

ANNUAL WATER QUALITY REPORT

Water testing performed in 2008



WALNUT VALLEY WATER
DISTRICT

PWS ID#: 1910234

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

Mahalaga ang impormasyong ito.
Mangyaring ipasalin ito.

"هذا التقرير يحتوي على معلومات مهمة تتعلق بمياه الشفة (أو الشرب).
ترجم التقرير، أو تكلم مع شخص يستطيع أن يفهم التقرير."

此份有關你的食水報告，內有重要資料和訊息，請找他人為你翻譯及解釋清楚。

此份有关你的食水报告，内有重要资料 and 讯息，请找他人为你翻译及解释清楚。

Chi tiet này thật quan trọng.
Xin nhờ người dịch cho quý vị.

この情報は重要です。
翻訳を依頼してください。

이 안내는 매우 중요합니다.
본인을 위해 번역인을 사용하십시오.

यह सूचना महत्वपूर्ण है ।
कृपा करके किसी से :सका अनुवाद करायें ।

Continuing Our Commitment

Once again we are pleased to present our annual water quality report. This edition covers all testing completed January 1 through December 31, 2008. We are pleased to tell you that our compliance with all state and federal drinking water laws remains exemplary. As in the past, we are committed to delivering the best quality drinking water. To that end, we remain vigilant in meeting the challenges of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

Last year, the Walnut Valley Water District (District) delivered to its customers over seven billion gallons of water that was tested every day at the entry and exit points of the District's 27 reservoirs. In addition to testing by the District, the Metropolitan Water District of Southern California (MWD) and the Three Valleys Municipal Water District (TVMWD) also thoroughly sampled and tested the drinking water delivered by the District. Combined, these agencies took over 300,000 samples last year from transmission and distribution system access points and analyzed them for over 120 different chemical parameters.

Community Participation

The District's board meetings are typically scheduled, unless otherwise noticed, for 6:00 p.m. on the third Monday of each month in the board room of the District's headquarters, located at 271 South Brea Canyon Road, Walnut, California. The board meetings are open to the public. Anyone who is interested in the operations and business of the District is encouraged to attend.

Office Hours: The Customer Service Department is open Monday through Thursday, 7:00 a.m. to 5:00 p.m., and Friday, 7:00 a.m. to 4:00 p.m.

Main Number: (909) 595-1268

Website: www.wvwd.com

Lead and Drinking Water

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high-quality drinking water but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at www.epa.gov/safewater/lead.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons, such as persons with cancer who are undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk for infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

Where Does My Water Come From?

As you may be aware, our District is dependent on surface water that is imported into southern California by MWD. MWD imports and treats surface water transported through two major conveyance systems: the 242-mile-long Colorado River Aqueduct and the 444-mile-long State Water Project (SWP). Water transported via the Colorado River Aqueduct originates in the Colorado River basin states, and water transported by the State Water Project conveyance system originates in the Sacramento-San Joaquin Delta. MWD treats this water at their Weymouth Filtration plant in the City of La Verne. The water is then purchased by the District through our designated wholesale water agency, TVMWD.

Source Water Assessment

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

Substances That Could Be in Water

The sources of drinking water (both tap water 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.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (U.S. EPA) and the State Department of Public Health (Department) 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. 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.

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 can result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

Pesticides and Herbicides, that 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, which are by-products of industrial processes and petroleum production, and which can also come from gas stations, urban stormwater runoff, agricultural applications, and septic systems;

Radioactive Contaminants, that can be naturally occurring or can be the result of oil and gas production and mining activities.

More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

What Causes the Pink Stain on Bathroom Fixtures?

The reddish-pink color frequently noted in bathrooms on shower stalls, tubs, tile, toilets, sinks, toothbrush holders and on pets' water bowls is caused by the growth of the bacterium *Serratia marcescens*. *Serratia* is commonly isolated from soil, water, plants, insects, and vertebrates (including man). The bacteria can be introduced into the house through any of the above mentioned sources. The bathroom provides a perfect environment (moist and warm) for bacteria to thrive.

The best solution to this problem is to continually clean and dry the involved surfaces to keep them free from bacteria. Chlorine-based compounds work best, but keep in mind that abrasive cleaners may scratch fixtures, making them more susceptible to bacterial growth. Chlorine bleach can be used periodically to disinfect the toilet and help to eliminate the occurrence of the pink residue. Keeping bathtubs and sinks wiped down using a solution that contains chlorine will also help to minimize its occurrence.

Serratia will not survive in chlorinated drinking water.

Information on the Internet

The U.S. EPA Office of Water (www.epa.gov/watrhome) and the Centers for Disease Control and Prevention (www.cdc.gov) Web sites provide a substantial amount of information on many issues relating to water resources, water conservation, and public health. Also, the Division of Drinking Water and Environmental Management has a Web site (www.dhs.ca.gov/ps/ddwem/technical/dwp/dwpindex.htm) that provides complete and current information on water issues in California, including valuable information about our watershed.

Tap vs. Bottled

The Food and Drug Administration is responsible for regulating bottled water, but these rules allow for less rigorous testing and purity standards than those required by the U.S. EPA for community tap water. For instance, the high mineral content of some bottled waters makes them unsuitable for babies and young children. Further, the FDA completely exempts bottled water that's packaged and sold within the same state, which accounts for about 70 percent of all bottled water sold in the United States.

People can spend up to 10,000 times more per gallon for bottled water than they typically do for tap water. If you get your recommended eight glasses a day from bottled water, you could spend up to \$1,400 annually. The same amount of tap water would cost about 49 cents. Even if you installed a filter device on your tap, your annual expenditure would be far less than what you'd pay for bottled water.

For a detailed discussion on the NRDC study results, check out their Web site at www.nrdc.org/water/drinking/bw/exesum.asp.



Questions?

For more information about this report, or for any questions relating to your drinking water, please call David Garcia, Water Quality/Production and Storage Manager, at (909) 595-1268, ext. 210.

Q & A

Is it safe to drink water from a garden hose?

Substances used in vinyl garden hoses to keep them flexible can get into the water as it passes through the hose. These chemicals are not good for you nor are they good for your pets. Allow the water to run for a short time in order to flush the hose before drinking or filling your pets' drinking containers. There are hoses made with "food-grade" plastic that will not contaminate the water. Check your local hardware store for this type of hose.

How much water is lost to a dripping faucet?

Dripping faucets waste a precious resource and cost you money. As an example, if you have a faucet that drips 60 times a minute, this adds up to over 3 gallons each day or 1,225 gallons each year.

How long can I store drinking water?

The disinfectant in drinking water will eventually dissipate even in a closed container. If that container housed bacteria prior to filling up with the tap water, the bacteria may continue to grow once the disinfectant has dissipated. Some experts believe that water could be stored up to six months before needing to be replaced. Refrigeration will help slow the bacterial growth.

What makes water Hard?

If substantial amounts of either calcium or magnesium, both nontoxic minerals, are present in drinking water, the water is said to be hard. Hard water does not dissolve soap readily, so making lather for washing and cleaning is difficult. Conversely, water containing little calcium or magnesium is called soft water.

Radon

Radon is a radioactive gas that you can't see, taste, or smell. It is found throughout the U.S. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will in most cases be a small source of radon in indoor air. Radon is a known human carcinogen. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may also cause increased risk of stomach cancer. If you are concerned about radon in your home, test the air in your home. Testing is inexpensive and easy. Fix your home if the level of radon in your air is 4 picocuries per liter of air (pCi/L) or higher. There are simple ways to fix a radon problem that aren't too costly. For additional information, call the EPA's Radon Hotline (800-SOS-RADON).

Water Conservation

You can play a role in conserving water and save yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you can save more than 30,000 gallons a year.



- Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.
- Use a broom instead of a hose to clean driveways, walks and patios.
- Keep grass at least two inches high to shade roots and hold moisture.
- Aerate lawns regularly and use mulch around plants to reduce evaporation.
- Water trees slowly, deeply and infrequently to encourage deep rooting.

Sampling Results

The District is pleased to report that during the past year, the water delivered to your home or business complied with, or surpassed, all state and federal drinking water requirements. For your information, the District has compiled the following table showing what substances were detected in your drinking water during 2008. Although all of the substances listed are under the Maximum Contaminant Level (MCL) set by the U.S. EPA and the California Department of Public Health, it is important that you know exactly what was detected and how much of the substance was present in the water. The state requires us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES											
				Walnut Valley Water District		TVMWD		MWD			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Aluminum (ppb)	2008	1000	600	NA	NA	22.25	ND-100	148	60-250	No	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic (ppb)	2008	10	0.004	NA	NA	NA	NA	2.4	ND-2.7	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (ppb)	2008	1	2	NA	NA	NA	NA	116	107-125	No	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Chloramines (ppm)	2008	[4.0 (as Cl ₂)]	[4 (as Cl ₂)]	1.97	1.75-2.50	2.68	2.3-2.90	2.40	1.4-3.2	No	Drinking water disinfectant added for treatment
Combined Radium (pCi/L)	2008	5	(0)	NA	NA	0.41	NA	NA	NA	No	Erosion of natural deposits
Control of DBP precursors [TOC] (ppm)	2008	TT	NA	NA	NA	1.6	0.9-2.2	NA	NA	No	Various natural and man-made sources
Fluoride (ppm)	2008	2.0	1	NA	NA	0.125	NA	0.8	0.6-1.0	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Alpha Particle Activity (pCi/L)	2008	15	(0)	NA	NA	NA	NA	5.2	ND-7.6	No	Erosion of natural deposits
Gross Beta Particle Activity ¹ (pCi/L)	2008	50	(0)	NA	NA	1.8225	0.54-5.21	4.2	ND-9.7	No	Decay of natural and man-made deposits
Haloacetic Acids (ppb)	2008	60	NA	24.9	13.5-31.1	19	12.6-29.7	16	6.7-27	No	By-product of drinking water disinfection
Nirate + Nitrite [N] (ppm)	2008	10	10	NA	NA	1.01	0.84-1.17	0.5	ND-0.6	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Radium 226 (pCi/L)	2008	5	0.05	NA	NA	0.08	NA	NA	NA	No	Erosion of natural deposits
Radium 228 (pCi/L)	2008	5	0.019	NA	NA	0.33	NA	NA	NA	No	Erosion of natural deposits
Strontium-90 (pCi/L)	2008	8	0.35	NA	NA	0.05	NA	NA	NA	No	Decay of natural and man-made deposits
TTHMs [Total Trihalomethanes] (ppb)	2008	80	NA	50.6	27.8-56.7	39.5	27.5-62.6	43	28-73	No	By-product of drinking water chlorination
Total Coliform Bacteria (# positive samples)	2008	More than 5.0% of monthly samples are positive	(0)	0.97	NA	NA	NA	NA	NA	No	Naturally present in the environment
Tritium (pCi/L)	2008	20,000	400	NA	NA	355	NA	NA	NA	No	Decay of natural and man-made deposits
Uranium (pCi/L)	2008	20	0.43	NA	NA	0.26	NA	2.9	2.4-3.4	No	Erosion of natural deposits

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	PHG	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2006	1.3	0.3	0.24	0/30	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2006	15	2	2	0/30	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

SECONDARY SUBSTANCES

				Walnut Valley Water District		TVMWD		MWD			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Aluminum (ppb)	2008	200	NS	NA	NA	22.25	ND–100	148	60–250	No	Erosion of natural deposits; residual from some surface water treatment processes
Chloride (ppm)	2008	500	NS	NA	NA	83.6	NA	96	92–104	No	Runoff/leaching from natural deposits; seawater influence
Color (Units)	2008	15	NS	0.30	ND–4	ND	NA	2	1–3	No	Naturally occurring organic materials
Odor–Threshold (Units)	2008	3	NS	NA	NA	NA	NA	3	3–3	No	Naturally occurring organic materials
Specific Conductance (µS/cm)	2008	1,600	NS	NA	NA	546	392–615	941	810–1090	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2008	500	NS	NA	NA	46.2	NA	209	159–275	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2008	1,000	NS	NA	NA	317	270–400	565	487–678	No	Runoff/leaching from natural deposits
Turbidity (NTU)	2008	5	NS	0.04	ND–0.166	0.05	0.03–0.07	0.06	0.05–0.06	No	Soil runoff

UNREGULATED SUBSTANCES

			Walnut Valley Water District		TVMWD		MWD			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE		
Boron (ppb)	2008	NA	NA	NA	NA	150	130–160	Runoff/leaching from natural deposits; industrial wastes		
Chromium VI [Hexavalent Chromium] (ppb)	2008	NA	NA	NA	NA	0.22	0.10–0.30	Industrial waste discharge; could be naturally present as well		
Sodium (ppm)	2008	NA	NA	60.8	NA	94	84–109	Measure of water quality		
Vanadium (ppb)	2008	NA	NA	NA	NA	3.6	3.1–4.0	Naturally occurring; industrial waste discharge		

OTHER UNREGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	TVMWD		MWD		TYPICAL SOURCE
		AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	
Alkalinity (ppm)	2008	81	60–95	109	101–122	Measure of water quality
Calcium (ppm)	2008	28.4	NA	60	52–74	Measure of water quality
Chlorate (ppb)	2008	NA	NA	52	24–58	By-product of drinking water chlorination; industrial processes
Hardness [total] (ppm)	2008	106	90–120	253	214–308	Measure of water quality
Magnesium (ppm)	2008	9.59	NA	25	21–29	Measure of water quality
N-Nitrosodimethylamine (ppt)	2008	4.3	NA	NA	NA	By-product of drinking water chlorination; industrial processes
pH (Units)	2008	8.23	7.9–8.43	8.1	8.0–8.2	Measure of water quality
Potassium (ppm)	2008	NA	NA	4.5	4.0–5.2	NA
Radon (pCi/L)	2008	8	NA	NA	NA	Naturally occurring, comes from decay of uranium in nearly all soils
Total Organic Carbon [TOC] (ppm)	2008	1.6	0.9–2.2	2.2	1.7–2.4	Various natural and man-made sources

¹ Effective 6/11/2006, the gross beta particle activity MCL is 4 millirem/year annual dose equivalent to the total body or any internal organ. 50 pCi/L is used as a screening level.

Definitions

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

µS/cm (microsiemens per centimeter): A unit expressing the amount of electrical conductivity of a solution.

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 (SMCLs) 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. EPA.

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

MRDLG (Maximum Residual Disinfectant Level Goal): 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. EPA.

NA: Not applicable.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NS: No standard.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

pCi/L (picocuries per liter): A measure of radioactivity.

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

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 EPA.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

ppt (parts per trillion): One part substance per trillion parts water (or nanograms per liter).

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