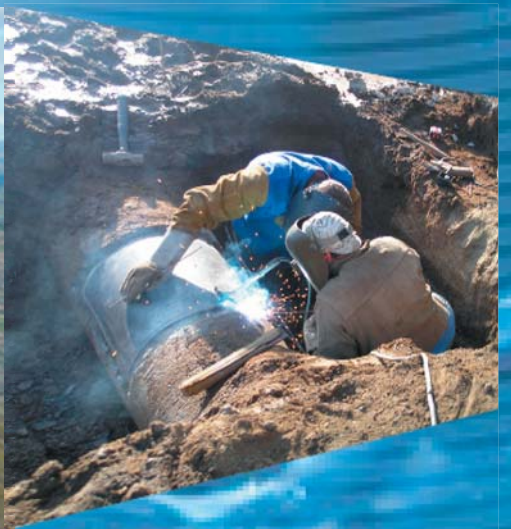


# VALLECITOS WATER DISTRICT



A Public Agency

## Water Quality



## CONSUMER CONFIDENCE REPORT 2007

*Este informe contiene informacion muy importante sobre su agua potable. Traduzcalo o hable con alguien que lo entienda bien*

**Water • Wastewater • Water Recycling**

201 Vallecitos de Oro San Marcos, CA (760) 744-0460 [www.vwd.org](http://www.vwd.org)

## This Report Explains:

- Where your water comes from
- What your water contains
- How it compares with state and federal drinking water standards for safety, appearance, taste and smell
- Regulations that protect your health
- Programs that protect the high quality of our supply

Think of this report as a snapshot of the water quality we provided during 2007. Once you have read this report, it's our hope that you will have a more complete understanding about the sources and quality of your drinking water and be better able to make informed decisions regarding issues affecting your health. We are committed to providing you with this information because informed customers are our best friends.

The water we provide meets all local, state and federal potable drinking standards. Last year, thousands of tests were performed on your water before and after entering Vallecitos' boundaries. Prior to being delivered to VWD, your water went through treatment that included filtering and disinfecting to ensure acceptable quality.

Results of our own testing, and that of our wholesalers' monitoring, are found in the tables on pages 4 through 7 of this report.

## The Water We Drink

The U.S. Congress has directed the U.S. Environmental Protection Agency (USEPA) to require water systems to report the quality of the drinking water they serve annually. Vallecitos Water District (VWD) supports this regulation and has provided Consumer Confidence Reports and other water quality data to all of its customers for many years.



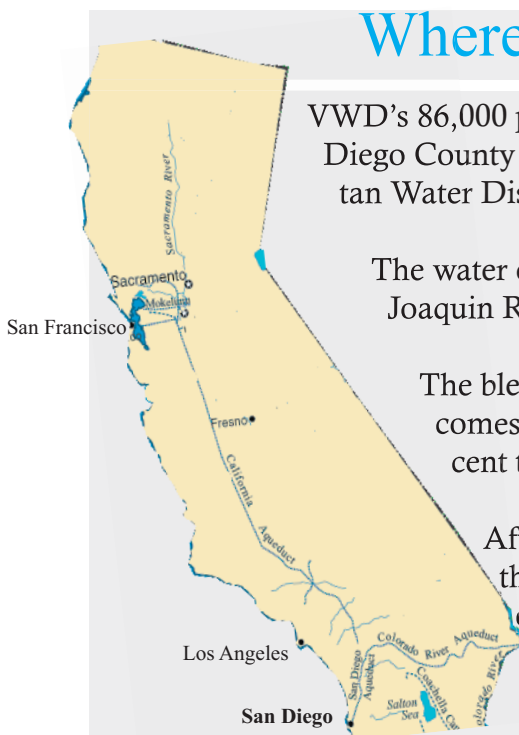
## Where Your Water Comes From

VWD's 86,000 plus residents receive 100 percent imported water from the San Diego County Water Authority, who in turn purchases it from the Metropolitan Water District of Southern California.

The water origins include the Colorado River and the Sacramento-San Joaquin River Delta in Northern California.

The blend of the two continually changes, but on average 60 percent comes through the 242-mile Colorado River Aqueduct and 40 percent through the 444-mile California Aqueduct.

After leaving our wholesalers' systems, your quality water enters through VWD's infrastructure of 323 miles of pipeline and 17 operational storage reservoirs to deliver more than 5.6 billion gallons of water annually to the 45-square-mile area that includes San Marcos; Lake San Marcos; portions of Escondido, Carlsbad and Vista; and nearby unincorporated areas of





**Origins of Your Drinking Water -  
Continued from Page 2**  
San Diego County.

During its journey, the water remains safe due to increased security at key facilities, increased water sampling, and aerial and ground patrols. Protecting your water doesn't end with the thousands of tests performed throughout the year. We also support regulatory changes in public policy to improve water quality.

## Water...California's Real Gold

Water is one of California's most precious resources. As such, VWD understands the vitality of water and takes every step necessary to treat, protect, and conserve this treasure. It is our goal to protect you by providing a clean, healthy, and reliable supply that is always available when needed. Water supplied by VWD meets high regulatory standards. Daily, your water passes through almost 200 types of tests conducted by our wholesalers. That's not all. Once within our boundaries, water is again tested at our reservoirs and more than 200 sample points throughout the District, providing added protection from possible tampering or contaminants.



*Your water passes thousands of tests administered annually prior to and upon entering VWD's distribution system.*



*Photos courtesy of Metropolitan Water District of Southern California*

## VWD Water Quality Report 2007

Since 1955, we've been your water specialists, making safety and quality a top priority. This is evidenced through the extra water quality tests we administer. It comes as no surprise, as you will later see in this report, that the District either met or exceeded every state and federal water quality monitoring and reporting standard in 2007. It is important to understand that drinking water standards in this report are based on research to protect the general public and may not be sufficient to protect certain immuno-compromised persons, as explained further in this report.

### What is Inside Your Water Before Treatment?

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 USEPA's Safe Drinking Water Hotline at (1-800-426-4791).

*Continued on Page 4*

## Your pretreated water -

### *Continued from Page 3*

In order to ensure that tap water is safe to drink, the USEPA and the California Department of Health Services prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health. The Vallecitos Water District, and its water wholesalers,

treat the water according to these regulations.

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, and can pick up substances resulting from the presence of animals or from human activity.

## Contaminants possibly present in source water before treatment 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, 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 come from gas stations, urban stormwater runoff, agricultural application and septic systems.

**Radioactive contaminants**, which can be naturally-occurring or be the result of oil and gas production and mining activities.



## HEALTH ADVISORIES REGARDING YOUR WATER

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 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. USEPA/Center for Disease Control guidelines on the appropriate means to lessen the risk of infection by *Cryptosporidium* or other microbial contaminants are available from the **Safe Drinking Water Hotline (800) 426-4791**.

**FOR MORE INFORMATION...** This report is only a summary of the water quality activities during the past year. If you have any questions about your water quality or Vallecitos Water District, please visit our web site at [www.vwd.org](http://www.vwd.org) or call (760) 744-0460 during business hours (Monday through Friday between 8 a.m. and 5 p.m.). The District's headquarters is at 201 Vallecitos de Oro, San Marcos, CA 92069. The public is also encouraged to attend meetings of the Board of Directors held the first and third Wednesdays of each month at 4 p.m. in the District's Board Room. Questions specific to water quality can be directed to Jon Sherwood, the District's Water System Operations Supervisor, at (760) 744-0460, ext. 236. For additional information, contact:

The tables below list all the drinking water contaminants tested for during the 2007 calendar year. Thousands of water quality tests were performed on your drinking water last year. Many more parameters were tested for and not found. The results in this report show that your water met, and in most cases exceeded, all of the stringent state (California Department of Public Health) and federal (U.S. Environmental Protection Agency) water quality standards relating to public health and aesthetics, such as taste, odor and color. Unless otherwise noted, the data in the following tables reflect testing from January 1, 2007, through December 31, 2007. The monitoring of certain contaminants is not required annually since they are not expected to vary significantly from year to year. Therefore, though representative of the water quality, some of the data may be more than one year old.

## Summary of Vallecitos Water District's 2007 Water Quality Analysis

PARAMETER	Units	State MCL [MRDL]	PHG (MCLG) [MRDLG]	Range	Treatment Plant Effluents	Major Sources in Drinking Water
					Combined Skinner Plants	
Percent State Project Water	%	NA	NA	Range	32 - 55	NA
				Average	43	
<b>PRIMARY STANDARDS - Mandatory Health-Related Standards - Data provided by Metropolitan Water District of Southern California (MWD)</b>						
<b>CLARITY</b>						
Combined Filter Effluent Turbidity	NTU %	0.3 95 (a)	NA	Highest % < 0.3	0.13 100%	Soil runoff
<b>MICROBIOLOGICAL</b>						
Total Coliform Bacteria	%	5.0 (b)	(0)	Range Average	System-wide: 0.0-0.14% System-wide: 0.02%	Naturally present in the environment
Fecal Coliform and E. coli	(c)	(c)	(0)	Distribution System-wide Fecal Coliform-positive samples = 0 Distribution System-wide E.coli-positive samples = 0		Human and animal fecal waste
Heterotrophic Plate Count (HPC) (d)	CFU/mL	TT	NA	Range Average	TT TT	Naturally present in the environment
Cryptosporidium (e)	Oocysts/ 200 L	TT	(0)	Range Average	ND ND	Human and animal fecal waste
Giardia (e)	Cysts/ 200 L	TT	(0)	Range Average	ND ND	Human and animal fecal waste
Total Culturable Viruses (e)	P or A/ 1000L	TT	(0)	Range Average	A A	Human and animal fecal waste
<b>ORGANIC CHEMICALS (Semi-Volatile Organic Compounds)</b>						
Acrylamide	NA	TT	(0)	Range Average	TT TT	Water treatment chemical impurities
Epichlorohydrin	NA	TT	(0)	Range Average	TT TT	Water treatment chemical impurities
<b>INORGANIC CHEMICALS</b>						
Aluminum (f)	ppb	1000	600	Range Average	ND - 57 ND	Residue from water treatment process; natural deposits erosion
Arsenic	ppb	10	0.004	Range Average	ND ND	Natural deposits erosion, glass and electronics production wastes
Barium	ppb	1000	2000	Range Average	ND ND	Oil and metal refineries discharges; natural deposits erosion
Fluoride (i) Naturally occurring	ppm	2	1	Range Average	0.2 - 0.3 0.20	Discharge from fertilizer and aluminum factories.
Fluoride (i) Treatment-related	ppm	Optimal Fluoride Control Range (i) 1 Distribution System-Wide:		Range	0.7 - 1.3 0.5 - 0.9 0.1 - 1.0	Water additive for dental health
Nitrate (as N) (g)	ppm	10	10	Range Average	ND - 0.4 ND	Runoff and leaching from fertilizer use; sewage; natural erosion
Nitrite (as N)	ppm	1	1	Range Average	ND ND	Runoff and leaching from fertilizer use; sewage; natural erosion
<b>RADIOLOGICALS (h)</b>						
Gross Alpha Particle Activity	pCi/L	15	(0)	Range Average	ND - 5.5 ND	Erosion of natural deposits
Uranium	pCi/L	20	0.43	Range Average	1.5 - 3.2 2.3	Erosion of natural deposits
<b>DISINFECTION BY-PRODUCTS, DISINFECTANT RESIDUALS, AND DISINFECTION BY-PRODUCTS PRECURSORS (FEDERAL)</b>						
Total Trihalomethanes (TTHM) (j)	ppb	80	NA	Range Average	37 - 61 48	By-product of drinking water chlorination
Haloacetic Acids (five) (HAA5) (j, k)	ppb	60	NA	Range Average	13-24 17	By-product of drinking water chlorination
Total Chlorine Residual	ppm	[4.0]	[4.0]	Range Highest RAA	0.72 - 3.4 2.4	Drinking water disinfectant added for treatment
Bromate (l)	ppb	10	(0)	Range Highest RAA	NA NA	By-product of drinking water ozonation
DBP Precursors Control (TOC) (o)	ppm	TT	NA	Range Average	TT TT	Various natural and man-made sources

This analysis report lists only the detected parameters, which are required by law to be published. However, more than 167 parameters were monitored. If you would like a copy of the full report, including the non-detected contaminants, call the District's Public Information Office at (760) 744-0460, ext. 238, or the report can be viewed on our website at [www.vwd.org](http://www.vwd.org).

## Summary of Vallecitos Water District's 2007 Water Quality Analysis - Continued

PARAMETER	Units	State MCL [MRDL]	PHG (MCLG) [MRDLG]	Range Average	Treatment Plant Effluents	Major Sources in Drinking Water
					Combined Skinner Plants	
<b>SECONDARY STANDARDS - Aesthetic Standards - Data provided by Metropolitan Water District of Southern California (MWD)</b>						
Aluminum (f)	ppb	200	600	Range	ND-57	Residue from water treatment process; natural deposits; erosion
				Average	ND	
Chloride	ppm	500	NA	Range	84 - 96	Runoff/leaching from natural deposits; seawater influence
				Average	92	
Color	Units	15	NA	Range	1 - 2	Naturally occurring organic materials
				Average	2	
Corrosivity (m)	SI	NA	NA	Range	0.15 - 0.52	Elemental balance in water; affected by temperature, other factors
				Average	0.38	
Odor Threshold (n)	TON	3	NA	Range	2	Naturally occurring organic materials
				Average	2	
Specific Conductance	µS/cm	1600	NA	Range	755 - 927	Substances that form ions in water; seawater influence
				Average	841	
Sulfate	ppm	500	NA	Range	134 - 202	Runoff/leaching from natural deposits; industrial wastes
				Average	169	
Total Dissolved Solids (TDS)	ppm	1000	NA	Range	438 - 551	Runoff/leaching from natural deposits; seawater influence
				Average	495	
Turbidity (a)	NTU	5	NA	Range	0.05 - 0.07	Soil runoff
				Average	0.05	

### ABBREVIATIONS AND DEFINITIONS

<b>A</b> - Absent	<b>ND</b> - None Detected
<b>CFU/ml</b> - Colony-Forming Units per milliliter	<b>NTU</b> - Nephelometric Turbidity Units
<b>DBP</b> - Disinfection By-Products	<b>pCi/L</b> - picoCuries per liter
<b>MCL</b> - Maximum Contaminant Level - 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.	<b>PHG</b> - 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.
<b>MCLG</b> - 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.	<b>ppb</b> - parts per billion or micrograms per liter (µg/L)
<b>MPN</b> - Most Probable Number	<b>ppm</b> - parts per million or milligrams per liter (mg/L)
<b>MRDL</b> - Maximum Residual Disinfectant Level - The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.	<b>RAA</b> - Running Annual Average
<b>MRDLG</b> - Maximum Residual Disinfectant Level Goal - The level of disinfectant added for water treatment below which there are no expected risks to health. MRDLGs are set by the U.S. Environmental Protection Agency.	<b>SI</b> - Saturation Index (Langelier)
<b>N</b> - Nitrogen	<b>TOC</b> - Total Organic Carbon
<b>NA</b> - Not Applicable	<b>TT</b> - Treatment Technique - A required process intended to reduce the level of a contaminant in drinking water.
	<b>µS/cm</b> - microSiemen per centimeter; also equivalent to µmho/cm (micromho per centimeter)
	<b>Primary Standards</b> (Primary Drinking Water Standards) - MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements and drinking water treatment requirements.
	<b>Secondary Standards</b> - Requirements that ensure the appearance, taste and smell of drinking water are acceptable.

### FOOTNOTES

- (a) - The turbidity level of the filtered water shall be less than or equal to 0.3 NTU in 95% of the measurements taken each month and shall not exceed 1 NTU at any time. Turbidity is a measure of the cloudiness of the water and is an indicator of treatment performance. The monthly averages and ranges of turbidity shown in the Secondary Standards section were based on the plant effluents.
- (b) - Total coliform MCLs: No more than 5.0% of the monthly samples may be total coliform-positive. Compliance is based on the combined distribution system sampling from all the treatment plants. In 2007, 8,905 samples were analyzed, and two samples were positive for total coliforms. The MCL was not violated.
- (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 2007.
- (d) - HPC values were based on the monthly averages of the plant effluent samples. In 2007, all distribution samples collected had detectable total chlorine residuals and no HPC was required.
- (e) - In 2007, the effluent from five treatment plants had no detectable *Cryptosporidium*, *Giardia*, or Total Culturable Viruses. Two hundred liters of water were collected monthly for *Cryptosporidium* and *Giardia* analysis. One thousand liters of water were analyzed quarterly for Total Culturable Viruses.
- (f) - Aluminum, copper, MTBE and thiobencarb have both primary and secondary standards.
- (g) - State MCL is 45 mg/L as nitrate, which equals 10 mg/L as N.
- (h) - Reported results were taken from four consecutive quarters of monitoring from August 2005 to April 2006.
- (i) - Data for the naturally occurring fluoride were taken before the fluoridation treatment began. Fluoridation treatment of water supplies at all five treatment plants sequentially from Oct. 29, 2007 to December 3, 2007. Metropolitan was in compliance with all provisions of the State's Fluoridation System Requirements.
- (j) - Average and range for the treatment plant effluents were taken from weekly samples for TTHM and monthly samples for HAA5. Distribution system-wide average and range were taken from 47 samples collected quarterly.
- (k) - DLR= 1.0 ppb for each HAA5 analyte (dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid) except for monochloroacetic acid which has a DLR = 2.0 ppb.
- (l) - Running annual average was calculated from weekly samples. Bromate reporting level is 3 ppb.
- (m) - SI measures the tendency for a water to precipitate or dissolve calcium carbonate (a natural mineral in water). Positive indices indicate the tendency to precipitate and/or deposit scale on pipes and are assumed to be non-corrosive. Negative indices indicate the tendency to dissolve calcium carbonate and are assumed to be corrosive.
- (n) - Metropolitan has developed a flavor-profile analysis method that can detect odor occurrences more accurately. For more information, contact MWD at (213) 217-6850.
- (o) - TOC

## Summary of Vallecitos Water District's 2007 Water Quality Analysis - Continued

### Other Detected Constituents That May be of Interest to Consumers

Parameter	Units	MCL	Range Average	Treatment Plant Effluents
				Combined Skinner Plants
Alkalinity	ppm	NA	Range	91-106
			Average	98
Boron	ppb	NL=1,000	Range	130 - 160
			Average	140
Calcium	ppm	NA	Range	44 - 60
			Average	53
Hardness	ppm	NA	Range	194 - 254
			Average	226
Magnesium	ppm	NA	Range	19 - 25
			Average	22
N-Nitrosodimethylamine (NDMA) (a)	ppt	PHG=3	Range	ND
pH	pH Units	NA	Range	8.1
			Average	8.1
Perchlorate (b)	ppb	6	Range	ND - 4.6
			Average	ND
Potassium	ppm	NA	Range	3.8 - 4.5
			Average	4.2
Sodium	ppm	NA	Range	73 - 89
			Average	83
Total Organic Carbon (TOC) (c)	ppm	TT	Range	1.9 - 2.7
			Average	2.3

#### ABBREVIATIONS, DEFINITIONS, AND FOOTNOTES

##### **Abbreviations and Definitions-** (Please refer to main table for other abbreviations and definitions)

**NL** - Notification Level - The level at which notification of the public water system's governing body is required.

**ppt** - parts per trillion or nanograms per liter (ng/L).

##### **Footnotes:**

- (a) - Range for the plant effluents were taken from quarterly samples.
- (b) - The State primary MCL for perchlorate was set at 6 ppb effective October 18, 2007  
Perchlorate reporting level is 2 ppb.
- (c) - Average and range for TOC were taken from weekly samples collected at the combined filter effluent.

# Summary of Vallecitos Water District's 2007 Water Quality Analysis - Continued

## Data Provided by Vallecitos Water District - Summary of Water Quality Tests Within VWD's Distribution System

PARAMETER	Units	State MCL [MRDL]	PHG (MCLG) [MRDLG]	Range Average	Within VWD's System	Major Sources in Drinking Water
<b>Data Provided by Vallecitos Water District - Summary of Water Quality Tests Within VWD's Distribution System</b>						
Total Coliform Bacteria (a)	%	5.0 (a)	(0)	(a)		Naturally present in the environment
Fecal Coliform & E. coli (b)	(b)	(b)	(0)	(b)		Human and animal fecal waste
Total Trihalomethanes (TTHM) (c)	ppb	80	NA	Range	54 - 90	By-product of drinking water chlorination
				Average	70.5	
Haloacetic Acids (five) (HAA5) (d)	ppb	60	NA	Range	9.1 - 35	By-product of drinking water chlorination
				Average	18.7	
General Physical Sampling (e)	(e)	(e)	(e)	Secondary Standards (aesthetics) testing required by CDPH within VWD's Distribution System		
<b>MONITORED AT CUSTOMERS' TAP</b>						
Copper (f)	ppm	AL=1.3	0.17	90th Percentile	0.18	House pipes internal corrosion; erosion of natural deposits.
Lead (f)	ppm	AL=0.015	0.002	90th Percentile	0.0019	

### ABBREVIATIONS AND DEFINITIONS

**MCL** - Maximum Contaminant Level - 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.

**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.

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

**MRDLG** - Maximum Residual Disinfectant Level Goal - The level of disinfectant added for water treatment below which there are no expected risks to health. MRDLGs are set by the U.S. Environmental Protection Agency.

**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.

**ppb** - parts per billion or micrograms per liter (µg/L)

**ppm** - parts per million or milligrams per liter (mg/L)

**TTHM** - Total Trihalomethanes

**HAA5** - Haloacetic Acids (five)

**AL** - Action Level

### FOOTNOTES

- (a) - The District tested the number of samples required by the State. All samples tested negative for Total Coliform bacteria. The District was in compliance with the Total Coliform MCL for 2007.
- (b) - The District tested the number of samples required by the State. All samples tested negative for Fecal/E. coli bacteria. The District was in compliance with the Fecal/E. coli MCL for 2007.
- (c) - The MCL for Total Trihalomethanes (TTHM) is determined by using a running annual average of the last four quarterly tests. The District was in compliance with the regulations concerning Total Trihalomethanes (TTHM) for 2007.
- (d) - The MCL for Haloacetic Acids (HAA5) is determined by using a running annual average of the last four quarterly tests. The District was in compliance with the regulations concerning Haloacetic Acids (HAA5) for 2007.
- (e) - These samples were tested for turbidity, odor and color. The District was in compliance with the Secondary Standards for these tests in 2007.
- (f) - The federal and state standards for Lead and Copper are treatment techniques requiring agencies to optimize corrosion control treatment. The District is required to take 30 samples every three years. The data shown is from samples taken during the 2006 sampling period. Our next sample period is scheduled for June 2009. The District was in compliance with the "Lead and Copper Rule" in 2007.



Parts Per Million  
3 drops in 42 gallons

Parts Per Billion  
1 drop in 14,000 gallons

U.S. Environmental Protection Agency - (800) 426-4791 - [www.epa.gov/safewater](http://www.epa.gov/safewater)

National Center for Disease Control - (404) 639-3311 - [www.cdc.gov](http://www.cdc.gov)

California Department of Public Health- Division of Drinking Water & Environmental Mgmt.  
(619) 525-4159 - [www.dhs.ca.gov/ps/ddwem](http://www.dhs.ca.gov/ps/ddwem)

Metropolitan Water District of Southern California - (213) 217-6000 - [www.mwd.dst.ca.us](http://www.mwd.dst.ca.us)

## CONSERVATION IS EVERYBODY'S JOB



It's not just water. It's life. Water is too precious to waste. Nearly all of Southern California's water is imported. Therefore we must use it wisely to maintain our quality of life and ensure future supplies. Following a few logical tips and paying attention to your water-use habits can equate to large amounts of water savings. Water conservation can easily be integrated into your daily routine and is as simple as turning off the faucet.

The VWD Water Conservation Office offers a free residential survey program that will help you learn how to conserve water inside and outside your home. For more information on how to be water-efficient, call the VWD Conservation Office at (760) 744-0460.

## END OF 2007 WATER QUALITY CONSUMER CONFIDENCE REPORT

The Vallecitos Water District is governed by a five-member Board of Directors that meets the first and third Wednesday of each month at 4 p.m. The Board Room is located in the VWD Administration Building, 201 Vallecitos de Oro, in San Marcos. The public is welcome to attend. For more information on the District - its Board of Directors, agendas, minutes or meeting times - please visit our web site at [www.vwd.org](http://www.vwd.org).

# Get to know your water pressure regulator

Navigating our way up and down hills may be difficult at times, but it's a way of life in our region. The same can be said about supplying water.

Pressure regulators are vital to combat higher pressures that may result from your water being transported over the District's naturally hilly terrain.

This important mechanical device is instrumental to reducing higher water pressures. In some instances the District installs and maintains its own regulators to reduce pressure 150 psi (pounds per square inch) to protect its water meters. It is not the District's responsibility to provide similar protection to customer plumbing systems.

Ideally, pressures inside your home should be set between 50 to 55 psi. If your home exceeds this level then you may have a faulty regulator. Evidence of excessive pressure include "clanging" or "rattling" of pipes when plumbing fixtures are in use.

To prolong plumbing fixture life, buildings within the District with the potential of more than 80 psi must have a pressure regulator as stipulated in the Uniform Plumbing Code (UPC) standards.



*Pressure regulators are necessary to reduce water flow and protect plumbing fixtures. Their replacement and upkeep is the responsibility of the property owner.*



Individual homeowners are responsible for the replacement and maintenance of their own pressure regulators, not Vallecitos Water District. How can you be certain of your regulator's performance?

Like all things mechanical, water pressure regulators are prone to failure. The typical life span is six

to eight years; less if pressure being regulated in the home or business is higher than the recommended 50 to 55 psi.

As a test, you can get a precise reading at your property by using a pressure gauge. They easily connect to your outdoor hose bib and can be purchased from any local hardware store for approximately \$10 or borrowed free of charge from VWD's Customer Service Department.

Water milky in appearance or registering a high reading when water usage is low is also a sign of a malfunctioning regulator. Conversely, low pressure is typically noticeable by touch.

For more assistance, including procedures for borrowing a pressure gauge, call the District at (760) 744-0460 or visit us at the web – [www.vwd.org](http://www.vwd.org).

## Second Twin Oaks reservoir receives honors

Now you see it...



...Now you don't



Vallecitos Water District's new, 40-million gallon Twin Oaks Reservoir No. 2 was recently recognized for "Outstanding Project" by the American Society of Civil Engineers (A.S.C.E.) and the 2008 Structural Engineers Association of San Diego award for Landmark Structures.

The reservoir, which was completed in November 2007, received these distinctions based on its unique design, illustration of superior civil engineering skills and significant contribution to civil engineering progress and society.

The Twin Oaks Reservoir No. 2 is located in the northern part of the District, directly adjacent to VWD's 33-million-gallon Twin Oaks Reservoir No. 1, which received accolades from a host of similar organizations upon its completion in 2000.

With both buried for security and to better blend with the environment, the two-tank tandem provides the District with additional storage and operational efficiency. The recently added Twin Oaks Reservoir No. 2 is currently the largest pre-stressed concrete structure of its kind.

# Protect the environment; use salt-free softeners

**A**s a direct result of its Sierra Nevada and Rocky Mountain origins, it's only natural for your water to have an increased measure of hardness.



Your water passes through multitudes of rocks and soils, collecting mineral deposits of calcium, magnesium, and ions that occur naturally, resulting in a product that may be hard on household plumbing fixtures. Water softeners offer a solution; however, many are

ion exchange systems based on salt chemicals that have a negative impact on the wastewater treatment process – and in turn – the environment.

According to a study, it is believed hard water is distributed to more than 85 percent of U.S. residences.

A local example of this is Vallecitos Water District's Meadowlark Water Reclamation Facility in Carlsbad. It has the capability to recycle 5.5 million gallons of wastewater per day.

But the discharge of salt brines through water softener regeneration increases treatment costs, hinders the quality of plant output and impairs the ability for

VWD to comply with regulatory discharge standards.

In the process of seeking a viable water-softener alternative, first find out if your water is truly "hard." This can be determined by observing the test results contained in the 2007 water quality report or calling VWD.

Generally in homes where readings are 50 to 150 milligrams per liter, no softener is necessary.



Protect the environment and only use a non-sodium based water softener.



And once that non-salt system is in place, try to limit recharge to lessen the burden on our treatment plant. Instead of daily or every-other-day recharge cycles,

a five-day cycle could be used, achieving the same softening benefits.

The District thanks all customers for doing their part in avoiding salt-based softeners, thus creating an overall promising picture of health for its treatment plant and the environment. If you have questions, please contact us at (760) 744-0460.

## Lake San Marcos HOA digs to liquid gold

Well, well, well...



*Since Aug. 2007, this well is allowing County Green Home Owners Association to rely less on VWD water and save \$17,000 annually in the process.*

**W**hen Country Green Home Owners Association met to consider the most efficient way to conserve water and operational costs, thoughts ran deep – 704 feet into Lake San Marcos earth to be exact!

Instead of relying 100 percent on Vallecitos Water District, the association dug below the surface to access ground water. The recently installed well is now providing approximately \$17,000 in savings annually.

The unit, which has been online since

August of 2007, has allowed for the shutdown of three meters so far. After an anticipated shutdown of a fourth meter, those savings will increase to approximately \$23,000 annually.

This well will eventually provide 80 percent of the association's outdoor water needs.

According to LeRoy Devries, member of the Country Green Homeowners Association Board, one of the benefits of the project is continuing to see cost and water savings improve as well-water use moves forward in the future.



# Special Edition - Water Quality Report



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The Water Specialist

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