

WATER QUALITY REPORT 1998



Your Drinking Water

A Report on the Quality of Your Tap Water



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The Cities of Antioch, Martinez and Pittsburg
California Cities Water Co. (Bay Point) • Diablo Water District (Oakley)
and the Contra Costa Water District

R41-d

To Our Customers:

To ensure your tap water is clean and safe to drink, your water purveyor employs state-of-the-art treatment technology while protecting its sources of water.

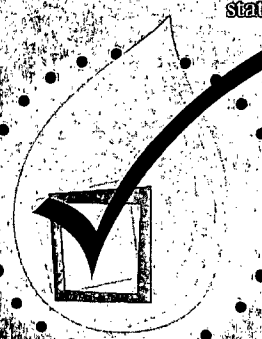
As a result, the quality of your tap water consistently meets or exceeds state and federal requirements. It is a pleasure to report that your tap water purveyor had no water quality violations in the past year.

Also noteworthy is the fact that water quality has been greatly improved by the Los Vaqueros Project, which offered good-quality, low-salt water to your

Your water purveyor is committed to providing you with safe, clean drinking water

purveyor throughout the year.

This Annual Water Quality Report will provide you with answers to the questions you may have about your tap water. It contains information about



the quality of water provided by the Contra Costa Water District, the cities of Antioch, Martinez and Pittsburg, the California Cities Water Company (Bay Point), and Diablo Water District (Oakley).

Required in California since 1989 by the state Department of Health Services,

this report has now become a requirement of the U.S.

Environmental Protection Agency for the entire

country. You may notice that this year's report has

more information in the tables and a format that is

slightly different from previous reports. This is due to recent changes

in the governmental requirements for Annual Water Quality Reports

Information

For information about the tap water in your community, please call one of the following points of contact:

CCWD (Central Contra Costa):

Joe Guistino (925) 688-8156

City of Antioch:

Lori Sarti (925) 779-7024

City of Martinez:

Alan Pellegrini (925) 372-3587

City of Pittsburg:

John Edwards (925) 439-4026

CA-Cities Water Co. (Bay Point):

Charles Gibson 1-800-999-4033

Diablo Water District (Oakley):

Danny Bowers (925) 625-2112

The U.S. Environmental Protection Agency Wants You To Know...

all drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants.

The presence of these contaminants does not necessarily indicate that water poses a health risk. The sources of tap and bottled water include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the earth's surface or through the ground, it can pick up contaminants that are naturally occurring or the result of human activity. 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 systems 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.

For more information about contaminants and potential health effects, or guidelines on appropriate means to lessen the risk of infection from Cryptosporidium and other microbial contaminants, call the EPA's Safe Drinking Water Hotline at 1-800-426-4791

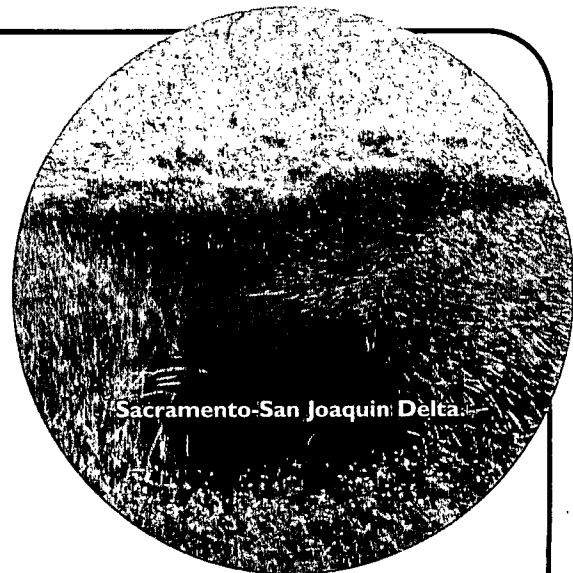
The Source of Your Water

The primary source of water for 400,000 residents in Central and Eastern Contra Costa County is the surface water of the Sacramento-San Joaquin Delta.

Originating from rivers within California's mountain ranges, the water flows into the Sacramento and San Joaquin rivers, eventually finding its way into the Delta. Delta water is drawn from Rock Slough near Oakley, Old River near Discovery Bay and Mallard Slough in Concord. The water is transported in the Contra Costa Canal, which starts at Rock Slough, then stretches east to Clyde, south to Walnut Creek and north to Martinez. Good quality water with low salt levels is also stored in the 100,000-acre-foot Los Vaqueros Reservoir after it is pumped from the Old River Intake.

The Contra Costa Water District treats this water and provides it to about 200,000 residents in Clayton, Clyde, Concord, Pacheco, Port Costa, and parts of Pleasant Hill, Martinez and Walnut Creek.

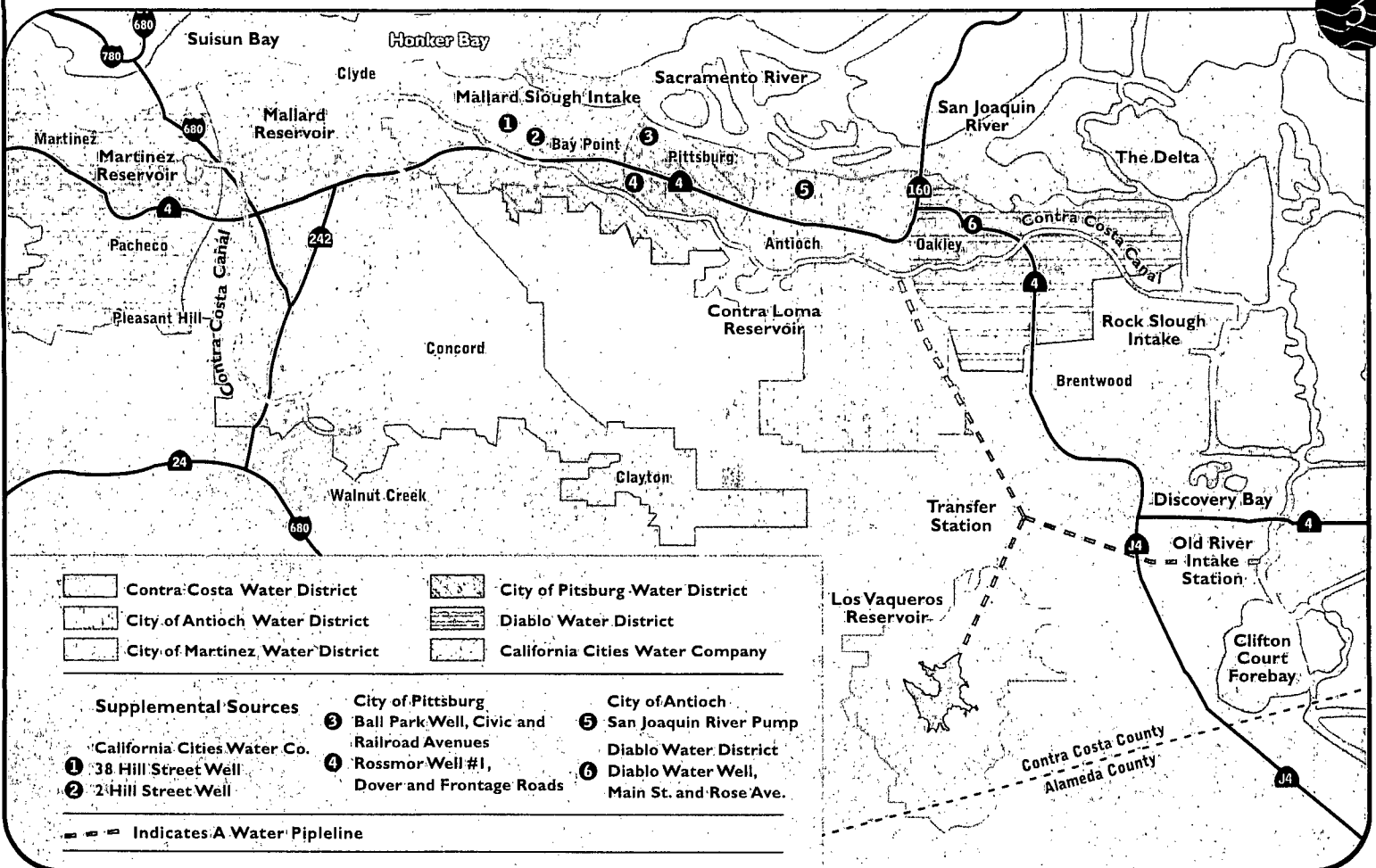
CCWD also sells untreated water (raw water) from the canal to the following purveyors: the cities of Antioch, Martinez and Pittsburg, the California Cities Water Company (Bay Point), and the Diablo Water District (Oakley). These five purveyors treat, distribute and bill for the water themselves. In addition to the water they buy from CCWD, most



Sacramento-San Joaquin Delta

of these agencies can draw groundwater from wells or surface water from their own reservoirs or the Sacramento or San Joaquin rivers as supplemental supplies. (Please refer to the map for locations.)

A source water assessment of the Delta has been completed and is available. If you would like information on this assessment or other raw water quality issues, please call (925) 688-8156.



1998 Water Test Results

Understanding the Treated and Raw Water Tables

In the following tables, you will find detailed information about the water that comes from your tap before it is treated (Raw Water) and after it is treated (Treated Water). Your water is regularly tested for more than 120

chemicals and other substances, as well as radioactivity.

Only substances that were detected in 1998 are listed in the tables.

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TREATED WATER TABLES				CCWD	DIABLO WATER DISTRICT
Chemical	PHG	MCLG	MCL	Range (mg/L)	Range (mg/L)
Asbestos	NA	NA	7 MFL	ND	ND
Total Trihalomethane (TTHM)	NA	0 mg/L	0.1 mg/L	0.0033-0.073	ND-0.0113
Aluminum (Al)	NA	NA	0.2 mg/L	0.0063-0.18	0.0085-0.083
Chloride (Cl)	NA	NA	250 mg/L	14-120	14-100
Corrosivity (SI)	NA	NA	non-corrosive	+ 0.01 - + 0.77	0 - + 0.88
Fluoride (F)	1.0 mg/L	4.0 mg/L	2.0 mg/L	0.11-1.2	0.68-0.90
Foaming Agents (MBAS)	NA	NA	0.5 mg/L	ND	ND
Iron (Fe)	NA	NA	0.3 mg/L	ND	ND
Manganese (Mn)	NA	NA	0.05 mg/L	ND-0.042	0.0033-0.013
Sulfate (SO ₄)	NA	NA	250 mg/L	34-100	30-160
Total Dissolved Solids (TDS)	NA	NA	500 mg/L	120-388	130-339
Sodium (Na)	NA	NA	NA	21-87	26-91
Alkalinity (CaCO ₃)	NA	NA	NA	44-82	52-120
pH	NA	NA	NA	8.44-9.22	8.0-9.13
Total Hardness (CaCO ₃)	NA	NA	NA	54-138	56-114
				Action Level (mg/L)	
EPA Lead Study (Pb)	0.002 mg/L	0 mg/L	0.015 mg/L @ 90th%	ND - 0.0095	ND-0.0065
EPA Copper Study (Cu)	0.17 mg/L	1.3 mg/L	1.3 mg/L @ 90th%	0.0057-0.099	ND-0.056
Physical					
Color	NA	NA	15 CU	ND	ND
Odor-Threshold	NA	NA	3 TON	ND	ND
Turbidity	NA	NA	1 NTU	0.04-2.04	0.003-0.05
Microbiological					
Total Coliform	NA	0 mg/L	>5.0% positive	0-0.47	0

Table Definitions

Treatment Technique

A required process intended to reduce the level of a contaminant in drinking water.

(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 Environmental Protection Agency.

(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 U.S. Environmental Protection Agency.

PHGs and MCLGs are non-mandatory goals based solely on public health considerations using the most recent scientific research available.

When these goals are set, the technological and economic feasibility of reaching these goals is not considered.

(MCL) Maximum Contaminant Level

The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the PHGs and MCLGs as is economically or technologically feasible.

Primary Drinking Water Standard

Primary MCLs, specific treatment techniques adopted in lieu of primary MCLs, and monitoring and reporting requirements for MCLs that are specified in regulations.

Action Level

The concentration of a contaminant which, if exceeded, triggers a treatment technique or other requirement which a water system must follow.



CITY OF ANTIOCH	CITY OF PITTSBURG	CAL CITIES WATER CO.	CITY OF MARTINEZ
Range (mg/L)	Range (mg/L)	Range (mg/L)	Range (mg/L)
NR	NR	NR	NR
0.034-0.054	0.008-0.018	0.076-0.095	ND-0.026
ND-0.07	0.009-0.019	ND	ND-0.17
19-156	39-101	18	11-135
0.33-0.19	0.31	0.93	0.17-0.59
0.71-0.99	0.71-0.83	ND	0.5-1.1
0.02-0.04	ND	ND	ND
ND	ND	ND	ND-0.28
ND	ND	ND	ND
32-130	34-137	19	42-52
52-466	250-405	120	130-400
12-104	43	21	32-68
42-83	78-142	42	44-110
8.0-9.0	8.2-8.5	7.8-8.5	8.7-9.2
44-138	88-152	56	50-182
ND-0.0098*	ND-0.0025*	ND-0.0052**	ND-0.014*
ND-0.140*	0.025-0.074*	ND-0.55**	ND-0.083*
ND	2.5	ND-2	ND
ND-1	1.6-2.0	ND-2	1.4-3.0
0.04-0.09	0.04-0.18	ND-0.25	0.03-0.10
0	0	0	0-1.8

Chart Abbreviations

NA	Not Applicable
ND	Not Detected
NR	Not Required
mg/L	milligrams per liter
MFL	million fibers per liter
CU	color unit
NTU	nephelometric turbidity unit
TON	threshold odor number
SI	Saturation Index

Corrosivity: (-) ... tends to corrode
(+) ... tends to form calcium deposit

* ... Lead/Copper study performed in 1997, next due in 2000.

** ... Lead/Copper study performed in 1996, next due in 1999.

Raw Water Tables

A Note to Our Customers:

The tables on these pages report results of testing on water used by individual providers as a supplement to water they received from CCWD. The City of Martinez is not listed because it does not supplement.

If you receive water from any of the purveyors on pg 7 or the City of Martinez, the CCWD table below also applies to you because your provider receives raw water from CCWD. Please review the CCWD chart in addition to the results from you city.

How to Get Involved in the Quality of Your Water:

Contra Costa Water District:

The Board of Directors meets in regular session at 6:30 p.m. on the first and third Wednesdays of each month. Meetings are held in the Board Room at the Contra Costa Water District Center, 1331 Concord Ave., Concord.

For meeting agendas, contact the District Secretary at (925) 688-8024.

CONTRA COSTA WATER DISTRICT RAW WATER

				MALLARD SLOUGH	ROCK SLOUGH	OLD RIVER	LOS VAQUEROS
Regulated Inorganic Chemicals	PHG (mg/L)	MCLG (mg/L)	MCL (mg/L)	Range (mg/L)	Range (mg/L)	Range (mg/L)	Range (mg/L)
Aluminum	NA	NA	1	0.21-0.73	0.054-0.36	0.13-2.3	0.048-0.70
Arsenic (As)	NA	NA	0.05	ND	ND	ND-0.0022	ND-0.0028
Cadmium (Cd)	NA	0.005	0.005	ND	ND-0.0001	ND	ND
Chromium (Cr)	NA	0.1	0.1	ND-0.0031	ND-0.0013	ND-0.0069	ND
Fluoride (F)	1	4	4	ND-0.46	ND-0.33	ND-0.26	ND-0.32
Nickel (Ni)	NA	NA	0.1	0.0021-0.0068	ND-0.0039	ND-0.016	ND-0.0066
Nitrate (as NO3)	45	45	45	0.72-3.5	0.73-6.4	1.4-3.9	1.1-5.1
Nitrite (as N)	1	1	1	ND	ND	ND	ND-0.039
Nitrate + Nitrite (sum as N)	10	10	10	0.16-0.79	0.17-1.45	0.32-0.89	0.26-1.17
Sulfate (SO4)	NA	NA	500	10-120	12-90	15-40	25-54
Regulated Organic Chemicals							
Volatile Organic Chemicals	various	various	various	ND	ND	ND	ND
Synthetic Organic Chemicals	various	various	various	ND	ND	ND	ND
Radiochemistry							
Total Alpha	NA	0 pCi/L	15 pCi/L	ND	3	2.3	1.4-2.8
Total Beta	NA	0 pCi/L	50 pCi/L	ND	ND	ND	ND-4.0
Tritium (H3)	NA	NA	20,000 pCi/L	ND	ND	43	ND-1125
Uranium (U)	NA	NA	20 pCi/L	ND	2.5	2.8	ND-2.0
Combined Ra 226 & Ra 228	NA	0 pCi/L	5 pCi/L	ND	ND	ND	ND-1.0
Unregulated Organic Chemicals							
Unregulated Organic Chemicals	NA	NA	various	ND	ND	ND	ND

City of Martinez:

The Martinez City Council meets in regular session at 7 p.m. on the first and third Wednesdays of each month. Meetings are held in Council Chambers at 525 Henrietta Street, Martinez.

For meeting agendas, contact the City Clerk at (925) 372-3512.

California Cities Water Company (Bay Point):

Meetings are held quarterly. This is an investor-owned utility.

For more information, call (800) 999-4033.

City of Pittsburg:

The Pittsburg City Council meets in regular session at 7 p.m. on the first and third Mondays of each month. Meetings are held in Council Chambers at 65 Civic Drive, Pittsburg.

For meeting agendas, contact the City Clerk at (925) 439-4890.

City of Antioch:

The Antioch City Council meets in regular session at 7 p.m. on the second and fourth Tuesdays of each month. Meetings are held in Council Chambers at Third and H Streets, Antioch.

For meeting agendas, contact the City Clerk at (925) 779-7009.

Diablo Water District (Oakley):

The Board of Directors meets in regular session at 7:30 p.m. on the fourth Wednesday of each month. Meetings are held at 2107 Main Street, Oakley. For meeting agendas, contact the District

at (925) 625-3798.



S U P P L E M E N T A L R A W W A T E R S O U R C E S

				CITY OF PITTSBURG Rossmoor Well #1	CITY OF PITTSBURG Ballpark Well	CAL CITIES WATER CO. Groundwater	CITY OF ANTIOCH San Joaquin Rvr.	DIABLO WATER DISTRICT Oakley Well***
Regulated Inorganic Chemicals	PHG (mg/L)	MCLG (mg/L)	MCL (mg/L)	Range (mg/L)	Range (mg/L)	Range (mg/L)	Range (mg/L)	Range (mg/L)
Aluminum	NA	NA	1	ND	ND	ND	0.34-2.3	0.06
Arsenic (As)	NA	NA	0.05	ND	0.0035	ND-0.0071	ND	ND
Fluoride	1	4	4	0.45	0.66	0.2-0.3	ND-0.18	ND
Nitrate (as NO3)	45	45	45	1.5	ND	5.1-17	ND-5.0	10.3
Nitrate + Nitrate (sum as N)	NA	NA	10	1.5	ND	ND-4.1	ND-1.1	1.5
Sulfate	NA	NA	500	210	ND	290-410	13-39	390
Regulated Organic Chemicals								
Volatile Organic Chemicals	various	various	various	ND	ND	ND	ND	NR
Synthetic Organic Chemicals	various	various	various	ND	ND	ND	ND	NR
Radiochemistry								
Total Alpha	NA	0	15pCi/L	18	9	1-5.2	0.4-1.6	4.8-10.5
Total Beta	NA	0	50pCi/L	15	6	NR	NR	1.1-7.0
Radon 222	NA	NA	300pCi/L	327	239	NR	NR	NR
Uranium (U)	NA	NA	20pCi/L	NR	NR	1.2-5.2	ND	5.7-8.5
Tritium (H3)	NA	NA	20,000pCi/L	NR	NR	NR	NR	ND-407
Combined Ra 226 & 228	NA	NA	5pCi/L	NR	NR	NR	NR	ND-1.3
Unregulated Organic Chemicals								
Unregulated Organic Chemicals	NA	NA	various	ND	ND	ND	ND	NR

Abbreviations/Units

NA (Not Applicable) | ND (Not Detected) | NR (Not Required) | mg/L (milligrams per liter) | pCi/L (picocurie per liter)

*** Results from 1997 analysis; next due 2000. Radiochemistry due in 1999.



CONTRA COSTA
WATER DISTRICT

Contra Costa Water District
P.O. Box H20
Concord, CA 94524

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Your Drinking Water

A Report on the Quality
of Your Tap Water in 1998

PRODUCED BY:

Contra Costa Water District

City of Antioch

City of Martinez

City of Pittsburg

Diablo Water District

California Cities Water Company

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