# YOUR DRINKING WATER IN 2022

ANNUAL WATER QUALITY REPORT

#### **TO OUR CUSTOMERS:**

We are pleased to present the Annual Water Quality Report that shows the high quality of your drinking water. As the water providers to more than 500,000 people, we take great effort and great pride in delivering a product that exceeds all drinking water standards set by the state and federal governments. This report includes water quality data collected throughout 2022 and answers questions you might have about your tap water. For detailed test results, see pages 8-17.

You can be confident your tap water is of a high quality. Frequent testing for water quality and regular improvements in the treatment process keeps your drinking water among the best in the country.

We hope you find this report useful in illustrating the high quality of your water service. If you have questions about the tap water in your community, please call your water provider using the contact list on the right.

#### **CONTRA COSTA WATER DISTRICT**

Erin Gomez | 925-688-8091

CITY OF ANTICOH Ivona Kagin | 925-779-7024

CITY OF MARTINEZ Hiren Patel | 925-372-3588

CITY OF PITTSBURG Ana Corti | 925-252-6916

DIABLO WATER DISTRICT Nacho Mendoza | 925-625-2112

GOLDEN STATE WATER COMPANY 925-458-3112

> CITY OF BRENTWOOD James Wolfe | 925-516-6000

## SAFETY STANDARDS ENSURE QUALITY

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

**Microbial contaminants** include viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

**Inorganic contaminants** include 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.

**Organic chemical contaminants** include synthetic and volatile organic chemicals that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application and septic systems.

**Pesticides and herbicides** may come from a variety of sources, such as agriculture, urban stormwater runoff and residential uses.

**Radioactive contaminants** 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 U.S. Environmental Protection Agency (US EPA) and the State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the US EPA's Safe Drinking Water Hotline (1-800-426-4791).

None of the public water systems listed in this report produce or distribute bottled water. The State Division of Drinking Water mandates that the statements about bottled water be included in this report.



Your drinking water is continually sampled and analyzed. We perform tens of thousands of tests throughout the year to ensure your water is clean and safe to use.

#### **IMPORTANT NOTICE**

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. US EPA/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.

## WATER QUALITY NOTIFICATIONS

#### LEAD IN DRINKING WATER

No water provider included in this report detected lead above the regulatory action level in their water supply. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and plumbing in buildings and homes. Your drinking water supplier is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two minutes before using water for drinking or cooking. If you do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at 1-800-426-4791 or at epa.gov/lead.

#### FLUORIDE

To prevent tooth decay, fluoride is added to your drinking water. This is a long-standing practice that has improved public health over many years. To read about fluoridation, visit waterboards.ca.gov/drinking\_water/certlic/drinkingwater/ Fluoridation.shtml.

#### CRYPTOSPORIDIUM

Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes Cryptosporidium, the most commonly-used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of these organisms in our source water and/or finished water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of Cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea,



The nearly 90-year-old main section of the Contra Costa Canal, which stretches from Oakley to north Concord, delivers every drop of water we serve to customers.

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

> In 2022, in addition to maintaining high water quality for customers, Los Vaqueros Reservoir helped meet the supply challenges of an extended drought.

## THE SOURCE OF YOUR WATER

Nearly every drop of water delivered by Contra Costa Water District originates in the Sacramento-San Joaquin River Delta. Though Delta water quality fluctuates throughout the year, investments made by your water provider ensures the water delivered to your tap is of a consistent high-quality. Contra Costa Water District diverts water from four locations in the Delta and adjusts its operations to divert where water quality is best.

#### CONTRA COSTA WATER DISTRICT

CCWD provides treated drinking water to homes and businesses in Clayton, Clyde, Concord, Pacheco, Port Costa, and parts of Martinez, Pleasant Hill and Walnut Creek. Water is pumped from the Delta, treated and then delivered to customers through a network of distribution pipes.

In June 2002 and May 2003, source water assessments were conducted at the Old River, Rock Slough and Mallard Slough intakes, the Los Vaqueros, Contra Loma, Mallard and Martinez reservoirs, and the Contra Costa Canal at Clyde. A source water assessment was conducted for the Middle River Intake in 2012. The assessments were based on a review of data collected from 1996 through 2001, as well as a review of the activities and facilities located at or near each source. In summary:

• **Intakes** were found to be most vulnerable to the effects of saltwater intrusion, agricultural drainage, recreational boating and regulated point discharges.

- **Reservoirs** were found to be most vulnerable to the effects of associated recreation, roads and parking lots, and watershed runoff.
- **Contra Costa Canal** was found to be most vulnerable to gas stations, chemical/petroleum processing/storage, septic systems, historic landfills and military institutions.

CCWD completes watershed sanitary surveys every five years and the last one was completed in 2020. The surveys concluded that potential contamination is regularly mitigated by the natural flushing of the Delta, controls at contamination sources and existing water treatment practices.

#### **BAY POINT**

The Golden State Water Company (GSWC) purchases treated water from CCWD and delivers it to customers through its distribution pipes. Water quality information for GSWC is not included in this report. View its water quality report at **gswater.com/baypointccr**.

#### BRENTWOOD

CCWD operates the CCWD/City of Brentwood's water treatment plant to treat water for the City. Water quality information for Brentwood is not included in this report. View its water quality report at https://www.brentwoodca.gov/government/publicworks/water/water-reports



## LOS VAQUEROS

#### A QUARTER CENTURY OF SUCCESS

Los Vaqueros Reservoir has been an invaluable investment by Contra Costa Water District customers to improve water quality and to help our communities withstand several droughts; this year was no exception. December 24, 2022, marked

the 25th anniversary of the original Los Vaqueros Reservoir—a monumental project for its time that has proven its value repeatedly through enhanced water quality, improved water supply, and drought protection.

25TH ANNIVERS

In 1997, construction of California's first dam in nearly two decades was complete and only a year later was nearly full of fresh Delta water. An off-stream reservoir built to improve water quality ensured Contra Costa Water District customers would receive high-quality water at all times of the year. In its first year, chloride levels were about three times lower than the goal and a vast improvement over water quality conditions before Los Vaqueros Reservoir was built.

**Did you know?** Los Vaqueros is an **off-stream reservoir**. That means it does not block a major waterway and surrounding habitat. Instead all the water stored in Los Vaqueros is pumped in from another source—in our case, the Delta!

#### LOS VAQUEROS RESERVOIR EXPANSION PHASE 2

Contra Costa Water District continues to evaluate the Phase 2 expansion of the Los Vaqueros Reservoir to increase capacity from 160,000 acre-feet to 275,000 acre-feet. The Phase 2 expansion involves both an expanded reservoir as well as new and expanded pump stations and pipelines. The larger reservoir will provide additional benefits to our customers and extend benefits to new project partners, who will help fund this expansion along with state and federal funding. Prior customer investments will continue to provide future benefits, and project partners will be paying a rental fee to reflect these prior investments. Contra Costa Water District will continue to own, operate, and maintain the facilities and ensure Contra Costa



Water District customer needs are met as a priority once the facilities are expanded.

The Los Vaqueros Reservoir Joint Powers Authority, of which Contra Costa Water District is a member, was formed in 2021 to finance the Phase 2 expansion and has since appointed an Executive Director. Development of permits, agreements, and design are ongoing.

Learn about the project at ccwater.com/lvstudies and about the JPA at losvaquerosjpa.com

#### THE THREE PHASES OF LOS VAQUEROS

Los Vaqueros Reservoir has reliably served our customers. Originally constructed in 1997, the reservoir was expanded in 2012 to supply additional storage benefits. Now, we're looking to expand the reservoir—and those benefits—for water users throughout the region. A future expansion of Los Vaqueros Reservoir also adds a new revenue stream for CCWD.

	THEN	TODAY	TOMORROW
Capacity	100,000 acre-feet	160,000 acre-feet	275,000 acre-feet
Dam Height	197 feet	226 feet	287 feet
Cost	\$350 million	\$120 million	\$980 million

#### **DEFINITIONS & ABBREVIATIONS**

Action Level (AL) – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow

Maximum Contaminant Level (MCL) – The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically or technologically feasible

Maximum Contaminant Level Goal (MCLG) – The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency

**Maximum Residual Disinfectant Level (MRDL)** – 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

Maximum Residual Disinfectant Level Goal (MRDLG) – The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants

mg/L – Milligrams per liter

**n/a** – Not analyzed or not applicable (when used in average column, only one data point is available)

3

ND – Not detected at or above the reporting level

ng/L - Nanograms per liter

NTU - Nephelometric turbidity units

**Primary Drinking Water Standards** – MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements

**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 Office of Health and Hazard Assessment

RAA – Running Annual Average

**Secondary Drinking Water Standards** – Secondary MCLs are set for contaminants that affect the odor, taste or appearance of water

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

µg/L – Micrograms per liter

µmhos/cm- micromhos per centimeter
(a measure of conductivity)

## **HOW TO READ THE TABLES**

The following tables contain detailed information about the water that is delivered to your home or business. Your water is regularly tested for more than 120 chemicals and substances, as well as radioactivity. Only those constituents that were detected last year are listed in the tables. Constituents may vary from provider to provider depending on water source and treatment techniques. Please see **ccwater.com** for a list of constituents tested but not detected.

#### WATER PROVIDER

<b>PRIMARY DRINKING WATER STANDARDS</b> Contaminants that may affect health								
Inorganic	State or Federal Goal	Highest Amt. Allowed	Range Detected	Average				
Fluoride (mg/L)	1	2	0.6-0.8	0.7				
		2		(3)				

State or Federal Goal (PHG, MCLG or MRDLG) – The level of contaminant in drinking water below which there is no known or expected risk to health

**2** Highest Amount Allowed (AL, MCL or MRDL) – The highest level of a contaminant that is allowed in drinking water

Average – The average level of a detected contaminant in drinking water

UNITS	EQUIVALENCE
<b>mg/L</b> (milligrams per liter) <b>ppm</b> (parts per million)	1 second in 11.5 days
μ <b>g/L</b> (micrograms per liter) <b>ppb</b> (parts per billion)	1 second in nearly 32 years

## **COMMON SOURCES OF CHEMICALS OR CONSTITUENTS**

The list below shows common sources for chemicals or constituents that may have been detected in your water. Consult the tables on the following pages to see what was detected in your drinking water.

	TYPICAL SOURCE
Aluminum	Erosion of natural deposits; residual from some surface water treatment processes
Bromate	Byproduct of drinking water disinfection
Chloramines	Drinking water disinfectant added for treatment
Chloride	Runoff/leaching from natural deposits; seawater influence
Chlorite	Byproduct of drinking water disinfection
Color	Naturally-occurring organic materials
Copper	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Foaming Agents	Municipal and industrial waste discharges
Gross Alpha	Erosion of natural deposits
Gross Beta	Decay of natural and man-made deposits
Haloacetic Acids	Byproduct of drinking water disinfection
Lead	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural depos- its
Manganese	Leaching from natural deposits
Nitrate	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Nitrite	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Odor-Threshold	Naturally-occurring organic materials
Specific Conductivity	Substances that form ions when in water; seawater influence
Sulfate	Runoff/leaching from natural deposits; industrial wastes
Total Coliform	Naturally present in the environment
Total Dissolved Solids	Runoff/leaching from natural deposits
Total Trihalomethanes	Byproduct of drinking water disinfection
Turbidity	Soil runoff
Uranium	Erosion of natural deposits

### **CONTRA COSTA WATER DISTRICT**

TABLE OF CHEMICALS OR CONSTITUENTS DETECTED IN WATER IN 2022

	1		CCWD		RANDALL-BOLD WTP*		CCWD-BRENTWOOD WTP	
<b>PRIMARY DRINKING WATE</b> Contaminants that may affect he	<b>R STANDA</b> ealth	RDS						
Inorganic	State or Federal Goal	Highest Amt. Allowed	Range Detected	Average	Range Detected	Average	Range Detected	Average
Barium (mg/L)	2	1	n/a	n/a	0.1	n/a	n/a	n/a
Fluoride (mg/L)	1	2	0.6-0.8	0.7	0.6-0.7	0.7	ND	ND
Nitrate as N (mg/L)	10	10	ND-0.2	ND	ND-0.5	0.2	ND-0.7	ND
Lead and Copper	State or Federal Goal	Highest Amt. Allowed	# of Sites Tested/ # Exceeding AL	90% Percentile	# of Sites Tested/ # Exceeding AL	90% Percentile	# of Sites Tested/ # Exceeding AL	90% Percentile
EPA Lead Study ( <b>µg/</b> L)	0.2	15	67/0	ND	n/a	n/a	n/a	n/a
EPA Copper Study (mg/L)	0.3	1.3	67/0	0.2	n/a	n/a	n/a	n/a
Date of Study			6/20	)22	n,	la	n,	la
Microbiological Standards	State or Federal Goal	Highest Amt. Allowed	Range or [Maximum Value]	Avg. or [Monthly % of Samples that Meet Req.]	Range or [Maximum Value]	Avg. or [Monthly % of Samples that Meet Req.]	Range or [Maximum Value]	Avg. or [Monthly % of Samples that Meet Req.]
Total Coliform (Revised Total Coliform Rule)	n/a	5% of mo. Samples	0%-0.6%	0.1%	n/a	n/a	n/a	n/a
Turbidity (NTU) (treatment plant)	n/a	95%≤0.3	[0.24]	[100%]	[0.23]	[100%]	[0.08]	[100%]
Disinfectant/Disinfection Byproducts	State or Federal Goal	Highest Amt. Allowed	Range Detected	Highest Quarterly RAA	Range Detected	Highest Quarterly RAA	Range Detected	Highest Quarterly RAA
Bromate (µg/L)	0.1	10	ND-17	5	ND-13	ND	ND	ND
Chloramines as Cl <sub>2</sub> (mg/L)		4	ND-3.5	1.7	n/a	n/a	n/a	n/a
Haloacetic acids (µg/L)	n/a	60	3.0-34	27	n/a	n/a	n/a	n/a
Total Trihalomethanes ( $\mu$ g/L)	n/a	80	10-38	33	n/a	n/a	n/a	n/a

			CCWD		RANDALL-BOLD WTP*		CCWD-BR W	ENTWOOD TP
SECONDARY DRINKING WATER STANDARDS Contaminants that may affect the odor, taste or appearance of water								
	State or Federal Goal	Highest Amt. Allowed	Range Detected	Average	Range Detected	Average	Range Detected	Average
Chloride (mg/L)	n/a	250	62-109	84	48-128	74	43-145	89
Copper (mg/L)	n/a	1.0	0.03	n/a	0.02	0.02	ND	n/a
Foaming agents (MBAS) ( $\mu$ g/L)	n/a	500	ND	n/a	ND	n/a	41	n/a
Odor-threshold (units)	n/a	З	ND	n/a	ND-1	ND	ND	n/a
Specific conductivity ( $\mu$ mhos/cm)	n/a	900	522-644	601	423-692	551	407-746	566
Sulfate (mg/L)	n/a	250	54-106	86	58-96	78	57-86	68
Total dissolved solids (mg/L)	n/a	500	288-345	325	223-361	299	219-388	298
Turbidity (NTU) (distribution system)	n/a	5	0.1-1.4	0.2	n/a	n/a	n/a	n/a

## **CONTRA COSTA WATER DISTRICT**

TABLE OF CHEMICALS OR CONSTITUENTS DETECTED IN WATER IN 2022

	_		CCWD		RANDALL-BOLD WTP*		CCWD-BRENTWOOD WTP		
GENERAL WATER QUALITY PARAMETERS Non-regulated parameters of general interest to consumers									
	State or Federal Goal	Highest Amt. Allowed	Range Detected	Average	Range Detected	Average	Range Detected	Average	
Alkalinity (mg/L)	n/a	n/a	50-90	70	40-102	67	48-77	61	
Ammonia (mg/L)	n/a	n/a	0.7	n/a	0.6	n/a	0.5	n/a	
Bromide (mg/L)	n/a	n/a	0.1-0.2	0.2	ND-0.2	0.2	ND-0.3	0.1	
Calcium (mg/L)	n/a	n/a	18-29	24	13-33	23	13-23	19	
Hardness (mg/L)	n/a	n/a	99-134	119	70-142	110	87-133	101	
Magnesium (mg/L)	n/a	n/a	12-15	14	9-15	13	10-17	13	
рН	n/a	n/a	7.5-8.4	8.0	7.5-8.1	7.7	7.6-8.9	8.1	
Potassium (mg/L)	n/a	n/a	2.7-3.6	3.2	2.2-4.0	2.9	2.1-4.4	3.1	
Sodium (mg/L)	n/a	n/a	59-75	71	53-87	65	44-98	68	

CCWD

CCWD-BRENTWOOD WTP

## UCMR4 ASSESSMENT MONITORING 2018-2020

	State or Federal Goal	Notification Level	Range Detected	Average	Range Detected	Average	Range Detected	Average
Manganese (µg/L)	n/a	500	1.2-6.8	3.6	0.9-45	12	1.8-4.1	3.2
ΗΑΑБ (μg/L)	n/a	n/a	1.6-14	6.6	n/a	n/a	n/a	n/a
HAA Br (µg/L)	n/a	n/a	1.4-15	7.1	n/a	n/a	n/a	n/a
HAA9 (µg/L)	n/a	n/a	2.5-25	11	n/a	n/a	n/a	n/a
Total Organic Carbon (TOC) (µg/L)	n/a	n/a	2800-4200	3475	2000-4300	3000	2100-5400	3525
Bromide (µg/L)	n/a	n/a	110-236	189	88-275	191	89-262	176

CCWD RANDALL-BOLD WTP\* CCV

**RANDALL-BOLD WTP\*** 

CCWD-BRENTWOOD WTP

#### **UNTREATED WATER TEST RESULTS**

Radiochemistry	State or Federal Goal	Highest Amt. Allowed	Range Detected	Average	Range Detected	Average	Range Detected	Average
Gross Alpha (pCi/L)	n/a	15	ND-4.5	3.0	ND-4.5	3.0	ND-4.5	3.0
Gross Beta (pCi/L)	0	50	ND-5.2	3.2	ND-5.2	3.2	ND-5.2	3.2

#### PUBLIC MEETINGS

**First and Third Wednesday 6:30 p.m.** 1331 Concord Avenue

1331 Concord Avenu Concord, CA 94520 925-688-8000 ccwater.com If you have any questions about Contra Costa Water District tap water, please call 925-688-8091. \*Randall-Bold Water Treatment Plant is a regular source of water for CCWD, Diablo Water District and the Golden State Water Company in Bay Point. It is also an as-needed source of water for Antioch and Brentwood and an emergency source for Pittsburg.

## **CITY OF ANTIOCH**

TABLE OF CHEMICALS OR CONSTITUENTS DETECTED IN WATER IN 2022

#### **PRIMARY DRINKING WATER STANDARDS** Contaminants that may affect health

Inorganic	State or Federal Goal	Highest Amt. Allowed	Range Detected	Average
Fluoride (mg/L)	1	2	0.5-0.7	0.6
Nitrate as N (mg/L)	10	10	0.2-0.3	ND
Lead and Copper	State or Federal Goal	Highest Amt. Allowed	# of Sites Tested/ # Exceeding AL	90% Percentile
EPA Lead Study ( $\mu$ g/L)	0.2	15	50/0	< 0.005
EPA Copper Study (mg/L)	0.3	1.3	50/0	0.084
Date of Study			9/2	021
Microbiological Standards	State or Federal Goal	Highest Amt. Allowed	Range or [Maximum Value]	Avg. or [Monthly % of Samples that Meet Req.]
Total Coliform (State Total Coliform Rule)	n/a	5% of mo. Samples	0%-1.0%	0.1%
Turbidity (NTU) (treatment plant)	n/a	95% ≤ 0.3	[0.3]	[99.9%]
Disinfectant/Disinfection Byproducts	State or Federal Goal	Highest Amt. Allowed	Range Detected	Highest Quarterly RAA
Chloramines as $Cl_2$ (mg/L)		4	0.2-3.8	2.5
Haloacetic acids (µg/L)	n/a	60	6.0-9.0	7.0
Total tribalomethanes (µg/L)	n/a	80	44-67	58

SECONDARY DRINKING WATER STANDARDS

Contaminants that may affect the odor, taste or appearance of water

	State or Federal Goal	Highest Amt. Allowed	Range Detected	Average
Chloride (mg/L)	n/a	250	65-120	92
Copper (mg/L)	n/a	1.0	ND-0.03	0.01
Specific conductivity (µmhos/cm)	n/a	900	590-650	620
Sulfate (mg/L)	n/a	250	46-50	48
Total dissolved solids (mg/L)	n/a	500	350	350
Turbidity (NTU) (distribution system)	n/a	5	0.02-2.4	0.08

#### **SOURCE OF WATER**

The City of Antioch purchases untreated water from CCWD, treats it in a City-owned treatment plant and delivers it to customers through the City's distribution pipes. The City is also able to pump directly from the San Joaquin River or purchase treated water from CCWD, which was the case in 2022. Only a small percentage of customers received drinking water from CCWD.

The City completes watershed sanitary surveys every five years. The last survey, completed in 2022, concluded that potential contamination is regularly mitigated by the natural flushing of the Delta, controls at contamination sources and existing water treatment practices.

In April 2003, Antioch conducted a source water assessment. In summary:

- Antioch Municipal Reservoir was found to be most vulnerable to sewer collection systems; this activity is not associated with contaminants in the water supply.
- San Joaquin River was found to be most vulnerable to the effects of saltwater intrusion, chemical/petroleum processing or storage, and regulated point discharges.

Water from the San Joaquin River is not always acceptable due to saltwater intrusion. When chloride levels in the river exceed 250 milligrams per liter, the City stops pumping until chloride levels decrease.

## **CITY OF ANTIOCH**

TABLE OF CHEMICALS OR CONSTITUENTS DETECTED IN WATER IN 2022



#### **GENERAL WATER QUALITY PARAMETERS**

Non-regulated parameters of general interest to consumers

	State or Federal Goal	Highest Amt. Allowed	Range Detected	Average
Alkalinity (mg/L)	n/a	n/a	56-142	86
Calcium (mg/L)	n/a	n/a	22-37	22
Hardness (mg/L)	n/a	n/a	74-156	108
Magnesium (mg/L)	n/a	n/a	12-13	12
рН	n/a	n/a	7.7-9.4	8.4
Potassium (mg/L)	n/a	n/a	2.8-3.7	3.2
Sodium (mg/L)	n/a	n/a	58-76	67

## UCMR4 ASSESSMENT MONITORING 2018-2020

2010 2020				
	State or Federal Goal	Highest Amt. Allowed	Range Detected	Average
Manganese (µg/L)	n/a	500	1.0-7.8	3.6
ΗΑΑ5 (μg/L)	n/a	n/a	1.7-11.9	4.84
HAA Br (µg/L)	n/a	n/a	0.7-11.8	5.21
HAA9 (µg/L)	n/a	n/a	2.4-21	8.94
Total Organic Carbon (TOC) ( $\mu$ g/L)	n/a	n/a	2500-3900	3200
Bromide (µg/L)	n/a	n/a	130-360	238

#### **UNTREATED WATER TEST RESULTS**

Radiochemistry	State or Federal Goal	Highest Amt. Allowed	Range Detected	Average
Gross Alpha (pCi/L)	n/a	15	ND-4.5	3.0
Gross Beta (pCi/L)	0	50	ND-5.2	3.2

#### PUBLIC MEETINGS

Second and Fourth Tuesdays 7:00 p.m. 200 H Street Antioch, CA 94509 925-779-7000 www.antiochca.gov

If you have any questions about the City of Antioch tap water, please call 925-779-7024.

## **CITY OF MARTINEZ**

TABLE OF CHEMICALS OR CONSTITUENTS DETECTED IN WATER IN 2022



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Carlor Mark	A State			1 0%
		IKING WAT	FR STAND	

#### **PRIMARY DRINKING WATER STANDARDS** Contaminants that may affect health

Inorganic	State or Federal Goal	Highest Amt. Allowed	Range Detected	Average
Fluoride (mg/L)	1	2	0.6-0.9	0.8
Lead and Copper	State or Federal Goal	Highest Amt. Allowed	# of Sites Tested/ # Exceeding AL	90% Percentile
EPA Lead Study (µg/L)	0.2	15	57/0	8.2
EPA Copper Study (mg/L)	0.3	1.3	57/0	0.15
Date of Study			6/2	021
Microbiological Standards	State or Federal Goal	Highest Amt. Allowed	Range or [Maximum Value]	Avg. or [Monthly % of Samples that Meet Req.]
Turbidity (NTU) (treatment plant)	n/a	95%≤0.3	[0.14]	[100%]
Disinfectant/Disinfection Byproducts	State or Federal Goal	Highest Amt. Allowed	Range Detected	Highest Quarterly RAA
Bromate (µg/L)	0.1	10	ND-13	ND
chloramines as Cl2 (mg/L)		4	0.1-3.0	1.9
Haloacetic acids (µg/L)	n/a	60	3.0-16	9.0
Total Trihalomethanes (µg/L)	n/a	80	25-60	43

#### SECONDARY DRINKING WATER STANDARDS

Contaminants that may affect the odor, taste or appearance of water

	State or Federal Goal	Highest Amt. Allowed	Range Detected	Average
Chloride (mg/L)	n/a	250	50-130	82
Copper (mg/L)	n/a	1.0	ND-0.003	0.001
Odor-threshold (units)	n/a	3	1-3	2
Specific conductivity (µmhos/cm)	n/a	900	570	570
Sulfate (mg/L)	n/a	250	55-64	60
Total dissolved solids (mg/L)	n/a	500	232-485	365
Turbidity (NTU) (distribution system)	n/a	5	0.05-0.57	0.12

#### **SOURCE OF WATER**

The City of Martinez purchases untreated water from CCWD, treats it in a City-owned treatment plant and delivers it through the City's distribution pipes to customers who are not served treated water directly from CCWD.

## **CITY OF MARTINEZ**

AR-IN

TABLE OF CHEMICALS OR CONSTITUENTS DETECTED IN WATER IN 2022



### GENERAL WATER QUALITY PARAMETERS

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Non-regulated parameters of general interest to consumers

	State or Federal Goal	Highest Amt. Allowed	Range Detected	Average
Alkalinity (mg/L)	n/a	n/a	42-113	81
Bromide ( <b>mg</b> /L)	n/a	n/a	0.1-0.4	0.2
Calcium (mg/L)	n/a	n/a	28-60	44
Hardness (mg/L)	n/a	n/a	42-144	108
Magnesium (mg/L)	n/a	n/a	14-55	35
рН	n/a	n/a	8.4-9.2	8.9
Potassium (mg/L)	n/a	n/a	3.3	3.3
Sodium (mg/L)	n/a	n/a	63	63

## UCMR4 ASSESSMENT MONITORING 2018-2020

2010 2020				
	State or Federal Goal	Highest Amt. Allowed	Range Detected	Average
Manganese (µg/L)	n/a	500	0.4-5.0	3.1
ΗΑΑ5 (μg/L)	n/a	n/a	0.3-4.4	2.4
HAA Br (µg/L)	n/a	n/a	0.6-5.1	2.7
HAA9 (µg/L)	n/a	n/a	1.0-7.1	3.8
Total Organic Carbon (TOC) ( $\mu$ g/L)	n/a	n/a	2800-4400	3667
Bromide (µg/L)	n/a	n/a	110-310	227

#### **UNTREATED WATER TEST RESULTS**

Radiochemistry	State or Federal Goal	Highest Amt. Allowed	Range Detected	Average
Gross Alpha (pCi/L)	n/a	15	ND-4.5	3.0
Gross Beta (pCi/L)	0	50	ND-5.2	3.2

#### PUBLIC MEETINGS

First and Third Wednesdays 7:00 p.m. 525 Henrietta Street Martinez, CA 94553 925-372-2512 cityofmartinez.org

If you have any questions about the City of Martinez tap water, please call 925-372-3588.

## **CITY OF PITTSBURG**

TABLE OF CHEMICALS OR CONSTITUENTS DETECTED IN WATER IN 2022



#### **SOURCE OF WATER**

The City of Pittsburg purchases untreated water from CCWD, treats it in a City-owned treatment plant and delivers it to customers through the City's distribution pipes. In addition to the water it buys from CCWD, the City is able to pump water from two wells.

A source water assessment was conducted for the Dover Well in September 2015, and for Bodega Well in July 2009. In summary:

- **Bodega well** was found to be most vulnerable to residential sewer collection systems, abandoned military installation (Camp Stoneman) and illegal activities (drug labs).
- **Dover well** was considered most vulnerable to sewer collection systems, transportation corridors, and storm drain discharge points. No contaminants associated with the identified potentially contaminating activities (PCA) have been detected in water samples from Dover well.

#### **PRIMARY DRINKING WATER STANDARDS** Contaminants that may affect health

Inorganic	State or Federal Goal	Highest Amt. Allowed	Range Detected	Average
Aluminum (mg/L)	0.6	1	ND-0.9	ND
Barium (mg/L)	2	1	0.1	n/a
Fluoride (mg/L)	1	2	0.5-0.9	0.7
Nitrate as N (mg/L)	10	10	0.4	n/a
Lead and Copper	State or Federal Goal	Highest Amt. Allowed	# of Sites Tested/ # Exceeding AL	90% Percentile
EPA Lead Study ( $\mu$ g/L)	0.2	15	53/0	ND
EPA Copper Study (mg/L)	0.3	1.3	53/0	ND
Date of Study			8/2	021
Microbiological Standards	State or Federal Goal	Highest Amt. Allowed	Range or [Maximum Value]	Avg. or [Monthly % of Samples that Meet Req.]
Turbidity (NTU) (treatment plant)	n/a	95%≤0.3	[0.15]	[100%]
Disinfectant/Disinfection Byproducts	State or Federal Goal	Highest Amt. Allowed	Range Detected	Highest Quarterly RAA
Chlorite (mg/L)	0.05	1	ND-0.4	0.2
Chloramines as Cl <sub>2</sub> (mg/L)		4	0.4-2.7	2.0
Haloacetic acids (µg/L)	n/a	60	ND-7.0	4.0
Total trihalomethanes (µg/L)	n/a	80	12-98	48

#### SECONDARY DRINKING WATER STANDARDS

Contaminants that may affect the odor, taste or appearance of water

	State or Federal Goal	Highest Amt. Allowed	Range Detected	Average
Aluminum (µg/L)	n/a	200	ND-91	43
Chloride (mg/L)	n/a	250	56-165	112
Odor-threshold (units)	n/a	З	1.3	1.3
Specific conductivity (µmhos/cm)	n/a	900	539-896	747
Sulfate (mg/L)	n/a	250	58-94	79
Total dissolved solids (mg/L)	n/a	500	162-509	419
Turbidity (NTU) (distribution system)	n/a	5	0.07-0.3	0.12

## **CITY OF PITTSBURG**

TABLE OF CHEMICALS OR CONSTITUENTS DETECTED IN WATER IN 2022



**GENERAL WATER QUALITY PARAMETERS** Non-regulated parameters of general interest to consumers

	State or Federal Goal	Highest Amt. Allowed	Range Detected	Average
Alkalinity (mg/L)	n/a	n/a	90-148	114
Ammonia (mg/L)	n/a	n/a	ND-0.36	0.28
Calcium (mg/L)	n/a	n/a	47	n/a
Hardness (mg/L)	n/a	n/a	126-208	175
Magnesium (mg/L)	n/a	n/a	21	n/a
рН	n/a	n/a	7.3-8.8	8.5
Potassium (mg/L)	n/a	n/a	3.9	n/a
Sodium (mg/L)	n/a	n/a	76	n/a

## UCMR4 ASSESSMENT MONITORING 2018-2020

	State or Federal Goal	Highest Amt. Allowed	Range Detected	Average
Manganese (µg/L)	n/a	500	3.2-5.3	3.9
HAA5 (µg/L)	n/a	n/a	1.7-8.6	5.4
HAA Br ( $\mu$ g/L)	n/a	n/a	1.0-16	8.4
HAA9 (µg/L)	n/a	n/a	2.7-20	12
Total Organic Carbon (TOC) ( $\mu$ g/L)	n/a	n/a	2100-4200	2975
Bromide (µg/L)	n/a	n/a	45-260	115

#### **UNTREATED WATER TEST RESULTS**

Radiochemistry	State or Federal Goal	Highest Amt. Allowed	Range Detected	Average
Uranium (pCi/L)	0.43	20	1.4	n/a

#### PUBLIC MEETINGS

First and Third Mondays 7:00 p.m. 65 Civic Avenue Pittsburg, CA 94565 925-252-4850 ci.pittsburg.ca.us

If you have any questions about the City of Pittsburg tap water, please call 925-252-6916.

## **DIABLO WATER DISTRICT**

TABLE OF CHEMICALS OR CONSTITUENTS DETECTED IN WATER IN 2022



#### SOURCE OF WATER

Diablo Water District purchases untreated water from CCWD. Water is treated and blended with groundwater pumped from two wells. The treated water is then delivered to customers through its distributions pipes.

A source water assessment was conducted for the Glen Park well in April 2005 and for Stonecreek well in March 2011. In summary:

• Both wells were found to be most vulnerable to historic waste dumps/ landfills and septic systems (high density, >1/acre). These activities are not associated with contaminants in the water supply.

	DIABL( DIS	) WATER TRICT	RANDALL-BOLD WTP*			
<b>PRIMARY DRINKING WAT</b> Contaminants that may affect h	<b>ER STANDA</b> nealth	RDS				
Inorganic	State or Federal Goal	Highest Amt. Allowed	Range Detected	Average	Range Detected	Average
Barium (mg/L)	2	1	0.1	n/a	0.1	n/a
Fluoride (mg/L)	1	2	0.6-0.7	0.7	0.6-0.7	0.7
Nitrate as N (mg/L)	10	10	0.1-0.9	0.4	ND-0.5	0.2
Lead and Copper	State or Federal Goal	Highest Amt. Allowed	# of Sites Tested/ # Exceeding AL	90% Percentile	# of Sites Tested/ # Exceeding AL	90% Percentile
EPA Lead Study (µg/L)	0.2	15	29/0	1.9	n/a	n/a
EPA Copper Study (mg/L)	0.3	1.3	29/0	0.24	n/a	n/a
Date of Study			6/2022		n/a	
Microbiological Standards	State or Federal Goal	Highest Amt. Allowed	Range or [Maximum Value]	Avg. or [Monthly % of Samples that Meet Req.]		
Turbidity (NTU) (treatment plant)	n/a	95%≤0.3	n/a	n/a	[0.23]	[100%]
Disinfectant/Disinfection Byproducts	State or Federal Goal	Highest Amt. Allowed	Range Detected	Highest Quarterly RAA		
Bromate (µg/L)	0.1	10	n/a	n/a	ND-13	ND
Chloramines as Cl <sub>2</sub> (mg/L)		4	0.4-3.3	2.5	n/a	n/a
Haloacetic acids (µg/L)	n/a	60	4.0-9.7	7.0	n/a	n/a
Total Trihalomethanes (µg/L)	n/a	80	7.1-30	19	n/a	n/a

			DIABLC DIS1	WATER TRICT	RANDALL-BOLD WTP*				
SECONDARY DRINKING WATER STANDARDS Contaminants that may affect the odor, taste or appearance of water									
State or Highest Amt. Range Average Range Federal Goal Allowed Detected Detected									
Chloride (mg/L)	n/a	250	53-130	85	48-128	74			
Copper (mg/L)	n/a	1.0	0.02	n/a	0.02	0.02			
Manganese (µg/L)	n/a	50	ND-410	32	ND	n/a			
Odor-threshold (units)	n/a	3	2	n/a	ND-1	ND			
Specific conductivity (µmhos/cm)	n/a	900	414-732	608	423-692	551			
Sulfate (mg/L)	n/a	250	55-110	83	58-96	78			
Total dissolved solids (mg/L)	n/a	500	222-403	338	223-361	299			
Turbidity (NTU) (distribution system)	n/a	5	0.1-0.5	0.2	n/a	n/a			

### **DIABLO WATER DISTRICT**

TABLE OF CHEMICALS OR CONSTITUENTS DETECTED IN WATER IN 2022

	V	DIABLO WATER DISTRICT				
		87 CA	DIABLC DIST	) WATER IRICT	RANDA W	LL-BOLD TP*
<b>GENERAL WATER QUALIT</b> Non-regulated parameters of ge	<b>Y PARAMI</b> neral interes	ETERS St to consum	iers			
	State or Federal Goal	Highest Amt. Allowed	Range Detected	Average	Range Detected	Average
Alkalinity (mg/L)	n/a	n/a	42-131	89	40-102	67
Ammonia (mg/L)	n/a	n/a	0.6	n/a	0.6	n/a
Bromide (mg/L)	n/a	n/a	0.1-0.3	0.2	ND-0.2	0.2
Calcium (mg/L)	n/a	n/a	13-36	26	13-33	23
Hardness (mg/L)	n/a	n/a	68-164	126	70-142	110
Magnesium (mg/L)	n/a	n/a	9-15	15	9-15	13
рН	n/a	n/a	7.8-8.3	8.1	7.5-8.1	7.7
Potassium (mg/L)	n/a	n/a	2.2-4.0	2.9	2.2-4.0	2.9
Sodium (mg/L)	n/a	n/a	52-89	69	53-87	65

#### **DIABLO WATER RANDALL-BOLD** DISTRICT WTP\*

## **UCMR4 ASSESSMENT MONITORING**

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	State or Federal Goal	Highest Amt. Allowed	Range Detected	Average	Range Detected	Average
Manganese (µg/L)	n/a	500	2.7-62	19	0.9-45	12
ΗΑΑ5 (μg/L)	n/a	n/a	2.5-9.5	5.1	n/a	n/a
HAA Br (µg/L)	n/a	n/a	3.1-14	6.1	n/a	n/a
HAA9 (µg/L)	n/a	n/a	3.6-18	8.6	n/a	n/a
Total Organic Carbon (TOC) (µg/L)	n/a	n/a	2000-4400	3275	2000-4300	3000
Bromide (µg/L)	n/a	n/a	89-262	176	88-275	191

#### **DIABLO WATER** RANDALL-BOLD DISTRICT WTP\*

#### **UNTREATED WATER TEST RESULTS**

Radiochemistry	State or Federal Goal	Highest Amt. Allowed	Range Detected	Average	Range Detected	Average
Gross Alpha (pCi/L)	n/a	15	ND-4.5	3.0	ND-4.5	3.0
Gross Beta (pCi/L)	0	50	ND-5.2	3.2	ND-5.2	3.2

#### **PUBLIC MEETINGS**

#### **Fourth Wednesday** 6:30 p.m.

87 Carol Lane Oakley, CA 94561 925-625-3798 diablowater.org

If you have any questions about Diablo Water District tap water, please call 925-625-2112.



This report contains important information about your drinking water. Have someone translate it for you, or speak with someone who understands it.

Su informe anual de la calidad del agua en español está disponible en línea en **ccwater.com/awqr\_es.** Este informe contiene información importante sobre su agua potable.

此报告包含有关您的饮用水的重要信息。请人帮您翻译出来,或请看懂此 报告的人将内容说给您听。

این گزارش شامل اطلاعات مهمی درمورد اب اشامیدنی شما میباشد. از شخصی بخواهید که به شما ترجمه کنند و یا با شخصی که این موضوع را میفهمند صحبت بکنید.

Mahalaga ang impormasyong ito. Mangyaring ipasalin ito.





## WANT MORE INFORMATION?

Contra Costa Water District's website contains valuable information about your water service. Visit **ccwater.com** to begin your research.