



San Lorenzo Valley Water District Water Quality Report 2005 Northern Distribution System

Volume 16, Number 1

Spring / Summer 2006

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.

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 primarily uses surface water sources from November to May. During these months, surfacewater may provide up to 100% of all District water. Streams utilized by the District contain water from granite formations with very low mineral content. This results in very soft, pleasant tasting water. Collection points for these streams are in remote areas high within the District's protected watershed, away from human contamination.

During the summer months from June-November the District blends surface water with groundwater sources (wells) located in the Ben Lomond and Zayante areas. All wells conform to State construction standards. These wells, with the exception of Olympia 2 and 3 in the Zayante area, produce very soft water with quality similar to our surface sources.

Olympia Wells 2 and 3 have a higher mineral content, primarily iron, manganese and carbonate hardness. These minerals are harmless when consumed in water, but may affect the aesthetic qualities of the water such as taste, odor, and color. Dissolved gases present in groundwater may also affect taste.

Consumers in the Hihn Road and Zayante areas, from time to time, may experience periods of discolored water caused by iron and manganese. As water comes in contact with chlorine at the well head and with oxygen during the trip through the mainline distribution piping, the iron and manganese precipitate deposits in the water mains. The District adds a polyphosphate chemical to slow down this process. However, this is not totally effective and some deposition still occurs. Occasionally, during higher flows, the deposits become dislodged resulting in discolored water. During this time, water is safe to use; however, you may want to avoid washing laundry as staining may occur. If you experience periods of discolored water, please contact the District at (831) 338-2153.

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.

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 from their health care providers about drinking water. 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>

"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."

Water Quality

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and State Department of Health Services (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 (1-800-426-4791) or on the web at www.epa.gov/safewater.

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 Health Services 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 in this report shows our test results for 2005. 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.

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



SAN LORENZO VALLEY WATER DISTRICT
WATER QUALITY ANALYSIS FOR 2005
North System - Boulder Creek, Brookdale, Ben Lomond, Zayante

| GROUNDWATER | | | | | | | | | |
|---------------------------------------|-------|-----------------------|------------|---|---------------------------------------|-------------|--------|--|--|
| PRIMARY STANDARDS | Meas. | MCL | PHG (MCLG) | SLVWD Range of Detection | SLVWD Water Average | Sample Date | Notes | Source | |
| Nitrate | ppm | 45 | 45 | < 1.0 - 12 | 2.7 | 2004 | (1) | Runoff / leaching from natural deposits. | |
| Trichloroethylene (TCE) | ppb | 5 | 0.8 | N.D. - 1.0 | 0.15 | 2005 | | Runoff and leaching from fertilizer use, leaching from septic tanks and sewage, erosion of natural deposits. | |
| Fluoride | ppb | 2 | 1 | 0.18 - 0.29 | 0.22 | 2003 | (1) | Discharge from steel and pulp mills and chrome plating; erosion of natural deposits. | |
| Arsenic | ppb | 50 | N/A | N.D. - 3.0 | 0.8 | 2005 | | Erosion of natural deposits. | |
| SECONDARY STANDARDS | | | | | | | | | |
| Sulfate | ppm | 500 | N/A | 10 - 310 | 119 | 2003 | (1) | Runoff / leaching from natural deposits. | |
| Total Dissolved Solids | ppm | 1000 | N/A | 90 - 590 | 279 | 2004 | (1) | Runoff / leaching from natural deposits. | |
| Iron | ppb | 300 | N/A | < 50 - 110 | 63 | 2003 | (1) | Leaching from natural deposits. | |
| Manganese | ppb | 50 | N/A | < 15 - 140 | 50 | 2005 | (3) | Leaching from natural deposits. | |
| Chloride | ppm | 500 | N/A | 6.5 - 9.6 | 8 | 2003 | (1) | Runoff / leaching from natural deposits. | |
| ADDITIONAL CONSTITUENTS ANALYZED | | | | | | | | | |
| | Meas. | MCL | PHG (MCLG) | SLVWD Range of Detection | SLVWD Water Average | Sample Date | Notes | Source | |
| Sodium | ppm | N/A | N/A | 10 - 15 | 13 | 2003 | (1) | Generally naturally occurring. | |
| Total Hardness | ppm | N/A | N/A | 46 - 470 | 211 | 2003 | (1) | Hardness is the sum of polyvalent cations present in the water, generally magnesium and calcium. | |
| Total Phosphorous | ppm | N/A | N/A | 0.55 - 5.2 | 2.9 | 2005 | (3) | Treatment additive | |
| SURFACE WATER | | | | | | | | | |
| PRIMARY STANDARDS | | | | | | | | | |
| | Meas. | MCL | PHG (MCLG) | SLVWD Range of Detection | SLVWD Water Average | Sample Date | Notes | Source | |
| Fluoride | ppm | 2 | 1 | N.D. - 0.26 | N.D. | 2005 | | Runoff / leaching from natural deposits. | |
| Total Organic Carbon (TOC) precursors | ppb | Treatment requirement | N/A | N.D. - 1.5 | 0.8 | 2002 | (1, 4) | Various natural manmade sources. | |
| SECONDARY STANDARDS | | | | | | | | | |
| Sulfate | ppm | 500 | N/A | 2.5 - 4.4 | 3.4 | 2005 | | Runoff / leaching from natural deposits. | |
| Total Dissolved Solids | ppm | 1000 | N/A | 85 - 110 | 9.4 | 2005 | | Runoff / leaching from natural deposits. | |
| Chloride | ppm | 500 | N/A | 5.5 - 6.3 | 6.1 | 2005 | | Runoff / leaching from natural deposits. | |
| Iron | ppb | 300 | N/A | N.D. - 0.11 | 0.025 | 2005 | | Leaching from natural deposits. | |
| ADDITIONAL CONSTITUENTS ANALYZED | | | | | | | | | |
| | Meas. | MCL | PHG (MCLG) | SLVWD Range of Detection | SLVWD Water Average | Sample Date | Notes | Source | |
| Sodium | ppm | N/A | N/A | 6.8 - 8.6 | 8.0 | 2005 | | Generally naturally occurring. | |
| Total Hardness | ppm | N/A | N/A | 48 - 70 | 57 | 2005 | | Hardness is the sum of polyvalent cations present in the water, generally magnesium and calcium. | |
| Turbidity | NTU | N/A | N/A | Less Than or Equal to 0.2 NTU. In 95% of samples each month. Never to exceed 1 NTU. | Highest single measurement = 0.16 NTU | 2005 | (2) | Soil runoff. | |

SYSTEM WIDE - COMBINED GROUNDWATER AND SURFACE WATER

| MICROBIAL CONTAMINANTS | | Meas. | MCL | PHG (MCLG) | SLVWD Range of Detection | SLVWD Water Average | Sample Date | Source |
|------------------------------------|-----|---|-----|---|--------------------------|---------------------|---|--------|
| Total Coliform | P/A | 5% of Samples Positive in any one month | 0 | N.D. - 2% | N.D. | 2005 | Naturally present in the environment. | |
| DISINFECTION RESIDUAL | | Meas. | MCL | PHG (MCLG) | SLVWD Range of Detection | SLVWD Water Average | Sample Date | Source |
| Chlorine | ppm | 4 | 4 | 0.2 - 1.0 | 0.54 | 2005 | Drinking water disinfectant added for treatment. | |
| DISINFECTION BY-PRODUCTS | | Meas. | MCL | PHG (MCLG) | SLVWD Range of Detection | SLVWD Water Average | Sample Date | Source |
| THM (Total Trihalomethanes) | ppb | 80 | N/A | 2.2 - 43 | 24.5 | 2005 | By-product of drinking water chlorination. | |
| HAA5 (Haloacetic Acids) | ppb | 60 | N/A | N.D. - 44 | 15 | 2005 | By-product of drinking water chlorination. | |
| PRIMARY STANDARDS REGULATED AT TAP | | Meas. | AL | PHG (MCLG) | SLVWD Range of Detection | SLVWD Water Average | Sample Date | Source |
| Lead | ppb | 15 | 2 | 90th Percentile = 2.5 Number of sites above AL = 0 | N.D. - 2.5 | 2005 | Corrosion of household plumbing, discharges from industrial manufacturers, erosion of natural deposits. | |
| Copper | ppb | 1300 | 170 | 90th Percentile = 560 Number of sites above AL = 0 | N.D. - 960 | 2005 | Corrosion of household plumbing, erosion of natural deposits, leaching from wood preservatives. | |

San Lorenzo Valley Water District 13060 Hwy 9 Boulder Creek, CA 95006 (831) 338-2153 www.slvwd.com

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. |
| Treatment Technique (TT): | A required process intended to reduce the level of a contaminant in drinking water. |
| NTU: Nephelometric Turbidity Units. | ppb: Parts per billion or micrograms per liter |
| N.D.: Not Detectable at testing limit | P/A: Presence /Absence ppm: Parts per million or milligrams per liter N/A: Not Applicable |

Protecting Our Watershed

Many common household products are hazardous if carelessly handled or stored. Chemicals poured on the ground or down the drain or toilet can pollute our drinking water. Of particular concern are Volatile Organic Chemicals (VOCs) and Synthetic Organic Chemicals (SOCs). VOCs are chemicals commonly found in paints, thinners, solvents, degreasers, and automotive products. SOCs are found in herbicides and pesticides. These products should never be poured down the sink, toilet or drain. The County of Santa Cruz receives household hazardous waste at the Ben Lomond Transfer Station. The District strongly encourages consumers to make use of this convenient program and to dispose of household hazardous waste in a proper and responsible manner. For more information on disposal and receiving times, you may call the County at 454-2606. You can help protect our drinking water from sources of pollution.

The District is required to monitor for these chemicals at every water source on a periodic basis. All of the District water sources are free from these contaminants with the exception of one, the District's Quail Well #5A. Currently, very small amounts of Trichloroethylene (TCE), a Volatile Organic Chemical, have been occasionally detected in Quail Well #5. Detectable amounts ranging between 0.60 to 1.0 parts per billion (PPB) have been intermittently found in water quality samples. As a result of this, the District has increased water quality monitoring of the water supply sources in the Quail Hollow area.

The occasional detection of TCE at one of the District's facilities demonstrates the on-going vulnerability of our water sources and the need to exercise great care when using hazardous chemicals around the home. It is extremely important to help protect our drinking water from possible sources of pollution by exercising care with all household chemicals. A little pollution can go a long way!

Summer Water Conservation During Power Outages

The San Lorenzo Valley is well known for its occasional power outages. In the past, these outages were usually the result of winter weather conditions -- heavy winds and rainfall. Power outages are now becoming more frequent during summer months due to increased electrical demands overloading availability. During summer months, as well as winter, power outages adversely impact the District's ability to supply water to its customers. The greatest challenge is to maintain water to District customers during power outages in summer months when water demand is at its highest.

Throughout the District, water service is maintained through storage tanks. Electrically powered pumping stations supply water to the tanks. Currently, the District maintains 22 pumping facilities. Loss of power to these facilities greatly hinders the District's ability to replace water in the storage tanks. The higher the customer's meter is in ground elevation, the more difficult the water supply problem becomes as water is pumped to one area and then re-pumped to yet a higher area. Three or four pumping lifts are common for higher elevation areas.

During summer months June through September, during power outages, it is important for customers to conserve water until power is restored. Over the years, the District has provided greater reliability to customers during power outages. This has been done by increasing the size of water storage facilities when possible, installing standby generators at key facilities, and pre-wiring generator connections for portable generators at pump stations. However, it is still important for District customers to conserve water during power outages.

Ways to Conserve Water

1. Water your lawn only when it needs it. Step on the grass. If it springs back up when you take your foot off, it doesn't need water.
2. Deep-soak your lawn. when you water your lawn, water it just long enough for water to seep down to the roots where it is needed. A light sprinkling, which sits on the surface, will evaporate and be wasted.
3. Water during the cool parts of the day. Early morning is better than dusk since it helps prevent the growth of fungus.
4. Don't water the gutter. Position your sprinklers so that water lands on your lawn or garden, not on concrete or other paved areas. Also, avoid watering on windy days.
5. Plant drought resistant trees and plants. Many beautiful trees and plants thrive with little water in our semi arid region.
6. Put a layer of mulch around trees and plants. Mulch slows the evaporation of moisture.
7. Use a broom instead of a hose to clean driveways and sidewalks.
8. Don't run the hose while washing your car. Soap down your car from a pail of soapy water. Use a hose to rinse it off.
9. Tell your children not to play with the hose and sprinklers.
10. 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.

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

San Lorenzo Valley Water District
13060 Highway 9
Boulder Creek, CA. 95006-9119

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