

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



# San Lorenzo Valley Water District Consumer Confidence Report Northern Distribution System

WATER QUALITY 2011

JULY 2012

## 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 [rrogers@slvwd.com](mailto:rrogers@slvwd.com).

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.

## 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?

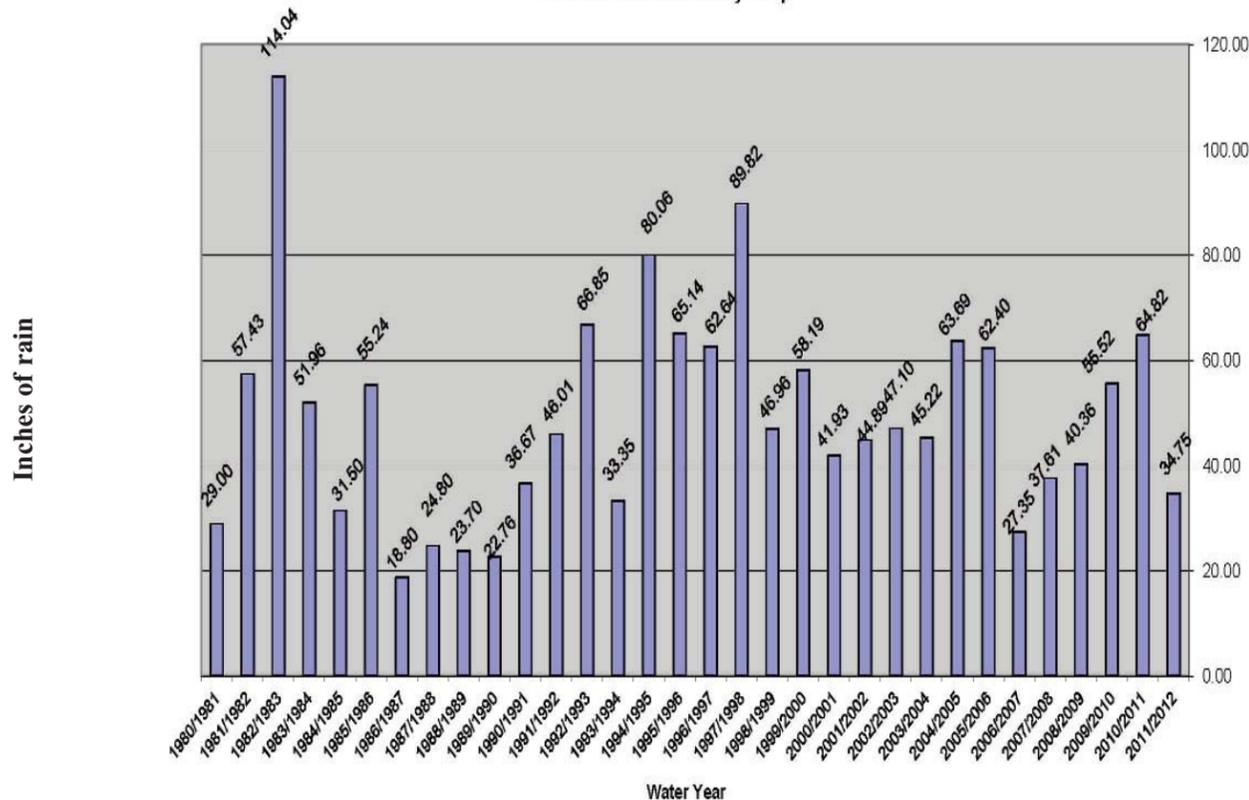
All water comes in the form of precipitation. Surface water accumulates mainly as a result of direct runoff from precipitation in the form of streams. Part of the precipitation that falls infiltrates the soil. Water drains downward (percolates) below the soil surface reaching a level at which all of 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

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

Standard Rate U.S.  
Postage Paid  
Boulder Creek, CA  
95006  
Permit No. 55

San Lorenzo Valley Water District  
Annual Rainfall History Graph



## 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 by calling (831) 430-4636 or the District website [www.slvwd.com](http://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. Immunocompromised 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>

## 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. 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. 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](http://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.

"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."

## 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 in this report shows our test results for 2011. 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.

## 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 (831) 454-2606. You can help protect our drinking water from sources of pollution.

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!

## Source Water Assessments

In 2002 and 2004 the District completed source water assessments of its deep water well aquifers and surface water watershed in Ben Lomond, Zayante and Boulder Creek. A source water assessment lists possible contaminating activities and the susceptibility of identified contamination threats that might affect the quality of our drinking water supplies.

### Quail Hollow Well Field Aquifer

Factors contributing to the potential vulnerability of the District's Quail Hollow Wells include: the high percolation capacity of the Santa Margarita Sandstone Aquifer and associated Zayante soils, the absence of a confining zone above the aquifer, residential septic tank systems, and unused production wells.

### Olympia Well Field Aquifer

Factors contributing to the potential water-quality vulnerability of the District's Olympia wells include: the high percolation capacity of the Santa Margarita Sandstone Aquifer, residential septic tank systems, and equestrian activities.

### Foreman, Peavine, Clear, and Sweetwater Creeks Watershed

Factors contributing to the potential vulnerability of the District's surface water include: managed forests, septic

systems, recreational, government or institutional facilities. Copies of the Source Water Assessments for each water source are available at the District Office.

## Lead in Your 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. San Lorenzo Valley Water District is 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 <http://www.epa.gov/safewater/lead>.

The San Lorenzo Valley Water District monitors for lead and copper at the customers tap throughout the District on a regular basis in accordance with the USEPA's Lead and Copper Rule regulations. The rule requires public water systems to sample at customers' homes that meet specific criteria where elevated levels of lead and copper are more likely to be found. Since 1993 samples have shown levels of lead and copper in District homes to be well below the action levels set by the USEPA. See the enclosed water quality table for test results from the latest round of sampling.

## Water Conservation Rebate Program

The District water conservation credit program offers qualifying District customers the opportunity to earn credits to your District account. The program offers several new landscaping credits. These credit options encourage District customers to save both water and money. The District's new program offers the following credit options:

- High Efficiency Clothes Washer Credit
- Drip Irrigation System Conversion Credit
- Weather-Based Irrigation Controller Credit
- Lawn Replacement Credit: Water-Wise Grass

## 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 by increasing the size of water storage facilities when possible and installing standby generators at key facilities.

## How To Read Your Water Meter

One of your best conservation tools is your water meter. It is normally located on the road shoulder in front of your home, housed in a concrete box. If you have trouble locating your water meter contact the District for a better location of your meter. Reading the meter is similar to reading a car odometer. The meter measures volume of water in cubic feet. The first digit on the right represents one cubic foot, the second from the right represents 10 cubic feet, the third from the right represents 100 cubic feet, and so forth. The sweep hand registers fractions of a cubic foot. One cubic foot is equal to 7.48 gallons of water. Your water bill is based on how many hundred cubic feet you use over a one- or two-month billing period.

One hundred cubic feet (also referred to as a billing "unit" or "ccf") equals 748 gallons.



## Using Your Water Meter to Check for Leaks

1. It's good preventive maintenance to conduct a leak check of your house periodically.
2. Start by firmly turning off all water devices inside and outside the house.
3. Next, go outside to the meter and mark down the reading, including the red flow detection indicator.
4. Wait 15 minutes and then check the meter again.

If the meter has not moved, your house is leak free. If the meter has moved, you have a leak to hunt down. The most likely cause is a leaking toilet. Most meters also have a triangular low-flow indicator, which should not be spinning unless a leak is present.

To avoid receiving a surprisingly high water bill caused by an undetected leak, we suggest you check your meter regularly.

The District invites all of our customers to visit the District's web site. The web site provides a great deal of information regarding water quality, customer service, Board Meetings, local weather, drought status, historical rainfall, watershed management, water conservation, fiscal budgets, and the District's Water Master Plan. Visit the web site [www.slvwd.com](http://www.slvwd.com)

## Water Conservation Tips

Did you know that the average U.S. household uses approximately 400 gallons of water per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes make a big difference - try one today and soon it will become second nature.

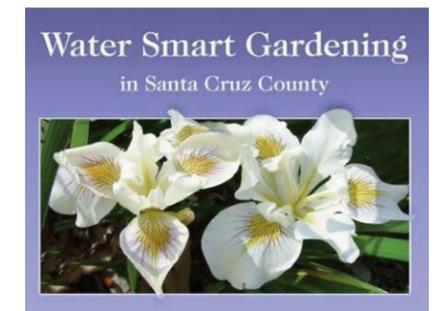
- Take short showers - a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath
- Shut off water while brushing your teeth, washing your hair and shaving. Washing your hair, and shaving can save up to 500 gallons a month.
- Use a water -efficient showerhead. Showerheads are inexpensive , easy to install and can save you up to 750 gallons per month.
- Run your clothes washer and dishwasher only when full. You can save up to 1000 gallons a month. Water plants only when necessary. Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it, and during the cooler parts of the day to reduce evaporation.
- Fix leaking toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing or replacing it with a new, more efficient model can save up to 1000 gallons a month. Rebates for high efficiency toilet replacement may be available from the District.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next months water bill!



## Water Smart Gardening

Water Smart Gardening in Santa Cruz County – Free Online Gardening Tool for Our Diverse Local Climate.visit <http://www.santacruz.watersaving-plants.com>

- View beautiful local gardens for design ideas
- Use interactive tools to design your garden
- Evaluate hundreds of plant species and make a plant list
- Learn how to reduce landscape water use
- Prevent and solve pest problems with less-toxic methods



## New Customer Service Programs Programs to Aid You in Paying Your Water Bill and Customer Notification System

The San Lorenzo Valley Water District has introduced two new customer service programs.

The first “Bill Pay” allows a customer to access their accounts on line and make payments from your bank account or credit card. Customers can also set up “auto bill pay” which automatically deducts your payment from your bank account and providing paperless bills.

The second program “Customer Notification System” will provide personalized communication to the District’s customers by phone (voice and/or text) email regarding payment reminders to help avoid late fees and for emergency notifications.

You can find more information and how to register for Bill Pay or Customer Notification System on the Districts web site at [www.slvwd.com](http://www.slvwd.com) or call 831-338-2153.

**SAN LORENZO VALLEY WATER DISTRICT  
WATER QUALITY ANALYSIS FOR 2011  
North System - Boulder Creek, Brookdale, Ben Lomond, Zayante**



**GROUNDWATER**

**GROUNDWATER**

PRIMARY STANDARDS	Meas.	MCL	PHG (MCLG)	SLVWD Range of Detection	SLVWD Water Average	Sample Date	Notes	Source
Arsenic	ppb	10	N/A	1.9 - 3.2	2.6	2009	(1)	Erosion of natural deposits.
Fluoride	ppb	2000	1000	120 - 240	175	2009	(1)	Erosion of natural deposits.
Nitrate	ppm	45	45	N.D. - 9.2	5.7	2011		Runoff / leaching from natural deposits.
SECONDARY STANDARDS								
Chloride	ppm	500	N/A	5.9 - 8.3	6.9	2009	(1)	Runoff / leaching from natural deposits.
Color	CU	15	N/A	3.0 - 6.0	5.0	2009	(1)	Naturally-occurring organic materials
Iron	ppb	300	N/A	< 20 - 160	99	2009	(1)	Leaching from natural deposits.
Manganese	ppb	50	N/A	82 - 310	145	2011	(3)	Leaching from natural deposits.
Sulfate	ppm	500	N/A	7.6 - 250	86	2009	(1)	Runoff / leaching from natural deposits.
Total Dissolved Solids	ppm	1000	N/A	110 - 600	303	2009	(1)	Runoff / leaching from natural deposits.
Turbidity	NTU	5	N/A			2011		

**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	11.5	2009	(1)	Refers to the salt present in the water and is generally naturally occurring.
Total Hardness	ppm	N/A	N/A	44 - 410	186	2009	(1)	Hardness is the sum of polyvalent cations present in the water, generally magnesium and calcium. The cations are usually naturally occurring.
Total Phosphate	ppm	N/A	N/A	1.9 - 3.0	2.2	2011	(3)	Treatment additive.

**SURFACE WATER**

**SURFACE WATER**

PRIMARY STANDARDS	Meas.	MCL	PHG (MCLG)	SLVWD Range of Detection	SLVWD Water Average	Sample Date	Notes	Source
Fluoride	ppb	2000	1000	53 - 77	65	2011		Erosion of natural deposits.
SECONDARY STANDARDS								
Chloride	ppm	500	N/A	5.4 - 5.9	5.6	2011		Runoff / leaching from natural deposits.
Color	CU	15	N/A	3.0 - 7.0	5.0	2009	(1)	Naturally-occurring organic materials.
Sulfate	ppm	500	N/A	2.2 - 3.6	2.8	2011		Runoff / leaching from natural deposits.
Total Dissolved Solids	ppm	1000	N/A	84 - 100	92	2011		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	7.5 - 9.2	8.0	2011		Refers to the salt present in the water and is generally naturally occurring.
Total Hardness	ppm	N/A	N/A	46 - 68	55	2011		Hardness is the sum of polyvalent cations present in the water, generally magnesium and calcium. The cations are usually naturally occurring.
Turbidity	NTU	Less Than or Equal to 0.2 NTU. In 95% of samples each month. Never to exceed 1 NTU.	N/A	Less Than or Equal to 0.2 NTU. In 100% of samples in one month.	Highest single measurement 0.2 NTU	2011	(2)	Soil runoff. Turbidity is a measure of the cloudiness of water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

**DISTRIBUTION SYSTEM**

**DISTRIBUTION SYSTEM**

MICROBIAL CONTAMINANTS	Meas.	MCL	PHG (MCLG)	SLVWD Range of Detection	SLVWD Water Average	Sample Date	Notes	Source
Total Coliform Bacteria (Total Coliform Rule)	P/A	No more than 5% of Samples Positive in any one month	0	N.D.	N.D.	2011		Naturally present in the environment.
DISINFECTION RESIDUAL								
Chlorine	ppm	4	4	0.25 - 1.5	0.62	2011		Drinking water disinfectant added for treatment.
DISINFECTION BY PRODUCTS								
THM (Total Trihalomethanes)	ppb	80	N/A	N.D. - 53	34.2	2011		By-product of drinking water disinfection.
HAA5 (Haloacetic Acids)	ppb	60	N/A	N.D. - 29	17	2011		By-product of drinking water disinfection.
ADDITIONAL CONSTITUENTS ANALYZED								
Ph	Ph Scale	N/A	N/A	6.8 - 8.2	7.6	2011		A measure of the acidity or alkalinity.
PRIMARY STANDARDS REGULATED AT TAP								
Lead	ppb	15	0.2	30	90th Percentile = 1.3	2011		Corrosion of household plumbing, discharges from industrial manufacturers, erosion of natural deposits.
Copper	ppb	1300	170	30	90th Percentile = 300	2011		Corrosion of household plumbing, erosion of natural deposits, leaching from wood preservatives.

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

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a disinfectant below which there is no known or expected risk to health. MRDLGs 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. MCLGs are set by the U.S. Environmental Protection Agency.

Primary Drinking Water Standards (PDWS): MCLs and MRDLs are 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 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.

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. PHGs 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: Picouries per liter      N/A: Not Applicable

N.D.: Not Detectable at testing limit      P/A: Presence /Absence      TON: Threshold odor number

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. 2) Surface Water Treatment Technique (Type of Approved Filtration Technology): Microfloc package plant with upflow clarification and gravity filtration. 3) District Olympia Wells 2 and 3 periodically exceed the Secondary Maximum Contaminant Level (MCL) for Manganese. Secondary MCLs are set for aesthetic reasons only, and do not cause adverse health effects. Manganese can cause discolored water and staining. To offset this effect, the District adds phosphate, which acts to keep the Manganese in solution and help prevent problems associated with this mineral. 4) Total Organic Carbon has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts.