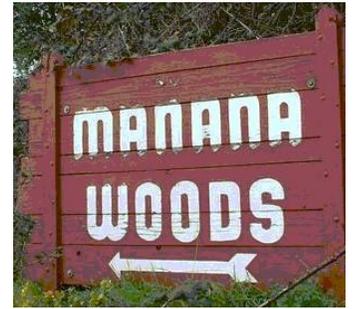


# Consumer Confidence Report Manana Woods Distribution System



## San Lorenzo Valley Water District

WATER QUALITY 2007

JUNE 2008

### Your Water Passes All Tests

Once again, the San Lorenzo Valley Water District is pleased to report that our water quality met or surpassed all State and Federal criteria for public health protection. For additional information regarding water quality, please contact the San Lorenzo Valley Water District's Director of Operations, Rick Rogers, at (831) 430-4624 or e-mail to [rogers@slvwd.com](mailto:rogers@slvwd.com).

### Sources of Water

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 including, radioactive material, and other substances resulting from the presence of animals or from human activity.

### Where Does Your Water Come From?

All water comes in the form of precipitation. Surface water accumulates mainly as a result of direct runoff from precipitation in the form of streams. Part of the precipitation that falls infiltrates the soil. Water drains downward (percolates) below the soil surface reaching a level at which all of the openings or voids in the ground are filled with water. This zone of saturation is referred to as groundwater. The District utilizes groundwater sources located in Scotts Valley. All wells conform to State construction standards.

### Public Involvement

The Board of Directors of the San Lorenzo Valley Water District invites you to attend its meetings to express your views and opinions. The Board meets on the 1st and

3rd Thursday of each month. Meetings start at 7:30 p.m. at the District's Operations Building, 13057 Highway 9, Boulder Creek. Agenda information for the Board of Director's meetings can be obtained from the District at 831-430-4636 or [www.slvwd.com](http://www.slvwd.com).

**In an effort to provide this report to everyone, the District encourages landlords to provide a copy of this report to their tenants.**

### Water Quality

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and State Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems.

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 (800-426-4791) or on the web at [www.epa.gov/safewater](http://www.epa.gov/safewater).

*"Our mission is to provide our customers and all future generations with reliable, safe and high quality water at an equitable price; to create and maintain outstanding customer service; to manage and protect the environmental health of the aquifers and watersheds; and, to ensure the fiscal vitality of the San Lorenzo Valley Water District."*

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## Possible Contaminants

Contaminants that may be in the water prior to treatment may 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**, that may come from a variety of sources such as agricultural, 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, agricultural application, and septic systems.

## State Standards and Monitoring

Individual water suppliers do not arbitrarily decide what constitutes “safe” drinking water. The U.S. Environmental Protection Agency and the California State Department of Public Health require all public water suppliers to meet stringent quality standards. Compliance is mandatory for public water utilities.

In California, drinking water standards (also called Maximum Contaminant Levels, or MCLs) are established for two categories. Primary Standards are set for the protection of public health. Secondary Standards are set only for aesthetic qualities such as taste, odor and color, but do not represent any threat to health.

The District maintains a monitoring program to sample and test all water sources in accordance with State and Federal standards. Should the District fail to monitor, or the District’s water exceed the MCLs allowable in the Primary Standards, it is required by law to notify all customers of the nature of the problem and any possible health effects. Some contaminants that are routinely monitored by the District are bacteria, turbidity, inorganic chemicals, metals, general minerals, volatile organic chemicals (VOCs), disinfection by-products (THMs), and radiation.

The table on the next page shows our test results for 2007. Once again, the San Lorenzo Valley Water District is

pleased to report that our water quality met or surpassed all State and Federal criteria for public health protection. For additional information regarding water quality, please contact the San Lorenzo Valley Water District at (831) 338-2153.

## Is the Water Safe for Everyone to Drink?

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 / Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline 800-426-4791 or on the internet at <http://www.epa.gov/safewater>

## Source Water Assessments

In 2002 the County of Santa Cruz completed Source Water Assessments of the Manana Woods Well. A Source Water Assessment lists possible contaminating activities, and the susceptibility of identified contamination threats that might affect the quality of the drinking water supply.

Factors contributing to the potential vulnerability of the Manana Woods Well to water-quality degradation include: dry cleaners, historic gas stations, historic waste dumps/landfills, known contaminant plumes, and underground storage tanks with confirmed leakage.

## Water Conservation

Water conservation has become a key part of California's overall water management strategy for allocating an increasingly scarce resource among a steadily growing population. There are many steps homeowners can take to reduce landscape water use. Options range from the simple to the elaborate.

Check for leaks in pipes, hoses, faucets and couplings. Leaks outside the house can be extremely wasteful, especially when they occur in your main water line. To check for hidden leaks in your pipes, shut off all faucets and taps around the house for 15 minutes. If the water meter reading advances during that time, you have a leak.

## Manana Woods Treatment

The water supply for Manana Woods comes from a groundwater aquifer located near Kings Village Shopping Center in Scotts Valley. In 1989 gasoline contaminants were detected in the Manana Woods groundwater supply aquifer. The Regional Water Quality Control Board (RWQCB) concluded that gasoline stations located at the intersection of Scotts Valley Drive and Mt. Hermon Road are the most likely source of these contaminants. The area has been a RWQCB cleanup site since 1989.

The most common contaminants in the source water are petroleum hydrocarbons and gasoline additives. Benzene, methyl-tert-butyl ether (MtBE) and tert-butyl alcohol (tBA) have been detected in the Manana Woods water supply well. Levels of these contaminants in the source water (before treatment) range between 1-2 parts per billion (ppb) for benzene, 8-15 ppb for MtBE and 1-3ppb for tBA. In previous years, the levels of these contaminants were higher. However, the levels of these contaminants has been trending downward, which may indicate that containment concentrations in the groundwater aquifer are decreasing.

Benzene and MtBE are chemicals regulated in drinking water by the California Department of Public Health (CDPH) The CDPH has established a Maximum Contaminate Level (MCL ) of 1.0 ppb for benzene and 13 ppb for MtBE. The established MCL is the maximum permissible level of a contaminate in water which is delivered to any customer. For comparison purposes, one (1) ppb is equal to one (1) second in 32 yrs. Contaminate levels detectable below a MCL are not known or anticipated to cause adverse human health effects. A public notification level of 12 ppb has been established for tBA.

In 2003 Manana Wood Mutual Water Company (MWMWC), in conjunction with Kennedy Jenks Consulting Engineers, completed construction of a new water treatment plant for the removal of these contaminants from the source water supply. The new treatment plant utilizes granular activated carbon (GAC) to capture and remove the contaminants. Benzene and MtBE are contaminants which are readily retained on to the GAC surface and easily removed from the drinking water by this process. However, tBA is not as easily removed from drinking water. The removal of tBA requires an additional biological treatment process. This process converts tBA into harmless by-products for more effective removal.

To evaluate the effectiveness of the treatment process the District routinely samples and monitors water leaving the treatment plant for benzene, MtBE, tBA and other chemicals. The District has an established goal to operate the Manana Woods Treatment Plant to remove all detectible gasoline contaminants prior to distribution to our customers.

On several occasions during the first half of 2007, small amounts of tBA (1.0 ppb or less) were detected in the finished water leaving the plant. The amounts were not considered harmful to public health and were below the detection level for purpose of reporting.

Several operational strategies have been implemented by the District to improve and optimize the treatment process. Since July 2007 no tBA has been detected in the plant effluent. The District remains dedicated to operating the Manana Woods water system in accordance with standards set by the California Department of Public Health and to ensure an acceptable water quality for all customers.

**Manana Woods Water Treatment Facility**



**SAN LORENZO VALLEY WATER DISTRICT  
WATER QUALITY ANALYSIS FOR 2007**

**Manana Woods Distribution System**

**GROUNDWATER**

<b>PRIMARY STANDARDS</b>	<b>Meas.</b>	<b>MCL</b>	<b>PHG (MCLG)</b>	<b>SLVWD Range of Detection</b>	<b>SLVWD Water Average</b>	<b>Sample Date</b>	<b>Notes</b>	<b>Source</b>
Nitrate	ppm	45	45	1.4 - 2.9	2.1	2007	Erosion of natural deposits.	
<b>SECONDARY STANDARDS</b>	<b>Meas.</b>	<b>MCL</b>	<b>PHG (MCLG)</b>	<b>One Sample / Detected Level</b>	<b>Sample Date</b>	<b>Source</b>		
Chloride	ppm	500	N/A	17	2007	Runoff / leaching from natural deposits.		
Color	CU	15	N/A	4	2006	Natural occurring organic material		
Manganese	ppb	50	N/A	31	2007	Leaching from natural deposits.		
Sulfate	ppm	500	N/A	150	2007	Runoff / leaching from natural deposits.		
Total Dissolved Solids	ppm	1000	N/A	41.4	2007	Runoff / leaching from natural deposits.		
Turbidity	NTU	5	N/A	0.64	2007	Soil runoff.		

**ADDITIONAL CONSTITUENTS ANALYZED**

	<b>Meas.</b>	<b>MRDL</b>	<b>MRDLG</b>	<b>SLVWD Range of Detection</b>	<b>SLVWD Water Average</b>	<b>Sample Date</b>	<b>Source</b>
Sodium	ppm	N/A	N/A	44	2007	Generally naturally occurring.	
Total Hardness	ppm	N/A	N/A	200	2007	Hardness is the sum of polyvalent cations present in the water, generally magnesium and calcium.	

**DISINFECTION RESIDUAL**

<b>Meas.</b>	<b>MRDL</b>	<b>MRDLG</b>	<b>SLVWD Range of Detection</b>	<b>SLVWD Water Average</b>	<b>Sample Date</b>	<b>Source</b>	
Chlorine	ppm	4	4	0.25 - 1.2	0.74	2007	Drinking water disinfectant added for treatment.

**Notes, Definitions, Terms and Abbreviations used in table:**

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. MRDLG's are set by the U.S. Environmental Protection Agency

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

Primary Drinking Water Standards (PDWS):MCL's and MRDL's for contaminants that effect health, along with their monitoring and reporting requirements, and water treatment requirements.

Maximum Contaminant Level (MCL):The highest level of a contaminant that is allowed in drinking water. Primary MCL's are set as close to the PHG's or (MCLG's) as is economically and technologically feasible.

Secondary MCL's are set to protect the odor, taste and appearance of drinking water.

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

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHG's are set by the California Environmental Protection Agency.

N.D.: Not Detectable at testing limit      ppb: Parts per billion or micrograms per liter      ppm: Parts per million or milligrams per liter      NTU: Nephelometric Turbidity Units

CU: Color Units      P/A: Presence /Absence      pCi/L: Picoecuries per liter      N/A: Not Applicable

Notes: 1) The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

## Water Use Restrictions in Effect

Due to continuing dry conditions the San Lorenzo Valley Water District has adopted mandatory restrictions on water use. Effective May 1, outdoor watering between the hours of 9:00 a.m. and 6:00 p.m. is prohibited. In early May, all customers were mailed a letter outlining the restrictions of Phase 2 of the Districts Drought Contingency Management Plan.

### **Other prohibitions now in place for water use include:**

- Washing of sidewalks, patios, decks, driveways, exterior building surfaces and other impervious surfaces.
- Car washing, except with a bucket and hose with shut-off nozzle.
- Waste of water due to broken or defective plumbing, sprinklers and watering /irrigation systems.
- Water service in public restaurants by request only.

The overall goal of Phase 2 is to reduce overall customer water demand by twenty (20%) percent. Water use restrictions will remain in effect until October 15 or until further notice.

Last summer (2007) was a critically dry year. Santa Cruz County received only 55% of annual average rainfall.

Rainfall to date is only 76% of the annual average total, and 2008 is classified as another dry year. Rainfall totals are far below the level to ensure a sustainable water supply for all customers. Groundwater Aquifers have been impacted by last year's lack of rainfall. It is imperative that customers continue to implement water conservation measures to avoid shortfalls this year, and in future years, if drought conditions continue. The District is totally dependent on local water supplies, which are directly impacted by the lack of rainfall.

More information is available on the District's website <http://www.slvwd.com> or contact the District office.

**PLEASE CONSERVE**

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

San Lorenzo Valley Water District  
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