

# CONSUMER CONFIDENCE REPORT 2005



**OTAY WATER DISTRICT**  
DEDICATED TO COMMUNITY SERVICE

## YOUR CONSUMER CONFIDENCE REPORT

The Otay Water District is pleased to provide you with your Consumer Confidence Report. This document outlines important information about your drinking water including, what we look for when we test your water, what the results of those tests were and information on some of the more common elements found in your water.

The information included in this report represents only a small part of what Otay Water District does to ensure high quality drinking water. Together with state certified laboratories, the San Diego County Water Authority and the Metropolitan Water District of Southern California, we routinely scrutinize the water supply for an entire range of elements that have the potential to degrade the quality of your water. This report summarizes water quality results from calendar year 2004.



## YOUR WATER IS SAFE

Don't worry, we've made sure the Otay Water District's drinking water meets or exceeds the water quality standards set by the State of California and the U.S. Environmental Protection Agency (EPA). Trained microbiologists, chemists and water treatment specialists at water quality laboratories conduct or supervise more than 250,000 water sample analyses annually. These experts monitor approximately 200 compounds in our water supply to guarantee that the water in your glass is safe and ready to drink.

## WONDERING ABOUT YOUR DRINKING WATER?

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 EPA's Safe Drinking Water Hotline at 800.426.4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised individuals, 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. The EPA and Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline.

The sources of drinking 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 human activity.

## PUBLIC PARTICIPATION

The Otay Water District encourages public participation from the ratepayers we serve. The Board of Directors meets on the first Wednesday of each month at 3:30 p.m. at District headquarters, 2554 Sweetwater Springs Blvd. in Spring Valley. Please feel free to attend these meetings. For directions, agendas or further information call 619.670.2222.

## HOW TO CONTACT US

General Information	(619) 670-2222
Emergencies (24 hour)	(619) 670-2207
Water Quality Lab	(619) 670-2294
Customer Service	(619) 670-2777
24-Hour Job Line	(619) 670-2700x2
Automated Information	(619) 670-2700
Development Services	(619) 670-2241
Water Conservation	(619) 670-2291
Speakers Bureau	(619) 670-2256
Public Information Office	(619) 670-2256
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Office Hours: 8:00 a.m. to 5:00 p.m. Monday - Friday  
Closed Federal & State Holidays





# OTAY WATER DISTRICT ANNUAL WATER QUALITY REPORT

Parameters	Units	State MCL (MCL)	PHG (MCLG) (MCLG)	STATE DUR	Range Average	MWD Combined Skinner Treatment Plants	Helix R.M. Levy Treatment Plant	Major Sources in Drinking Water
Percentage State Project Water	%	NA	NA	NA	Range Average	18 - 45 37	18 - 45 37	
<b>PRIMARY STANDARDS: Mandatory Health Related Standards</b>								
<b>CLARITY</b>								
Combined Filter Effluent Turbidity	NTU %	0.3 95 (a)	NA	NA	Highest % <0.3	0.09 100%	0.10 100%	Soil runoff
<b>MICROBIOLOGICAL</b>								
Total Coliform Bacteria	%	5.0 (b)	(c)	NA	Range Average	Combined Distribution System = 0% Combined Distribution System = 0%		Naturally present in the environment
Fecal Coliform and <i>E. coli</i>	(c)	(c)	(c)	NA		Dist. system-wide Fecal Coliform - positive samples = 0 Dist. system-wide <i>E. coli</i> - positive samples = 0		Human and animal fecal waste
<b>INORGANIC CHEMICALS</b>								
Aluminum (d)	ppb	1000	600	50	Range Average	ND ND	160 - 161 160	Residue from water treatment process; natural deposits; erosion
Fluoride	ppm	2	1	0.1	Range Average	0.21 - 0.30 0.24	0.21 - 0.27 0.23	Erosion of natural deposits; water additive for tooth health
Arsenic	ppb	50	0.004	2	Range Average	ND ND	ND - 2.2 ND	Natural deposits erosion, glass and electronics production wastes
Barium	ppb	1000	2000	100	Range Average	ND ND	ND - 110 ND	Oil drilling and metal refineries discharges; natural deposits erosion
Nitrate (as N) (h)	ppm	10	10	0.4	Range Average	ND - 0.54 ND	ND ND	Runoff and leaching from fertilizer use, sewage, natural erosion
Nitrate & Nitrite (as N)	ppm	10	10	0.4	Range Average	ND - 0.54 ND	ND ND	Runoff and leaching from fertilizer use, sewage, natural erosion
<b>RADIOLOGICALS (e)</b>								
Gross Alpha Particle Activity	pCi/L	15	NA	3	Range Average	ND - 4.0 3.4	ND - 11.3 3.8	Erosion of natural deposits
Gross Beta Particle Activity	pCi/L	50	NA	4	Range Average	ND - 4.1 ND	ND - 5.5 ND	Decay of natural and man-made deposits
Uranium	pCi/L	20	0.5	2	Range Average	ND - 2.4 ND	ND - 2.7 2.2	Erosion of natural deposits
<b>DISINFECTION BY-PRODUCTS, DISINFECTANT RESIDUALS, AND DISINFECTION BY-PRODUCTS PRECURSORS (Federal Rule)</b>								
Total Trihalomethanes (TTHMs)	ppb	80	NA	0.5	Range Average	Distribution System-Wide: 36.0 - 73.0 Distribution System-Wide (Highest RAA) = 53.0		By-product of drinking water chlorination
Haloacetic Acids (live) (HAA5) (f)	ppb	60	NA	1 (f)	Range Average	Distribution System-Wide: 14.0 - 31.0 Distribution System-Wide (Highest RAA) = 22.0		By-product of drinking water chlorination
Total Chlorine Residual	ppm	[4]	[4]	NA	Range Average	Distribution System-Wide: 0.2 - 3.5 Distribution System-Wide: 2.6		Drinking water disinfectant added for treatment
DPB Precursors Control (TOC)	ppm	TT	NA	0.30	Range Average	TT TT	1.9 - 3.7 3.0	Various natural and man-made sources
<b>SECONDARY STANDARDS: Aesthetic Standards</b>								
Aluminum (d)	ppb	200	600	50	Range Average	ND ND	160 - 161 160	Residues from water treatment process; erosion of natural deposits
Chloride	ppm	500	NA	NA	Range Average	80 - 92 85	79 - 90 84	Runoff/leaching from natural deposits; seawater influence
Color	Units	15	NA	NA	Range Average	1 - 3 2	1 - 3 1	Naturally occurring organic materials
Specific Conductance	µmhos/cm	1600	NA	NA	Range Average	786 - 947 827	869 869	Substances that form ions in water; seawater influence
Sulfate	ppm	500	NA	0.5	Range Average	153 - 212 169	170 - 210 183	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids	ppm	1000	NA	NA	Range Average	466 - 574 492	530 530	Runoff/leaching from natural deposits; seawater influence
Corrosivity	SI	non-corrosive	NA	NA	Range Average	0.18 - 0.32 0.26	non-corrosive	Elemental balance in water; affected by temperature, other factors
<b>LEAD AND COPPER RULE (g)</b>								
Copper	ppm	AL = 1.3	0.17	0.05		0 sites above AL out of 107 sites sampled 90th percentile = 0.35		Internal corrosion of household pipes; erosion of natural deposits
Lead	ppb	AL = 15	2	5		0 sites above AL out of 107 sites sampled 90th percentile = 2.5		Internal corrosion of household pipes; erosion of natural deposits
<b>UNREGULATED CHEMICALS REQUIRING MONITORING</b>								
Boron	ppb	NA	AL = 1000	100	Range Average	130 - 140 140	120 - 140 125	Runoff/leaching from natural deposits; industrial wastes
Vanadium	ppb	NA	AL = 50	3	Range Average	ND ND	3.7 - 5.2 4.5	Naturally occurring; industrial waste discharge

## ADDITIONAL PARAMETERS

Parameters	Units	State MCL (MFDL)	PHG (MCLG) (MFDLG)	STATE DLR	Range Average	MWD Combined Skinner Treatment Plants	Helix R.M. Levy Treatment Plant	Major Sources in Drinking Water
<b>MICROBIAL CONTAMINANTS</b>								
<i>Cryptosporidium</i>	Oocysts/100L	TT	(0)	NA	Range Average	TT TT	0 0	Human and animal fecal waste
<i>Giardia</i>	Oocysts/100L	TT	(0)	NA	Range Average	TT TT	0 0	Human and animal fecal waste
<b>OTHER PARAMETERS</b>								
Alkalinity	ppm	NA	NA	--	Range Average	103 - 124 110	95 - 128 109	
Calcium	ppm	NA	NA	--	Range Average	51 - 64 54	54 - 63 58	
Hardness	ppm	NA	NA	--	Range Average	218 - 269 230	225 - 264 246	
Hardness	grains per gallon	NA	NA	--	Range Average	12.7 - 15.7 13.4	13.1 - 15.4 14.4	
Magnesium	ppm	NA	NA	--	Range Average	22 - 26.5 23	22 - 26 24	
pH	pH Units	NA	NA	--	Range Average	8.0 - 8.1 8.1	7.5 - 8.1 7.9	
Potassium	ppm	NA	NA	--	Range Average	3.8 - 4.3 4.0	3.9 - 5.0 4.5	
Sodium	ppm	NA	NA	--	Range Average	74 - 90 78	76 - 87 81	
Total Organic Carbon (TOC)	ppm	TT	NA	0.3	Range Average	2.1 - 3.0 2.5	1.9 - 3.7 3.0	Various natural and man-made sources

## ABBREVIATIONS

DLR	Detection Limits for purposes of Reporting	pCi/L	PicoCuries per Liter	RAA	Running Annual Average
NA	Not Applicable	ppb	Parts per billion or micrograms per Liter (µg/L)	SI	Saturation Index (Langelier)
ND	Not detected	ppm	Parts per million or milligrams per Liter (mg/L)	TT	Treatment Technique
NTU	Nephelometric Turbidity Units	ppt	Parts per trillion or nanograms per Liter (ng/L)		

## FOOTNOTES

- (a) The turbidity level of the filtered water shall be less than or equal to 0.3 NTU in 99% of the measurements taken each month and shall not exceed 1.0 NTU at any time. Turbidity is a measure of the cloudiness of the water. We monitor turbidity because it is a good indicator of water quality and filtration performance.
- (b) Total coliform MCLs: No more than 5.0% of the monthly samples may be total coliform positive. The MCL was not violated in 2004. Compliance is based on the distribution system's highest monthly percentage positive: 1,803 samples were analyzed in 2004.
- (c) Fecal coliform/E. coli MCLs: The occurrence of 2 consecutive total coliform-positive samples, one of which contains fecal coliform/E. coli, constitutes an acute MCL violation. The MCL was not violated in 2004.
- (d) Aluminum has both a primary and secondary standard.
- (e) Four quarter radiological monitoring results for Levy (HWD) are for 2001, Skinner (MWD) are for 2002-2003.
- (f) DLR = 1.0 ppb for each HAA5 analyte (dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, dibromoacetic acid) except for monochloroacetic acid which has a DLR = 2.0 ppb.
- (g) These are 2004 results. Although Environmental Protection Agency mandated testing is required only once every three years, the Otay Water District performs these analyses annually as a quality assurance measure for our customers.
- (h) State MCL is 45 mg/L as Nitrate, which equals 10mg/L as N.

## DEFINITIONS

**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 and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

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

**Maximum Residual Disinfectant Level (MRDL):** The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

**Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by the U.S. Environmental Protection Agency.

**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.

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

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