agencies are working on new requirements for per- and polyfluoroalkyl substances (abbreviated as PFAS, the so-called "forever chemicals") as well as microplastics. EBMUD is following these developments closely and plans to continue monitoring for PFAS and start monitoring for microplastics in 2024.

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. ([www.epa.gov/ground-water-and-drinking-water](http://www.epa.gov/ground-water-and-drinking-water)) 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. ([www.cdc.gov/parasites/crypto/index.html](http://www.cdc.gov/parasites/crypto/index.html))

## 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 2023 our monitoring detected *Cryptosporidium* and *Giardia* in our source water, prior to reaching EBMUD water treatment plants.

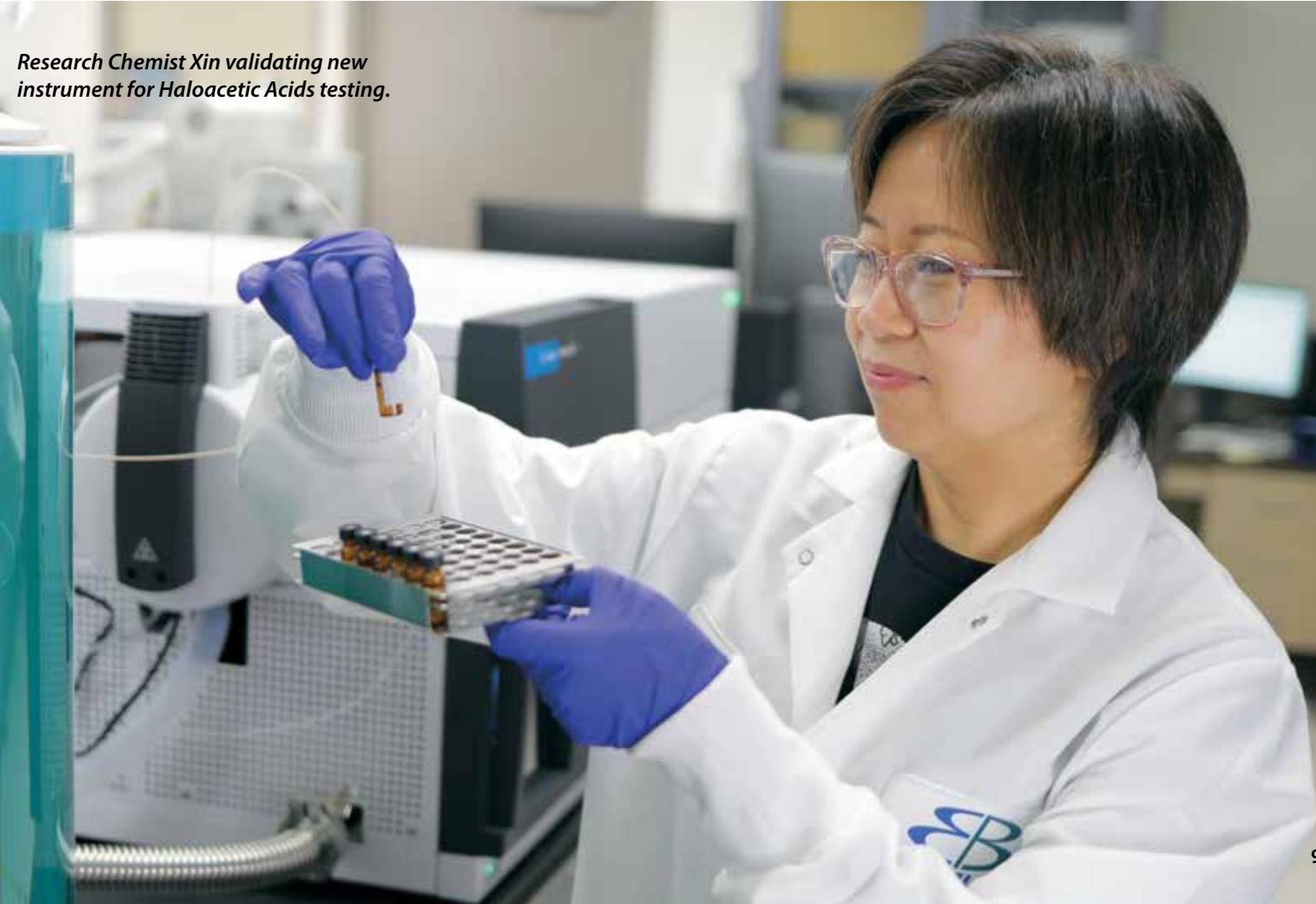
*Cryptosporidium* and *Giardia* must be ingested to cause disease, and it may spread through means other than drinking water. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people, infants and small children, and the elderly are at greater risk of developing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

## Investments in a new century of service

The winter of 2022-23 brought a dramatic transition from record dry periods to record rains. From drought to deluge, EBMUD is prepared for the next 100 years with an eye keen on addressing the aridification of the west – from managing fisheries to conserving our precious water supplies.

To mitigate the impact of climate change and ensure we have a more reliable and resilient water system, EBMUD has entered the most capital-intensive period in its history and is investing more than \$2.8 billion in the next five years to rehabilitate water treatment plants, pumping plants, reservoirs and pipelines.

Following many improvements to our vast water system over the years, in 2023, EBMUD broke ground on a five-year, \$325 million improvement project to add state-of-the-art disinfection technology to Orinda Water Treatment Plant, our largest water treatment plant. The additions of an ultraviolet disinfection facility and a chlorine contact basin will enhance the treatment process, maintain high water quality, and reduce the formation of disinfection byproducts. This significant investment will prepare this vital facility to handle diverse water sources that might include groundwater and water from other rivers.



Research Chemist Xin validating new instrument for Haloacetic Acids testing.



Standards and reagents loaded into an autosampler for alkalinity testing.



## Lead in drinking water

If present, elevated levels of lead can cause serious health problems. Pregnant women, infants and young children are more vulnerable to lead in drinking water than the general population. There is no lead in the water supplied by EBMUD. However, lead can get into drinking water from materials and components containing lead, like older pipes, faucets, and home plumbing.

Between 1942 and 1945, when copper and steel were in short supply due to the war efforts, EBMUD used lead for water service lines. These lead services have all been removed. In accordance with new federal requirements, EBMUD is going back to these former lead service line locations to determine if any of them have galvanized iron pipes on the customer side. In some water systems, galvanized iron pipes had become contaminated with lead, and the lead can be released into the water. EBMUD testing indicates that this has not occurred in our water; however, these customers will be notified in 2024 of this legacy situation and offered a free lead test. 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 plumbing or fixtures that contain lead.

During 2021, the most recent year that compliance samples were taken, more than 90 percent of 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; the next monitoring will be performed 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. Approximately 3,500 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 2 minutes before using water for drinking or cooking. You can wash the dishes or use water in some other way first, and then take a fully flushed glass for drinking. Or you can capture and reuse the first-flush 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)

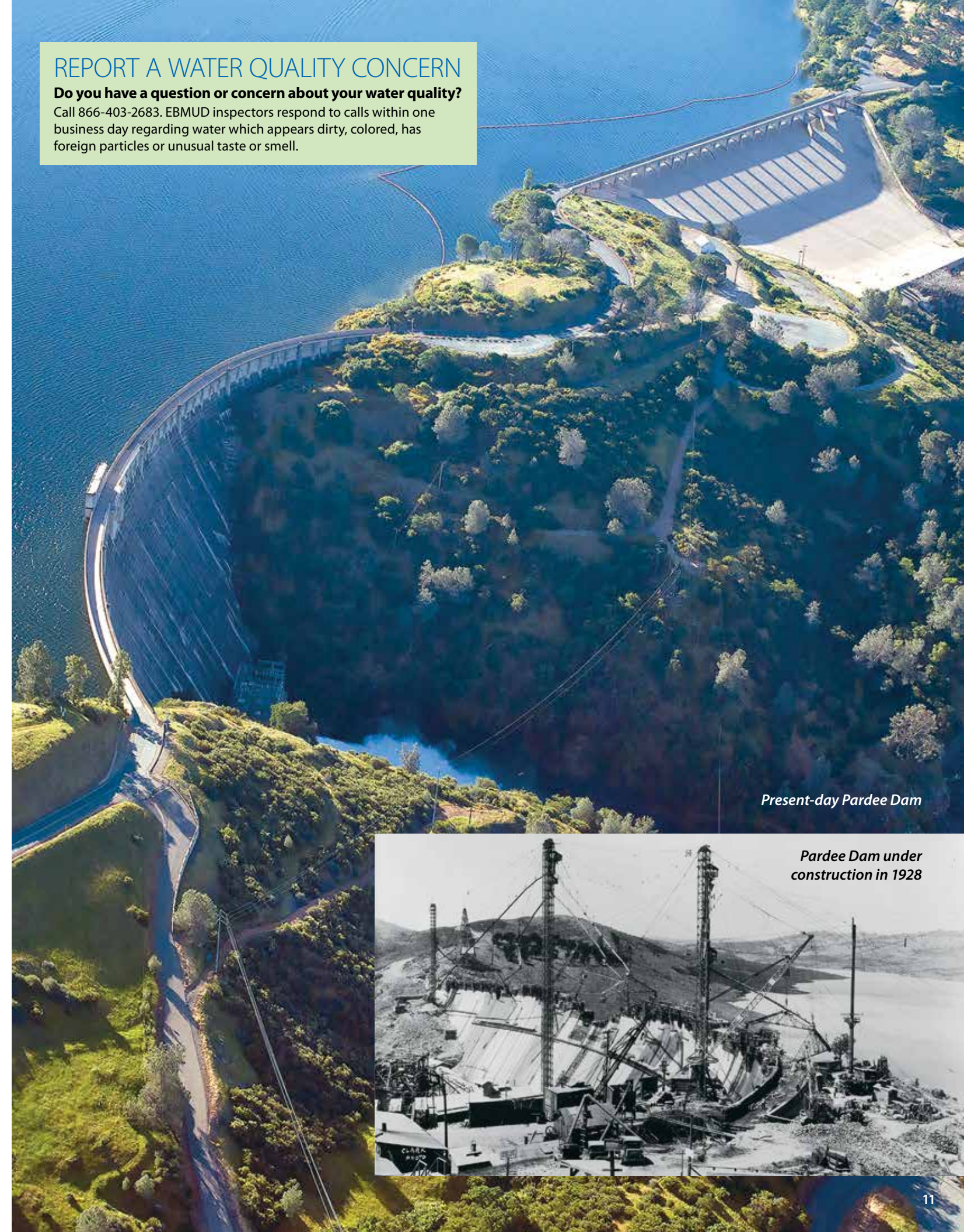
## Fluoridation

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 ([www.waterboards.ca.gov/drinking\\_water/certlic/drinkingwater/Fluoridation.html](http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.html)) and CDC websites. ([www.cdc.gov/fluoridation](http://www.cdc.gov/fluoridation))

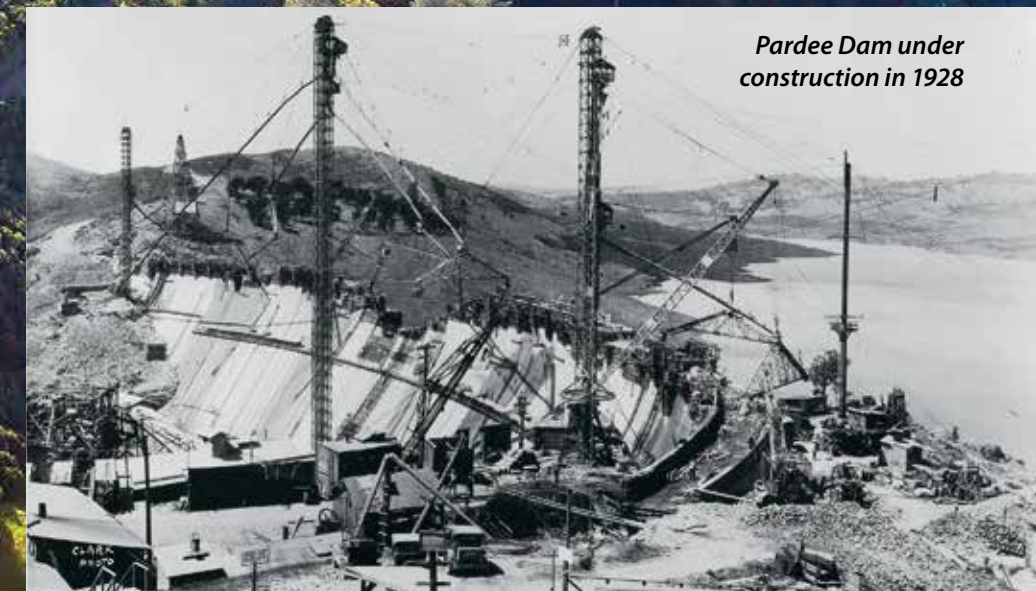
## REPORT A WATER QUALITY CONCERN

**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 smell.



Present-day Pardee Dam

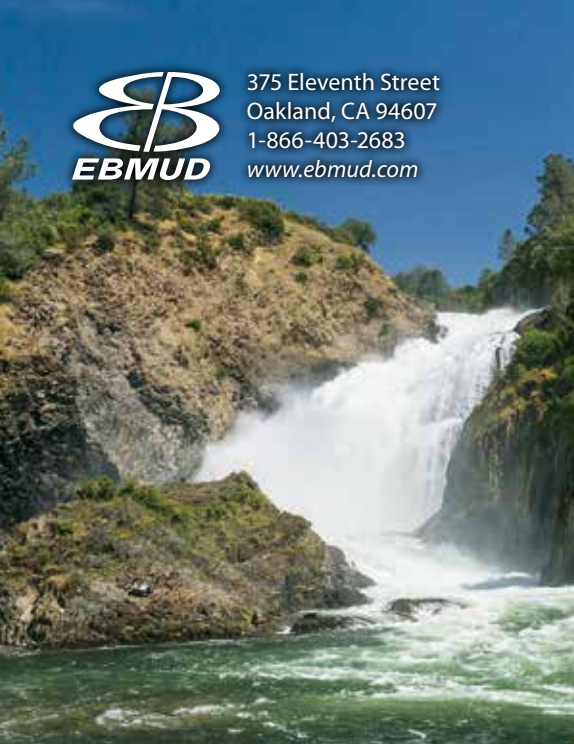


Pardee Dam under construction in 1928





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



# 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 • 925-608-5200

PUB. 148 3/23 2M 30% Post-consumer waste

### English

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

### Spanish

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

### Chinese

這是有關於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。

### Tagalog

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

### Vietnamese

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.

### Korean

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

### Farsi

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.

### French

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

### Hebrew

מדובר על מידע חשוב בנוגע למייה שתייה שלך. מדובר על מידע חשוב על המים שאתם שותים.

### Hindi

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।

### Arabic

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

### Russian

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

### Japanese

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。

### German

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

### Portuguese

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

### Italian

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

### Polish

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

### Urdu

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۔

### Khmer

នេះគឺជាព័ត៌មានសំខាន់ អំពីទឹកផឹករបស់អ្នក។ សូមអានឱ្យប្រុងប្រយ័ត្ន ឬពិគ្រោះជាមួយនឹងអ្នកណាដែលយល់។

### Gujarati

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

### Tamil

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

### Bengali

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

### Punjabi

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।

### Telugu

ఇది మీ త్రాగునీటి గురించి ముఖ్యమైన సమాచారం. దీనిని అనువదించండి లేదా దీనిని అర్థం చేసుకునే ఎవరితోనైనా మాట్లాడండి.

### Armenian

Ասիկա կարեւոր տեղեկություն է ձեր խմելիք ջրիդի մասին: Թարգմանե՛ք զայն, կամ խոսե՛քք մեկու մը հետ, որ կը հասկնայ զայն: