



# San Lorenzo Valley Water District Consumer Confidence Report

WATER QUALITY 2012

WWW.SLVWD.COM

JULY 2013

## Your Water Passes All Tests

Once again, 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. SLVWD operates four (4) independent water systems, each of which has its own source water supply. The four water systems are: North System, South System, Felton System and Manana Woods Systems. You can determine which systems provides your water service by examining the first two numbers of your individual water account number located on your water bill. The first two account numbers denote the water system as follows:

Account No. 11-13 denotes South Water System (Pasatiempo Pines, Scotts Valley).

Account No. 14 denotes Manana Woods System.

Account No. 23-29 denotes Felton Water System.

Account No 30-95 denotes North Water System.

For Example: Account No. 30-XXX-XXX receives water service from the North System.

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).

## Summer Water Conservation During Power Outages

In the past, power outages were usually the result of winter weather conditions, i.e. 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.

## 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>

## 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).

## 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.

## 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 2012. 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.

## 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.

## 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!

"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."

## 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.

### Mañana Woods

In 2002 the County of Santa Cruz completed source water assessments of the Mañana 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 Mañana 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.

## 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 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!

## 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 operates four independent water systems as follows

**San Lorenzo Valley Water District; North System** - Services the areas of North Boulder Creek, Boulder Creek, Brookdale, Ben Lomond, Quail Hollow, Glen Arbor, and Zayante.

Water supply in these areas primary uses surface water sources from November to May. During these months, surface water may provide up to 100% of all drinking 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 the District's surface water.

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 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.

**San Lorenzo Valley Water District; Felton System** – Services the areas of the town of Felton, Highway 9 South to Big Trees, San Lorenzo Avenue, Felton Empire Grade, Felton Grove, and El Solyo Heights.

District customers in the Felton Water System are supply water from the Bennett Spring, Bull Springs and Fall Creek.

Drinking water treatment technologies used in your water system include conventional treatment (coagulation, filtration, and disinfection) to ensure the bacteriological quality.

**San Lorenzo Valley Water District; South System (Pasatiempo Pines, Scotts Valley)**– Services the areas of Whispering Pines Drive, Lockwood Lane, Hidden Glen, Estrella Drive, Twin Pines Drive, Oak Tree Villa, Spring Lakes and Vista Del Lago Mobile Home Parks.

District customers in the Southern Pasatiempo Pines areas are supply groundwater sources located from within the Southern Distribution System. All wells conform to State construction standards.

**San Lorenzo Valley Water District; Manana Woods System** – Services the general areas of La Cuesta Drive, El Sereno Drive, Miraflores Drive, and Canepa Drive.

The water supply for Mañana Woods comes from a groundwater aquifer located near Kings Village Shopping Center in Scotts Valley. In 1989 gasoline contaminates were detected in the Mañana 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 contaminates 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 Mañana Woods water supply well. Levels of these contaminants in the source water (before treatment) range between 1-2 parts per billion (ppb) for benzene, 2-13 ppb for MtBE and ND-1.0 ppb 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 contaminates 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.

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 Mañana Woods Treatment Plant to remove all detectible gasoline contaminates prior to distribution to our customers.

SLVWD operates four (4) independent water systems, each of which has its own source water supply. The four water systems are: North System, South System, Felton System and Manana Woods Systems. You can determine which systems provides your water service by examining the first two numbers of your individual water account number located on your water bill. The first two account numbers denote the water system as follows:

Account No. 11-13 denotes South Water System (Pasatiempo Pines, Scotts Valley).

Account No. 14 denotes Manana Woods System.

Account No. 23-29 denotes Felton Water System.

Account No 30-95 denotes North Water System.

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

## Terms and Definitions used in table: (Next Page)

**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 **CU:** Color Units

**ppm:** Parts per million or milligrams per liter. **P/A:** Presence /Absence **N/A.:** Not Applicable

**N.D.:** Not Detectable at testing limit \*Some of our data, though representative, are more than one year old.

\*\* There are no PHGs, MCLGs, or mandatory standard health effects language for these constituents because secondary MCLs are set on the basis of aesthetics.

**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.

**Notes: 2)** Surface Water Treatment Technique (Type of Approved Filtration Technology); Microfloc package plant with upflow clarification and gravity filtration.

**Notes: 3)** District Olympia Wells 2 and 3 periodically exceed the Secondary Maximum Contaminant Level (MCL) for Manganese. Secondary MCL's 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.

**Notes: 4)** Total Organic Carbon has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts.

SAN LORENZO VALEY WATER DISTRICT WATER QUALITY REPORT 2012			NORTH SYSTEM Boulder Creek, Brookdale, Ben Lomond, Zayante Account No 30-95					FELTON SYSTEM Account No. 23-29					SOUTHERN SYSTEM Lockwood Lane, Whispering Pines Account No. 11-13			MANANA WOODS Account No. 14			SAN LORENZO VALEY WATER DISTRICT WATER QUALITY REPORT 2012		
			GROUND WATER		SURFACE WATER			GROUND WATER		SURFACE WATER			GROUND WATER			GROUND WATER					
PRIMARY HEALTH STANDARDS	MCL or [MRDL]	PHG or [MRDLG]	Sample Year	Range of Detection	Average Amount	Range of Detection	Average Amount	Sample Year	Range of Detection	Average Amount	Range of Detection	Average Amount	Sample Year	Range of Detection	Average Amount	Sample Year	Range of Detection	Average Amount	TYPICAL SOURCE		
Inorganic Constituents Arsenic (ppb)	10	N/A	2012	1 - 2.9	2.4	ND	ND	2012	ND	ND	ND	ND	2012	1 - 9.7	5.6	2012	ND - 9.7	5.6	Erosion of natural deposits.		
Fluoride (ppm)	2.0	1000	2012	150 - 450	263	59 - 85	71	2012	Single Sample	100	60 - 120	100	2012	77 - 1300	485	2012	77 - 1300	485	Erosion of natural deposits.		
Nitrate (as NO <sub>3</sub> ) (ppm)	45	45	2012	<0.44 -11	3.5	ND	ND	2012	ND	ND	ND	ND	2012	ND - 1.1	0.5	2012	ND - 1.1	0.5	Runoff / leaching from natural deposits.		
Radioactive Constituents Gross Alpha (pCi/L)	15	0	2012	< 3 - 3.2	< 3	ND	ND	2012	ND	ND	ND	ND	2012	ND	ND	NA	NA	NA	Erosion of natural deposits.		
Radium 228 (pCi/L)	5	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*2006	ND - 2.4	0.54	*2006	ND - 2.4	0.51	Erosion of natural deposits.		
SECONDARY STANDARDS	MCL or [MRDL]	PHG or [MRDLG]	Sample Year	Range of Detection	Average Amount	Range of Detection	Average Amount	Sample Year	Range of Detection	Average Amount	Range of Detection	Average Amount	Sample Year	Range of Detection	Average Amount	Sample Year	Range of Detection	Average Amount			
Chloride (ppm)	500	N/A	2012	5.8 - 8.7	7.3	5.2 - 6.3	5.7	2012	Single Sample	7.5	7.4 - 10	8.8	2012	6.4 - 39	17.7	2012	Single Sample	39	Runoff / leaching from natural deposits.		
Color (units)	15	N/A	*2009	3.0 - 6.0	5.0	<3.0 - 3.0	3.0	N/A	N/A	N/A	N/A	N/A	2012	< 3.0 - 4.0	3.3	2012	Single Sample	12	Naturally-occurring organic materials.		
Iron (ppb)	300	**	2012	<20 - 270	135	< 20 - 140	35	N/A	N/A	N/A	N/A	N/A	2012	66 - 450	291	2012	28 - 450	220	Leaching from natural deposits.		
Manganese (ppb)	50	**	2012	< 2 - 230	83	N/A	N/A	2012	ND	ND	ND	ND	2012	10 - 30	22	2012	ND - 49	12	Leaching from natural deposits.		
Sulfate (ppm)	500	**	2012	5 - 180	83	2.7- 4.3	3.4	2012	Single Sample	11	8 - 8.6	8.3	2012	26 - 290	115	2012	Single Sample	290	Runoff / leaching from natural deposits.		
Total Dissolved Solids (TDS) (ppm)	1000	**	2012	130 - 600	335	80 - 110	92	2012	Single Sample	250	140 - 300	227	2012	120 - 170	145	2012	Single Sample	710	Runoff / leaching from natural deposits.		
Turbidity [Nephelometric Turbidity Units (NTUs)]	5	N/A	*2009	0.59 - 0.63	0.60	< or = to 0.2 in 100% of Samples	Highest measurement = 0.20	2012	ND	ND	< or = to 0.2 in 100% of Samples	Highest measurement = 0.20	2012	0.44 - 1.3	0.59	N/A	N/A	N/A	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.		
ADDITIONAL CONSTITUENTS ANALYZED	MCL or [MRDL]	PHG or [MRDLG]	Sample Year	Range of Detection	Average Amount	Range of Detection	Average Amount	Sample Year	Range of Detection	Average Amounts	Range of Detection	Average Amount	Sample Year	Range of Detection	Average Amount	Sample Year	Range of Detection	Average Amount			
Sodium	N/A	N/A	2012	10 - 15	12	8.3 - 10	9	2012	Single Sample	7.1	9.0 - 10	9.5	2012	16 - 17	16.5	2012	Single Sample	52	Refers to the salt present in the water and is generally naturally occurring.		
Total Hardness	N/A	N/A	2012	44 - 393	200	51 - 73	59	2012	Single Sample	13.4	97 - 291	202	2012	33 - 30	46	2012	Single Sample	390	Hardness is the sum of polyvalent cations present in the water, generally magnesium and calcium. The cations are usually naturally occurring.		
Total Phosphate	N/A	N/A	2012	0.4 - 3.8	2.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2012	0.3 - 5.6	3.9	2012	0.30 - 5.6	3.9	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.		
UNREGULATED CONTAMINANTS Vanadium (ppb)	N/A	NL = 50	N/A	N/A	N/A	N/A	N/A	*2008	ND - 4.6	2.2	ND	ND	N/A	N/A	N/A	N/A	N/A	N/A	Erosion of natural deposits.		
			DISTRIBUTION SYSTEM					DISTRIBUTION SYSTEM					DISTRIBUTION SYSTEM			DISTRIBUTION SYSTEM					
PRIMARY HEALTH STANDARDS	MCL or [MRDL]	PHG or [MRDLG]	Sample Year	Range of Detection		Average Amount		Sample Year	Range of Detection		Average Amount		Sample Year	Range of Detection	Average Amount	Sample Year	Range of Detection	Average Amount	TYPICAL SOURCE		
Disinfection By-products/Residues* TTHM (Total Trihalomethanes) (ppb)	80	N/A	2012	1.2 - 44		19.6		2012	5.8 - 25		19		2012	1.2 - 2.6	2.0	2012	ND - 3.2	2.3	By-product of drinking water disinfection.		
HAA5 (Haloacetic Acids) (ppb)	60	N/A	2012	ND - 31		14.2		2012	7.1 - 16		12		2012	ND	ND	2012	ND	ND	By-product of drinking water disinfection.		
Chlorine (ppm)	[4.0]	[4.0]	2012	0.39 - 0.94		0.66		2012	0.4 - 0.90		0.61		2012	0.39 - 0.94	0.66	2012	0.0 - 1.4	0.69	Drinking water disinfectant added for treatment.		
MICROBIAL CONTAMINANTS Total Coliform Bacteria (Total Coliform Rule) (P/A)	No more than 5% of Samples Positive in any one month.	0	2012	ND		ND		2012	ND		ND		2012	ND	ND	2012	ND	ND	Naturally present in the environment		
ADDITIONAL CONSTITUENTS ANALYZED	MCL or [MRDL]	PHG or [MRDLG]	Sample Year	Range of Detectio		Average Amount		Sample Year	Range of Detection		Average Amount		Sample Year	Range of Detection	Average Amount	Sample Year	Range of Detection	Average Amount	TYPICAL SOURCE		
pH (unitless)(USEPA)	6.5 - 8.5	N/A	2012	6.7 - 8.3		7.6		2012	7.2 - 8.1		7.8		2012	6.8 - 7.7	7.3	2012	6.6 - 8.0	7.0	A measure of the acidity or alkalinity.		
PRIMARY STANDARDS REGULATED AT TAP	Action Level (AL)	PHG or [MRDLG]	Sample Year	Number of Samples	Tap Water 90th Percentile Results	Sites Above Action Level	Sample Year	Number of Samples	Tap Water 90th Percentile Results	Sites Above (AL)	Sample Year	Number of Samples	Tap Water 90th Percentile Results	Sample Year	Number of Samples	Tap Water 90th Percentile Results	Sample Year	Number of Samples	Tap Water 90th Percentile Results		
Lead (ppb)	15	0.2	*2011	30	1.3	0	*2011	21	5.5	0	*2011	4	90th Percentile = 0 Sites Above (AL) = 0	*2008	5	90th Percentile = 4.9 Sites Above (AL) = 0	Corrosion of household plumbing, discharges from industrial manufacturers, erosion of natural deposits.				
Copper (ppb)	1300	170	*2011	30	300	0	*2011	21	800	0	*2011	4	90th Percentile = 0 Sites Above (AL) = 0	*2008	5	90th Percentile = 380 Sites Above (AL) = 0	Corrosion of household plumbing, erosion of natural deposits, leaching from wood preservatives.				