



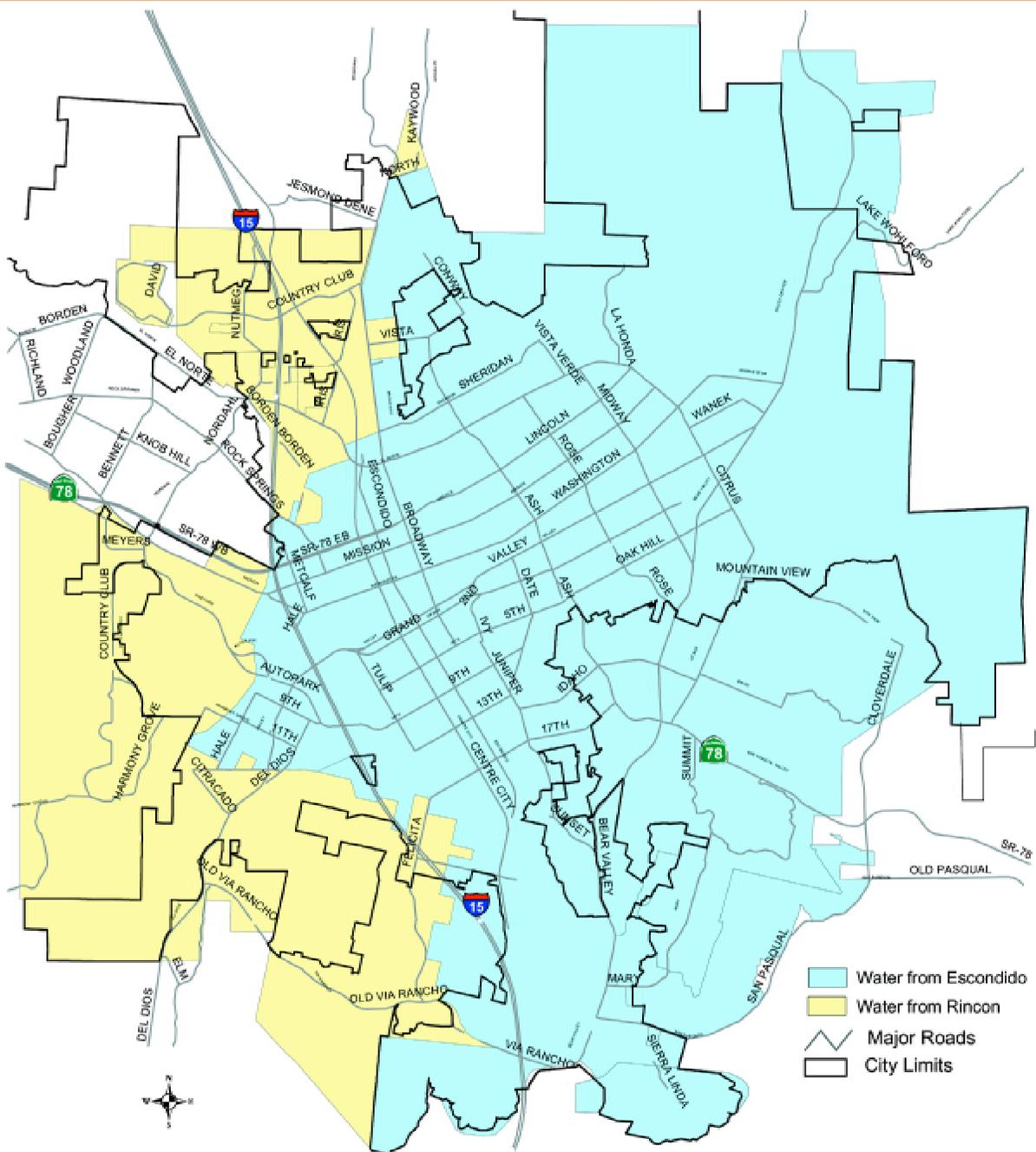
# 2004 Consumer Confidence Report

The city of Escondido Water Utilities (City) and the Rincon del Diablo Municipal Water District (Rincon) are pleased to provide you with this year's Consumer Confidence Report. **During 2004, both agencies' drinking water met or exceeded all state and federal government drinking water standards.** This report is to inform you about the quality of water that is delivered to you every day.

City of Escondido • Rincon del Diablo MWD

Over the many years that both water utilities have served the City and greater Escondido Valley, geographic characteristics of the area have led to unique agency boundaries. And, with water exchange agreements between both agencies, some customers may actually be billed by one agency although receiving water from the other. For this reason, the City and Rincon have joined together to provide you with a snapshot of the water you receive.

The map below is an indicator of the **source** of your drinking water. Once you have determined where your service address is located on the map, please refer to the corresponding color-coded chart located inside this report for information on how your drinking water compared to the State of California standards. **If you have any questions regarding this information, please be certain to call the agency that regularly bills you for water service.**



## 2004 Consumer Confidence Report for customers located within the yellow area of the map (see yellow columns below):

**Surface Water Source:** As a member agency, Rincon purchases 100% of its water supply from the San Diego County Water Authority (SDCWA). The SDCWA in turn purchases its water from the Metropolitan Water District of Southern California (MWD). MWD is a wholesaler that provides water to over 17 million people living in Southern California. MWD imports its water from two sources: a 242 mile-long aqueduct which transports Colorado River water from Lake Havasu to southern California and a 444 mile-long aqueduct that transports water from the Sacramento-San Joaquin Delta in northern California to Lake Skinner located in Riverside County. The water is treated at the Robert A. Skinner Filtration Plant at Lake Skinner before delivery into our distribution system. *This chart shows the water quality for 1/01/04 - 12/31/04.*

Parameter (a)	State MCL	PHG	DLR	ESCONDIDO		RINCON		DESCRIPTION
	MRDL	MCLG		Range	Avg	Range	Avg	
<b>CLARITY (b)</b>								
<b>Turbidity: (NTU %) (c)</b>	TT < 0.3 95% of the time	NS		Highest 0.18		Highest 0.09		Soil runoff
Combined Filter Effluent					Percentage 100%		Percentage 100%	
Lowest monthly percentage samples meeting the standard		NS						
<b>MICROBIOLOGICAL CONTAMINANTS (d, e)</b>								
<b>Total Coliform Bacteria (%)</b>			-		highest single month 1.6%			
Monthly positives in DSYS	5	0		0 - 1.60		0%	0%	Naturally present in the environment
<b>DISINFECTION BY-PRODUCTS (Distribution System)</b>								
<b>Total Trihalomethanes (ug/L)</b>	80	0	0.5	40.0 - 66.0	49.0	41.2 - 64.0	52.6	By-product of drinking water chlorination; sampled quarterly (f)
Running Annual Average				47.0 - 49.0	48.0	48.3 - 51.8	50.0	
Highest Running Average					49.0		51.8	
<b>Haloacetic Acids (ug/L)</b>	60	0	-	15.0 - 23.0	19.0	16.0 - 45.4	30.7	By-product of drinking water chlorination; sampled quarterly (g)
Running Annual Average				18.0 - 19.0	18.0	18.1 - 35.1	26.6	
Highest Running Average					19.0		27.1	
<b>Total Chlorine Residual (mg/L)</b>	4.0	4.0	-	0.9 - 2.8	2.0	1.5 - 2.4	1.95	Addition of chlorine & ammonia as combined disinfectant, chloramine
Running Annual Average				2.0 - 2.1	2.1	1.8 - 1.8	1.8	
Highest Running Average					2.1		1.8	
<b>Chlorite (mg/L)</b>	1	0.8	-	.06 - .78	.71	NA	NA	By-product of drinking water chlorination
<b>Chlorate (ug/L)</b>	NS	NS	-	50 - 180	160	NA	NA	By-product of drinking water chlorination
<b>INORGANIC CONTAMINANTS - Copper/lead in Residential Taps (Escondido - 2003, Rincon - 2003) (h)</b>								
	<u>AL</u>			90th Percentile of 52 samples		90th Percentile of 30 samples		
<b>Copper (mg/L) (i)</b>	1.3	0.17	0.05	0.37	0.23	0.17	0.231	Corrosion of household plumbing systems
<b>Lead (ug/L)</b>	15	2	5	ND	0	<5	0	Corrosion of household plumbing systems and erosion of natural deposits
<b>INORGANIC CONTAMINANTS - PRIMARY STANDARDS (WTP Effluent)</b>								
<b>Fluoride (mg/L)</b>	2	1/NS	0.1	0.23 - 0.91	0.48	0.21 - .30	0.24	Erosion of natural deposits
<b>MTBE (ug/L)</b>	13	13	-	ND	ND	ND	ND	Underground leakage

### Is the water safe to drink?

Since your water comes from a natural source and has met the federal and state standards, it is considered safe or "potable" (rhymes with "floatable"). In accordance with state regulations, your drinking water is routinely monitored for numerous contaminants. These contaminants include inorganic contaminants, lead, copper, nitrates, volatile contaminants, synthetic organic contaminants, disinfection by-products, and microbiological contaminants.

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

### Questions about this report?

**If you are billed by the City of Escondido, call Timothy Kwak**, Supervising Chemist at (760) 839-6274. **If you are billed by Rincon del Diablo Municipal Water District, staff** will be happy to answer your questions at (760) 745-5522.

### How Much is That?

With the development of sensitive scientific instruments, it is possible to measure water characteristics in precise and minute quantities. The measurements used in this report are in **parts per million**, which is equivalent to **mg/L (milligrams per liter)**. Also used are **parts per billion** and **parts per trillion**, which are equivalent to **ug/L (micrograms per liter)** and **ng/L (nanograms per liter)**, respectively. For perspective purposes, consider the following:

<b>1 part per million is:</b> 1 cent in \$10,000 1 minute in 2 years 1 inch in 16 miles	<b>1 part per billion is:</b> 1 cent in \$10,000,000 1 minute in 2,000 years 1 inch in 16,000 miles	<b>1 part per trillion is:</b> 1 cent in \$10,000,000,000 1 minute in 2,000,000 years 1 inch in 16,000,000 miles
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## 2004 Consumer Confidence Report for customers located within the blue area of the map (see blue columns below):

**Surface Water Source:** This water is provided by the city of Escondido (City). The City has two sources for its drinking water. The first is local water, which originates from Lake Henshaw in the San Luis Rey Watershed. Water from Lake Henshaw is transferred to Lake Wohlford to the Escondido/Vista Water Treatment Plant. The second source is water purchased from the San Diego County Water Authority (SDCWA). This water in turn is purchased from the Metropolitan Water District of Southern California (MWD). MWD imports its water from two sources: a 242 mile-long aqueduct which transports Colorado River water from Lake Havasu to southern California and a 444 mile-long aqueduct that transports water from the Sacramento-San Joaquin Delta in northern California to Lake Skinner located in Riverside County. *This chart shows the water quality for 1/01/04 - 12/31/04.*

Parameter	State MCL	PHG	DLR	ESCONDIDO		RINCON		DESCRIPTION
	MRDL	MCLG		Range	Average	Range	Average	
<b>INORGANIC CONTAMINANTS - SECONDARY STANDARDS (WTP Effluent)</b>								
Color (units)	15	NS	-	1 - 1	1	1 - 3	2	Naturally occurring organic materials
Chloride (mg/L)	500	NS	-	82 - 91	86	80 - 92	85	Runoff/leaching from natural deposits; seawater influence
Sulfate (mg/L)	500	NS	0.5	150 - 170	163	153 - 212	171	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (mg/L)	1000	NS	-	480 - 520	500	466 - 574	487	Runoff/leaching from natural deposits; seawater influence
Specific Conductance (umho/cm)	1600	NS	-	792 - 853	812	786 - 947	816	Substances that form ions when in water; seawater influence
pH (units)	6.5 - 8.5	NS	-	7.37 - 7.43	7.40	8.0 - 8.1	8.06	
Zinc (mg/L)	5.0	NS	0.05	0.45 - 0.49	0.47	ND	ND	Corrosion control additives
Corrosivity (SI) <small>SI = Saturation Index</small>	Non-Corrosive	NS		0.23 - 0.35 (Non-Corrosive)	0.29	0.18 - .32 (Non-Corrosive)	0.26	Natural or industrial-influenced balance of hydrogen, carbon, & oxygen in the water; affected by temperature and other factors
<b>INORGANIC CONTAMINANTS - UNREGULATED (WTP Effluent) YEAR SAMPLED - City: Boron in 2001, Vanadium in 2002; Rincon: Both in 2003</b>								
Boron (mg/L)	AL = 1	NS	0.1	0.12 - 0.15	0.13	0.11 - 0.14	0.13	State regulations require monitoring of this contaminant while the State considers setting a limit on it
Vanadium (ug/L)	AL = 50	NS	3	ND - 3.9	3.9	ND	ND	State regulations require monitoring of this contaminant while the State considers setting a limit on it
<b>ADDITIONAL ANALYZED (WTP Effluent)</b>								
Bicarbonate (mg/L)	NS	NS	-	113 - 149	126	ND	ND	Erosion of natural deposits; leaching
Calcium (mg/L)	NS	NS	-	51 - 53	53	51 - 64	54	Erosion of natural deposits; leaching
Carbonate (ug/L)	NS	NS	-	.31 - .76	.50	ND	ND	Erosion of natural deposits; leaching
Haloacetic Acids (ug/L)	60	NS	-	17 - 22	20	13 - 38	21	By-products of drinking water chlorination
Hardness as CaCO <sub>3</sub> (mg/L)	NS	NS	-	218 - 223	222	218 - 269	230	Erosion of natural deposits; leaching
Hydroxide (ug/L)	NS	NS	-	5 - 20	11	ND	ND	Erosion of natural deposits; leaching
Magnesium (mg/L)	NS	NS	-	22 - 22	22	22 - 26.5	23	Erosion of natural deposits; leaching
Nitrosodimethylamine (ng/L)	NS	AL = 10		NA	NA	ND - 2.3	1.1	By-products of drinking water chlorination
Odor Threshold (units)	NS	NS	-	ND	ND	1 - 1	1	Naturally occurring organic materials
Phosphate (mg/L)	NS	NS		.35 - .42	.31	ND	ND	Erosion of natural deposits; leaching
Potassium (mg/L)	NS	NS	0.5	3.8 - 4.2	4.0	3.8 - 4.3	4.0	Erosion of natural deposits; leaching
Silica (mg/L)	NS	NS	-	10 - 11	11	NA	NA	Erosion of natural deposits; leaching
Sodium (mg/L)	NS	NS	-	72 - 91	79	74 - 90	78	Erosion of natural deposits; leaching
Total Alkalinity (mg/L)	NS	NS	-	93 - 122	103	103 - 124	110	Erosion of natural deposits; leaching
Total Chlorine Residual (mg/L)	4	4	-	2.1 - 2.9	2.6	1.5 - 2.4	1.8	Addition of chlorine and ammonia as a combined disinfectant chloramine
Total Organic Carbon (mg/L)	NS	NS		2.25 - 3.99	2.93	2.1 - 3.0	2.5	TOC provides a medium for the formation of disinfectant by-products. These by-products include TTHMs and HAAs
Total Trihalomethanes (ug/L)	80	NS		37 - 49	44	31 - 70	53	By-products of drinking water chlorination
<b>RADIONUCLIDES (Analyzed every four years, four consecutive quarters) YEAR SAMPLED - City: 2000; Rincon: 2002-03 (WTP Effluent)</b>								
Gross Alpha Activity (pCi/L)	15	0	3	ND	ND	ND - 4.0	3.4	Erosion of natural deposits
Gross Beta Activity (pCi/L)	50	0	4	ND - 4.7	4.2	ND - 4.1	ND	Decay of natural & man-made deposits
Combined Radium (pCi/L) (j)	5	0	1	ND - 1.03	1.01	ND	ND	Erosion of natural deposits
Uranium (pCi/L)	20	0	2	ND - 2.9	2.36	ND - 2.4	ND	Erosion of natural deposits

### What Does it Cost?

With 10 gallons costing less than \$.03, your tap water is a quality product at an **exceptionally low** price. With high government standards for both tap and bottled water, tap water is *clearly* the better choice!

### Hard Water and Grains

Water is considered "hard" when two nontoxic minerals, calcium and magnesium, are present in substantial amounts. These minerals are also the cause for the white scaling on pots, pans, and tea kettles. Water-related appliances (e.g. dishwashers) may be affected by the level of hardness. In the appliance industry, user manuals often require hardness levels to be measured in the unit of "grains per gallon". Hardness for 2004 ranged from: **12.9 - 13.4 grains per gallon.**

### Is the water safe for everyone?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons 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 from their health care providers about their drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

### Would it be safer to drink bottled water?

Not necessarily. Both bottled and tap water producers must comply with stringent government standards. Additionally, bottled water does not typically have additional health benefits. People tend to purchase bottled water because they prefer a different taste. Although convenient, it is easy to forget that bottled water usually costs about a thousand times more than the water from your tap.

### Why is this report so technical?

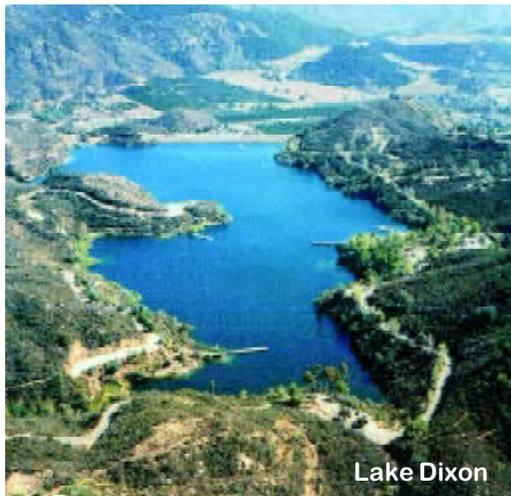
This is a "report card" of how we are doing in terms of providing our customers with safe, reliable, and high-quality drinking water. The federal and state governments require us to publish our annual testing results to reassure you that we are meeting strict government standards. Although the charts can be highly technical and somewhat confusing, the table content and a portion of the report language are mandated by federal law. We would be glad to assist you if you have any questions about our Consumer Confidence Reports.

### Why does my water sometimes taste/smell funny?

When your water tastes or smells funny, the problem might be in the water or it might not. The odors may actually be coming from your sink drain where bacteria grow on food, soap, hair, and other things that get trapped. Gases in the drain that smell get stirred up when water goes down the pipe. Odor can also come from bacteria growing in water heaters - usually ones that have been turned off for a while or have the thermostat turned too low.

Chlorine is added to tap water to ensure that germs in the water are killed. When you can taste or smell a hint of chlorine, your water has been properly treated. There are regulations that limit the amount of chlorine added to tap water. An easy way to get rid of chlorine taste and smell is to let the water sit in a glass for a few minutes or put the water in a covered container and chill it in the refrigerator.

If there is an odor, check to see if the smell comes from only one of your faucets. Does the odor go away after running the water for a few minutes? If you answer yes to either situation, the source of the odor is probably within your plumbing system.



Lake Dixon

## Abbreviation Key

AL	<b>Regulatory Action Level:</b> The concentration of a contaminant, which if exceeded, triggers treatment, or other requirements, which a water system must follow.
DLR	<b>Detection Limit for Reporting:</b> A detected contaminant is any contaminant detected at or above its detection level for purposes of reporting.
DSYS	<b>Distribution System.</b>
MCL	<b>Maximum Contaminant Level:</b> The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to PHGs, MRDLGs, and maximum contaminant level goals as economically or technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.
MCLG	<b>Maximum Contaminant Level Goal:</b> The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the <i>United States Environmental Protection Agency (USEPA)</i> .
mg/L	<b>Milligrams per liter:</b> Parts per million (ppm).
NA	<b>Not Applicable.</b>
ND	<b>None Detected:</b> Parameters for detection limits available upon request.
ng/L	<b>Nanograms per liter:</b> parts per trillion (ppt)
NS	<b>No Standard.</b>
MRDL	<b>Maximum Residual Disinfectant Limit:</b> The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.
MRDLG	<b>Maximum Residual Disinfectant Level Goal:</b> The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLs are set by the <i>United States Environmental Protection Agency</i> .
NTU	<b>Nephelometric Turbidity Units:</b> A measure of the cloudiness in water. It is a good indicator of the effectiveness of the WTP & DSYS.
Pci/L	<b>PicoCuries per liter:</b> A measure of radioactivity.
PDWS	<b>Primary Drinking Water Standard:</b> MCLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.
PHG	<b>Public Health Goal:</b> The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the <i>California Environmental Protection Agency (CalEPA)</i> .
TT	<b>Treatment Technique:</b> A required process intended to reduce the level of a contaminant in drinking water.
ug/L	<b>Micrograms per liter:</b> parts per billion (ppb).
umho/cm	<b>Micromhos per centimeter:</b> A measure of a substance's ability to convey electricity.
WTP	<b>Water Treatment Plant.</b>

### Symbol Key

<	Less Than
>	More Than

## Foot Notes

(a) Data shown are annual averages and ranges. (b) Tests are performed on drinking water turbidity (clarity) at the Water Treatment Plant and in the distribution system. The turbidity tests are done continuously at the WTP. In addition, samples are taken each week at various points in the distribution system. This table reflects the clarity or turbidity produced at the WTP and in the distribution system. (c) The turbidity level of the filtered water shall be less than or equal to 0.5 NTU in 95% of the measurements taken each month and shall not exceed 1.0 NTU at any time. (d) Total coliform MCLs: No more than 5% of the monthly samples may be total coliform positive. These MCLs were not violated in 2004. (e) The City of Escondido Water Distribution System consists of approximately 350 miles of pipelines. Tests are performed each week at various points along the system for compliance with bacteriological and physical parameters. Of concern to all customers is the bacteriological quality of the drinking water. This table shows that drinking water leaving the WTP registered zero coliform bacteria. The distribution system table indicates the amount of positive samples found in the system. (f) Calculated from the average of quarterly samples. (g) Calculated from the average of quarterly filtration plant effluent samples (h) This table shows the levels of copper and lead found in the homes of selected customers. The Copper Lead Rule requires the collection of special samples from designated residents every three years. The amount of lead and copper found in the samples is an indication of the degree of leaching within the customer-owned copper plumbing and brass faucets. Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that your home's level may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about the elevated lead levels in your home's water, you may wish to have your water tested. As a rule, flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline at (800) 426-4791. (i) The Federal and State standards for lead and copper are treatment techniques requiring agencies to optimize corrosion control treatment. Average of the highest value is the 90th percentile value. (j) Standards are for Radium-226 and Radium-228 combined.

**Cryptosporidium:** Cryptosporidium ("crypto") is a microscopic organism found in rivers and streams, and comes from animal wastes in the watershed. When ingested by humans, it may result in a variety of gastrointestinal symptoms including diarrhea, nausea, and fever. The Metropolitan Water District of Southern California (MWD) has tested for crypto in its treated water supplies for years. In 2004, this organism has not been detected in either MWD or the city of Escondido's source water or treated water.

**Notice** - 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, and can pick up substances resulting from the presence of animals or human activity. Contaminants that may be present in source water 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 and herbicides**, which may come from a variety of sources like 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, and septic systems.
- **Radioactive contaminants**, which can be naturally occurring or the result of oil and gas production and mining activities.





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**About the Watersheds...**

**Colorado River and State Water Project Supplies:**

In December 2002, Metropolitan Water District of Southern California (MWD) completed its source water assessment of its Colorado River and State Water Project supplies. Colorado River supplies are considered to be most vulnerable to recreation, urban/storm water runoff, increasing urbanization in the watershed, and wastewater. State Water Project supplies are considered to be most vulnerable to urban/storm water runoff, wildlife, agriculture, recreation, and wastewater. A copy of the assessment can be obtained by contacting MWD by telephone at (213) 217-6850.

**Local Supplies:**

In December of 2000, the city of Escondido prepared a *Sanitary Survey* of the local watershed. While the survey identifies a number of activities that have the potential to adversely affect water quality, including residential septic facilities, highway runoff, and agricultural and recreational activities, no contaminants from these activities were detected in the local water supply in 2004.

There have been no contaminants detected in the water supply, however the source is still considered vulnerable to activities located near the drinking water source. The primary activity of concern is the use of Lake Dixon for non-body contact recreational activities such as boating, fishing, picnicking, and camping. Boat oar and motor boat rentals are available. MTBE is a possible contaminant from motor boat fuel.

Lake Dixon is owned and operated by the City of Escondido. Access to Lake Dixon is restricted in the vicinity of the dam and intake by in-water buoys and on-shore fences. The level is controlled by water imported from the aqueduct and any water released to the plant for treatment. Direct management and surveillance at the lake are provided by park rangers. No swimming or body contact is allowed. A copy of the *Watershed Sanitary Survey*, which is similar to the *Source Water Assessment Program*, is available for review at City Hall (760-839-4662).

**Este informe contiene informacion muy importante sobre su agua potable. Traduzcalo o hable con alguien que lo entienda bien. Si tiene preguntas favor de llamar al numero: 760-839-4662.**

**Getting Involved...**

**The City Council of the city of Escondido** normally meets the first four Wednesdays per month at 4:00 p.m. and 7:30 p.m. in the Council Chambers at City Hall. The address is 201 North Broadway, Escondido. Call (760) 839-4631 for details.

**Rincon del Diablo Municipal Water District** is a public agency governed by a five-member Board of Directors that normally meets on the second Tuesday of the month at 7:00 pm. The address is 1920 North Iris Lane, Escondido. Call (760) 745-5522 for details.