

A Report on the Quality of Your Tap Water

From the Contra Costa Water District, the Cities of Antioch, Martinez and Pittsburg, and the Diablo Water District (Oakley).

To Our Customers:

To ensure that your tap water is clean and safe to drink, your water provider employs state-of-the-art treatment technology and carefully protects its sources of water. In 2001, the treated drinking water delivered to your home met all primary drinking water standards set by the state and federal governments. Primary standards are set for contaminants that could affect health. For more information, see the Treated Water Table and Raw Water Tables on pages 4-7.

This report presents a “snapshot” of the quality of your drinking water in 2001. It will provide you with answers to questions you may have about your tap water. It contains information about the quality of water delivered to customers by the Contra Costa Water District (CCWD), the cities of Antioch, Martinez and Pittsburg, and the Diablo Water District in Oakley. This report is required each year by the California Department of Health Services and the U.S. Environmental Protection Agency (EPA).

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

- CCWD (Central Contra Costa): Jean Zacher – (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
- Diablo Water District (Oakley): Danny Bowers – (925) 625-2112



PHOTO BY STEPHEN JOSEPH

All Drinking Water Systems are Required by the California Department of Health Services to Provide Consumers With the Following Information:

All drinking water, including bottled water, in all communities 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.

The sources of drinking water (both tap 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. It can also pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water before it is treated include:

- *Microbial contaminants, such as viruses and bacteria, 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, which may come from a variety of sources, such as agriculture, urban stormwater runoff and residential uses.*
- *Organic chemical contaminants, including synthetic and volatile organic chemicals that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.*
- *Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.*

To ensure that tap water is safe to drink, the U.S. Environmental Protection Agency and the California Department of Health Services prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Limits are also established by the U.S. Food and Drug Administration for contaminants in bottled water that must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than the general population. People with compromised immune systems, such as cancer patients undergoing chemotherapy, people 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 for EPA and Centers for Disease Control 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**



PHOTO OF LOS VAQUEROS RESERVOIR BY STEPHEN JOSEPH

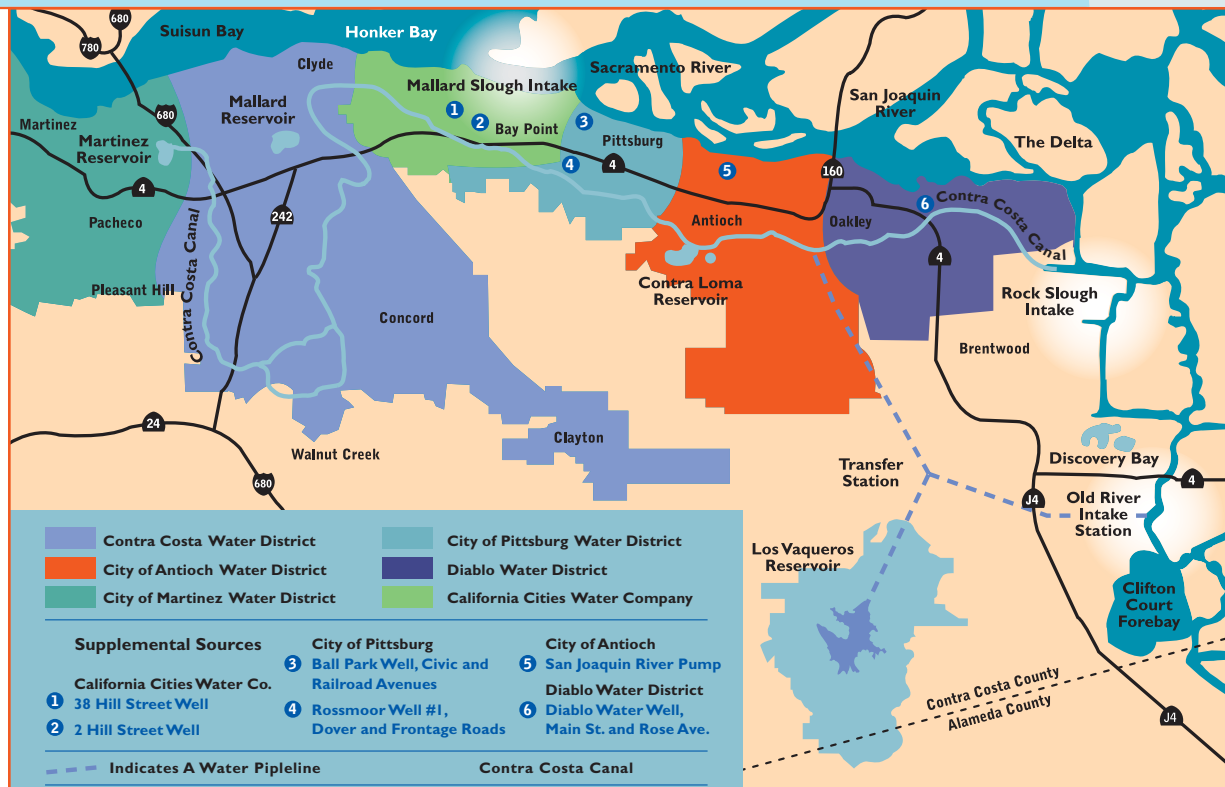
The Source of Your Water:

The primary source of water for 450,000 residents in Central and Eastern Contra Costa County is the surface water of the Sacramento-San Joaquin Delta. CCWD draws Delta water from Rock Slough near Oakley, Old River near the Town of Discovery Bay, and Mallard Slough in Bay Point. The water is transported in the Contra Costa Canal. CCWD can also store water in the Los Vaqueros Reservoir south of Brentwood, the Contra Loma Reservoir in Antioch, the Mallard Reservoir in Concord and the Martinez Reservoir in Martinez.

CCWD treats this water and distributes it to about 230,000 residents in Clayton, Clyde, Concord, Pacheco, Port Costa, and parts of Pleasant Hill, Martinez and Walnut Creek. Some treated CCWD water is also distributed under contract to Antioch, Bay Point and Brentwood.

CCWD sells untreated water (raw water) from the canal to the following agencies: the cities of Antioch, Martinez and Pittsburg, the California Cities Water Company (Bay Point), and the Diablo Water District (Oakley). These five agencies treat, distribute and bill for the water themselves. Most of these agencies, as well as CCWD, can draw groundwater from wells or surface water from their own reservoirs or the San Joaquin River as supplemental supplies. (Please refer to the map for locations.)

A Sanitary Survey of the watershed that provides water for Central and Eastern Contra Costa was completed by CCWD and the City of Antioch in May of 1997, with an update by the City of Antioch in May 2001. This survey assessed the vulnerability of the Sacramento-San Joaquin Delta to potential forms of contamination. The survey identified that contamination could potentially come from industrial and municipal wastewater discharges, urban runoff, highway runoff, agricultural



runoff, pesticides (insecticides/herbicides/fungicides), grazing animals, concentrated animal facilities, wild animals, mine runoff, recreational activities, traffic accidents/spills (including cars, trucks, trains, ships and aircraft), seawater intrusion, geologic hazards, and solid and hazardous waste disposal facilities.

The survey concluded that these potential sources of contamination are regularly mitigated by the natural flushing of the Delta, controls at the contamination sources or existing water treatment practices. The Los Vaqueros Reservoir provides another means of mitigation because water can be drawn from it when water cannot be taken directly from the Delta.

City of Pittsburg: A drinking water assessment was conducted for the Ballpark Well and the Rossmoor Well in the City of Pittsburg water system in November 2001. No contaminants have been detected in these sources, however, the Ballpark Well is considered most vulnerable to the following activities: historic gas stations. The Rossmoor Well is considered most vulnerable to the following activities: grazing, sewer collection systems, utility stations – maintenance areas. You may request a summary of the assessment be sent to you by contacting Clifford L. Bowen, California Department of Health Services District Engineer, (510) 540-2154.

Test Results for Treated and Raw Water

Treated Water: Primary Drinking Water Standards

Constituent Name	PHG (MCLG)	MCL	CCWD		CITY OF ANTIOCH		CITY OF PITTSBURGH	
			Average	Range	Average	Range	Average	Range
nitrate (mg/L)	n/a	45	ND	ND-2.2	5	3-6	n/a	n/a
arsenic (ug/L)	n/a	50	ND	ND	ND	ND	n/a	n/a
chromium (ug/L)	(100)	50	ND	ND	ND	ND	n/a	n/a
aluminum (mg/L)	0.6	1	ND	ND-0.07	ND	ND	ND	ND
fluoride (mg/L)	1	2	0.67	0.13-0.89	0.84	0.66-1.1	0.8	0.7
total trihalomethanes (ug/L)	n/a	100	41	36-46	49	38-61	18	18
Constituent Name	PHG (MCLG)	MCL	Maximum Value	Lowest monthly % of samples that meets requirements	Maximum Value	Lowest monthly % of samples that meets requirements	Maximum Value	Lowest monthly % of samples that meets requirements
turbidity (NTU) (treatment plant)	0	TT	0.1	100%	0.09	100%	0.12	100%
Lead/Copper Study	PHG	Action limit	# of sites tested/ # exceeding action limit	90% Percentile	# of sites tested/ # exceeding action limit	90% Percentile	# of sites tested/ # exceeding action limit	90% Percentile
EPA Lead Study (ug/L)	2	15	65/0	ND	34/1**‡	ND	24/0	ND
EPA Copper Study (mg/L)	0.17	1.3	65/0	0.07	34/0	0.093	24/0	0.07
Date of Study			June 01		September 00		August 00	

** No lead was detected in the drinking water supplied to customers. One home tested showed some lead from internal plumbing fixtures.

‡ Subsequent retesting showed non-detectable lead level.

Understanding the Tables:

In the following tables, you will find detailed information about the water that comes from your tap after it is treated (Treated Water) and before it is treated (Raw Water). Your water is regularly tested for more than 120 chemicals and other substances, as well as radioactivity. Only substances that were detected in the treated and raw water are listed in the tables.

Definitions

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.

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.

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.

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.

Primary Drinking Water Standard (PDWS): MCLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

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.

Regulatory Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Raw Water: Water before it has been filtered and treated.

JRG Range	CITY OF MARTINEZ		DIABLO WATER DIST.		MAJOR SOURCES
	Average	Range	Average	Range	
11	ND	ND	ND	ND-2.9	Runoff from fertilizers; erosion of natural deposits
3	ND	ND	ND	ND	Erosion of natural deposits; runoff from orchards
2	ND	ND	ND	ND	Erosion of natural deposits
ND	ND	ND	ND	ND	Erosion of natural deposits; residue from surface water treatment process
7-0.83	0.8	0.59-1.0	0.83	0.77-0.90	Water additive that promotes strong teeth
18	6.2	3.0-14	ND	ND	By-product of drinking water chlorination
At monthly samples meets requirements	Maximum Value	Lowest monthly % of samples that meets requirements	Maximum Value	Lowest monthly % of samples that meets requirements	
100%	0.1	100%	0.19	100%	Soil runoff
Percentile	# of sites tested/ # exceeding action limit	90% Percentile	# of sites tested/ # exceeding action limit	90% Percentile	
ND	58/0	ND	40/1**	ND	Corrosion of household water plumbing systems
ND	58/0	0.06	40/0	ND	Corrosion of household water plumbing systems
	June 00		June 01		

Treated Water: General Treated Water Quality Parameters*

Constituent name	CCWD		CITY OF ANTIOCH		CITY OF PITTSBURG		CITY OF MARTINEZ		DIABLO WATER DIST.	
	Average	Range	Average	Range	Average	Range	Average	Range	Average	Range
boron (ug/L)	NA	NA	150	100-200	NA	NA	NR	NR	n/a	200
pH	8.9	8.8-9.0	8.6	8.1-9.2	8.5	8.3-8.5	8.9	8.6-9.3	9.0	8.9-9.0
ammonia (mg/L)	0.38	0.3-0.5	NR	NR	0.37	0.06-0.51	NR	NR	0.31	0.23-0.35
silica dioxide (mg/L)	n/a	8	NR	NR	12.3	8.6-19.1	NR	NR	n/a	13
alkalinity (mg/L)	87	63-105	90	70-124	99	63-132	95	62-120	99	81-113
hardness (mg/L)	104	94-116	110	80-144	112	74-147	108	80-133	104	90-116
calcium (mg/L)	16.5	7.1-26	24	15-32	32	32	23	17-28	16.5	4.7-27
magnesium (mg/L)	12.8	11.1-15	n/a	12	16	16	11	10-12	12	10-16
potassium (mg/L)	2.7	2.1-3.0	n/a	2	3	3	2.4	2.4-2.5	2.6	2.0-3.2
sodium (mg/L)	55	45-64	54	27-94	71	71	49	47-51	53	46-67
vanadium (ug/L)	NR	NR	ND	ND-3	NR	NR	NR	NR	NR	NR
Bromate (ug/L)	2.6	ND-15	NR	NR	NA	NA	4.3	ND-15	4.6	ND-15
Haloacetic acids (ug/L)	9	6.5-13.6	5.1	1.2-8.4	3	2.0-4.0	2.3	ND-6.3	2.2	ND-6.9

*General Treated Water Quality Parameters are provided as a courtesy of your water provider because this information is often useful for household purposes. No MCL or PHG have been established for these constituents.

*Hardness Classification:
Soft: 0-50 mg/L
Moderately Hard: 50-150 mg/L
Hard: 150-300 mg/L
Very Hard: 300+ mg/L

ND = Not Detected	PHG = Public Health Goal	mg/L = milligrams per liter or parts per million (ppm)
NA = Not Analyzed	MCLG = Maximum Contaminant Level Goal	ug/L = micrograms per liter or parts per billion (ppb)
NR = Not Required	MFL = million fibers per liter	TT = Treatment Technique
n/a = not applicable	NTU = Nephelometric Turbidity Units	< = less than; not detected
SI = Saturation Index	pCi/L = picocuries per liter (a measure of radioactivity)	> = greater than
AL = Regulatory Action Level		
MCL = Maximum Contaminant Level		

Water Quality Notifications

Radon in Raw Water in Pittsburg and Oakley:

Radon has been detected in the raw water in wells in Pittsburg and Oakley. Radon is a naturally occurring radioactive gas that you can't see, taste or smell. One of its sources is granite, rock like that in the Sierra Nevada, the ultimate source of your water. Radon is naturally occurring throughout the United States. It can move up through the ground and into a home through the cracks in the foundation. Radon gas can

also get into indoor air when released from tap water used during showering, washing dishes and other household activities. Compared to radon entering the home through the soil, radon entering the home through tap water is a small source. Radon is a known human carcinogen. If you are concerned about radon in your home or water, call the EPA's Radon Hotline at 800-SOS-RADON. For information about water in Pittsburg, call (925) 439-4026. For information about water in Oakley, call (925) 625-2112.

Treated Water: Secondary Drinking Water Standards

Constituent name	MCL	PHG (MCLG)	CCWD		CITY OF ANTIOCH		CITY OF PITTSBURG	
			Average	Range	Average	Range	Average	Range
aluminum (ug/L)	n/a	200	ND	ND-70	ND	ND	ND	ND
color (units)	n/a	15 units	ND	ND	ND	ND	2.4	
corrosivity (SI)	n/a	non-corrosive	0.31	-0.15-+0.59	0.44	-0.2-+0.86	0.52	
iron (ug/L)	n/a	300	ND	ND	ND	ND	ND	
manganese (ug/L)	n/a	50	ND	ND	ND	ND	ND	
odor-threshold (units)	n/a	3 units	I	I	I	I	2.5	
turbidity (NTU) (dist. system)	n/a	5	0.49	0.08-1.7	0.08	0.05-0.16	0.08	
total dissolved solids (mg/L)	n/a	1000	300	287-312	271	195-362	259	
specific conductance (umhos/cm)	n/a	1600	470	400-530	542	391-720	n/a	
chloride (mg/L)	n/a	500	55	43-69	82	40-155	76	
sulfate (mg/L)	n/a	500	57	48-63	49	47-52	44	

CCWD Raw Water Sources: Primary Drinking Water Standards

Constituent name	PHG (MCLG)	MCL	LOS VAQUEROS		OLD RIVER		ROCK SLOUGH	
			Range	Average	Range	Average	Range	Average
Total Alpha (pCi/L)	n/a	15	1.8-4.2*	2.6*	ND-3*	1.2*	ND-2.6*	1.3*
Total Beta (pCi/L)	n/a	50	ND*	ND*	ND-7.1*	ND*	ND-4.5*	ND*
Radon 222 (pCi/L)	n/a	n/a	ND*	ND*	ND*	ND*	ND*	ND*
Uranium (pCi/L)	n/a	20	ND*	ND*	ND-1.5*	ND*	ND-2.2*	ND*
Combined Ra 226 & Ra 228 (pCi/L)	n/a	5	ND-2.3*	1.1*	ND-2.7*	1.2*	ND-3.4*	1.1*

Supplemental Raw Water Sources: Primary Drinking Water Standards

Constituent name	PHG (MCLG)	MCL	CITY OF ANTIOCH San Joaquin River/ Reservoir Storage		CITY OF PITTSBURG Ballpark Well		CITY OF PITTSBURG Rossmoor Well		Range
			Range	Average	Range	Average	Range	Average	
Total Alpha (pCi/L)	n/a	15	ND-2.6*	ND*	ND	n/a	6.4	n/a	6.2-9.0*
Total Beta (pCi/L)	n/a	50	NR	NR	5.9	n/a	7.4	n/a	ND-7.6*
Radon 222 (pCi/L)	n/a	300	NR	NR	220**	n/a	430**	n/a	ND-206*
Tritium (pCi/L)	n/a	20,000	NR	NR	ND	n/a	ND	n/a	ND-1160*
Uranium (pCi/L)	0.5	20	ND*	ND*	ND	n/a	6.9	n/a	4.1-6.4*
Combined Ra 226 & Ra 228 (pCi/L)	n/a	5	NR	NR	0.83	n/a	ND	n/a	ND-2.4*

Notice to City of Pittsburg Water Customers:

Notice of Violation – Failure to Collect Repeat Total Coliform Sample Set

(The following notice was published in The Contra Costa Times at the time the violation was discovered. The maximum contaminant level [MCL] for total coliform was not exceeded.)

Review of California Department of Health Services records indicates that the City of Pittsburg (City) violated Section 64424, Title 22, California Code of Regulations (CCR), which addresses the collection of repeat bacterio-

logical water samples. Specifically, the City failed to collect complete repeat sample sets following three total coliform-positive repeat samples in its distribution system during September 2001. Section 64424 [c] indicates that if one or more samples in the repeat sample set are total coliform-positive, the water supplier shall collect and have analyzed an additional set of three repeat samples. This process shall be repeated until either no coliform are detected in one complete repeat sample set or the supplier determines that the MCL for total coliform has been exceeded and notifies the Department.

JRG	CITY OF MARTINEZ		DIABLO WATER DIST.		Major Sources
	Range	Average	Range	Average	
ND	ND	ND	ND	ND	Erosion of natural deposits; residue from surface water treatment process
1.8-2.5	ND	ND	ND	ND	Naturally-occurring organic materials
0.52	0.57	-0.08-+1.01	0.38	-0.06-+0.70	Natural or industrially-influenced balance of hydrogen, carbon, and oxygen in the water; affected by temperature and other factors
ND	ND	ND	ND	ND-105	Leaching from natural deposits
ND	ND	ND	ND	ND-42	Leaching from natural deposits
2.8	1.8	1.4-3	I	I	Naturally-occurring organic materials
0.05-0.12	0.07	0.05-0.10	0.04	0.03-0.07	Soil runoff
193-347	290	200-330	280	230-330	Runoff/leaching from natural deposits
610	390	350-435	450	390-560	Substances that form ions when in water
54-102	62	32-84	48	31-78	Seawater influence
28.2-52	48	48	47	34-69	Runoff/leaching from natural deposits

MALLARD SLOUGH		CONTRA LOMA		Major Sources
Range	Average	Range	Average	
ND-2.4*	ND*	ND-2.5*	1.4*	Erosion of natural deposits
ND-39.2*	15.7*	ND-6.0*	ND*	Decay of natural and man-made deposits
ND*	ND*	ND-124*	ND*	See text above
ND-2.3*	ND*	ND-2.6*	ND*	Erosion of natural deposits
ND-2.9*	0.9*	ND-1.6*	1.1*	Erosion of natural deposits

If you received water from any of the providers on pages 4 and 5, the CCWD table to the left applies to you because your provider receives raw water from CCWD. Please review this chart in addition to the results from your city or water district.

DWD Oakley Well	Average	Major Sources
	8.1*	Erosion of natural deposits
	ND*	Decay of natural and manmade deposits
	146*	See text above
	ND*	Decay of natural and manmade deposits
	5.1*	Erosion of natural deposits
	1.8*	Erosion of natural deposits

A Note to Our Customers: The “Supplemental Raw Water Sources” table on this page reports results of testing on water used by individual providers as a supplement to the water they received from CCWD. The City of Martinez is not listed in the “Supplemental Raw Water Sources” table because it does not use supplemental water.

* Data is from previous years, next due in 2002. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative, are more than one year old.
 ** Although detected in both wells, radon was not detected in the treated water delivered to consumers.



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

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 Wednesday 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.

City of Martinez:

The Martinez City Council meets in regular session at 7 p.m. on the first and third Wednesday of each month. Meetings are held in Council Chambers at 525 Henrietta Street, Martinez. For meeting agendas, contact the Deputy City Clerk at (925) 372-3512.

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, call (925) 252-4850.

City of Antioch:

The Antioch City Council meets in regular session at 7 p.m. on the second and fourth Tuesday 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.



Este informe contiene información muy importante sobre su agua beber. Para una copia en español de este informe, llame a Franklin Mills al (925) 688-8144, de lunes a viernes de las 8 a.m. a las 4 p.m.

این اطلاعیه شامل اطلاعات مهمی راجع به آب آشامیدنی است. اگر نمیتوانید این اطلاعات را بزبان انگلیسی بخوانید لطفاً از کسی که میتواند یاری بگیرد تا مطالب را برای شما به فارسی ترجمه کند.

Mahalaga ang impormasyong ito. Mangyaring ipasalin ito.

This report contains important information about your drinking water. If you know someone who is not proficient in reading English, please help them translate and understand it.