

For more than 60 years, Suburban Water Systems (Suburban) has provided dependable, high-quality water that meets or exceeds federal and state health safety standards to thousands of families in the San Gabriel Valley and nearby areas. We are proud to report that 2013 was no exception.

### Who We Serve

Suburban provides drinking water to West Covina and portions of Walnut, Hacienda Heights, La Puente and City of Industry. Suburban serves approximately 125,000 people. In 2013, Suburban purchased 46 percent of its drinking water from the Metropolitan Water District of Southern California (MWDSC) and the Covina Irrigating Company (CIC) and utilized local groundwater for the remainder of its supply.

### Suburban's Drinking Water Complies With All Health, Safety Regulations

In order to ensure that tap water is safe to drink, the United States Environmental Protection Agency (USEPA) and the California Department of Public Health (CDPH) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. CDPH regulations also establish limits for contaminants in bottled water, which must provide the same protection for public health. Last year, as in the past, Suburban's drinking water was in full compliance with all applicable county, state and federal drinking water regulations. Our system of pumps, reservoirs and distribution pipelines are all routinely inspected, monitored and maintained by professional state-certified water system operators to protect the quality of the water from source to tap.

### Purpose Of This Report

This annual water quality report demonstrates Suburban's compliance with CDPH and USEPA regulations. It also provides important information to the public about where drinking water comes from, how drinking water is regulated, and what types of contaminants may be in the drinking water. You will find charts on the following page, which summarize the results of our ongoing water-quality testing program. Determine how the water quality in your area compares to government standards by finding the average values in the charts and comparing these values to the maximum contaminant level (MCL). Chemicals reported in the table were detected in the water by an independent accredited laboratory during 2013 or from the most recent tests. Most, but not all, of these chemicals occur naturally in the water. Some of these chemicals, however, are the result of industrial and agricultural contamination that occurred many decades ago. To help you understand what these test results mean, we have also included information about significant constituents, measurements, water quality definitions and advisories.

**Water Quality Goals** The water Suburban delivers to your home meets standards required by USEPA, CDPH and California Public Utilities Commission (PUC). Often, Suburban goes beyond what is required to monitor for constituents that have known health risks. The company uses only independent, state-certified water quality laboratories for testing. **The charts in this report include two types of water quality goals:**

- **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 USEPA.
- **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.

**Water Quality Standards** The quality of drinking water in the United States is regulated by the USEPA. Two state agencies, the CDPH and the PUC, supplement and enforce federal USEPA standards. Standards established by these agencies are used to set limits for substances that may affect health or aesthetic qualities of water. The water quality charts in this report cover the following standards:

- **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.
- **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 drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- **Primary Drinking Water Standard (PDWS):** MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, as well as water treatment requirements.
- **Regulatory Action Level (AL):** The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that a water system must follow.

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**Contaminants That May Be In The Water** The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- **Microbial contaminants**, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- **Inorganic contaminants**, such as salts and metals that can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, agricultural application and septic systems.
- **Radioactive contaminants** that can be naturally-occurring or be the result of oil and gas production and mining activities.
- **Lead**, if present in elevated levels, 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. Suburban 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 two 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 (800) 426-4791 or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

**Are There Risks?** 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.

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.

### **Public Participation Opportunities**

We value your input, concerns and suggestions. Please contact Michael Nutt, Communications Manager, at (626) 543-2531 or email him at [mnutt@swwc.com](mailto:mnutt@swwc.com) to inquire about possible future public participation opportunities. Also, please feel free to contact Ken Reich, Quality Assurance Manager, at (626) 543-2575, if you have any questions about water quality. **In addition, a number of local water boards hold monthly meetings that are open to the public, including:**

- **Metropolitan Water District of Southern California**  
Second Tuesday of the month, (213) 217-6000
- **Upper San Gabriel Valley Municipal Water District**  
First and third Tuesday of the month, (626) 443-2297
- **Main San Gabriel Basin Watermaster**  
First Wednesday of the month, (626) 815-1300
- **Three Valleys Municipal Water District**  
First and third Wednesday of the month, (909) 621-5568.

### **Source Water And Quality Water Assessments**

Suburban provides drinking water for the San Jose Hills Service Area from its wells in the Main San Gabriel groundwater basin. In 2013, Suburban also distributed supplemental drinking water from the following sources: 1) treated groundwater from La Puente Valley County Water District (LPVCWD) and Valley County Water District (VCWD) wells; 2) treated San Gabriel River water from CIC; and 3) treated imported surface water from MWDC. Suburban and the utilities providing supplemental water to Suburban have completed source water assessments in accordance with the federal Safe Drinking Water Act. The purpose of the source water assessment is to promote source water protection by identifying types of activities in the proximity of sources which could pose a

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threat to the water quality. You may request summaries of the assessments by contacting Ken Reich, Quality Assurance Manager, at (626) 543-2575 or you may request complete copies from the CDPH at (818) 551-2049.

Suburban, VCWD and LPVCWD source water assessments were completed between 2002 and 2008 and concluded groundwater sources are most vulnerable to the following activities: leaking underground storage tanks; known contaminant plumes from industrial waste discharges; landfills/dumps; gas stations; transportation corridors; machine shops; pesticide/fertilizer/petroleum storage and transfer areas; and agricultural drainage.

Every five years, MWDSC and CIC are required to examine and update possible sources of drinking water contamination in their surface water source waters. These reports are called watershed sanitary surveys. MWDSC's most recent surveys were completed in March 2012 (Colorado River) and May 2012 (State Water Project). Both source waters are considered most vulnerable to contamination from storm water runoff, agriculture, urbanization, recreational activities, wastewater discharges, wildlife, fires and other watershed-related factors that could affect water quality. CIC completed an update of its San Gabriel River watershed sanitary survey in 2010. The survey concluded that CIC's surface water is vulnerable to contamination from erosion, debris removal, forest fires and recreational activities.

**Nitrate Advisory** Nitrate can result from the presence of fertilizer. Nitrate in drinking water at levels above 45 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider. The level of nitrate in water provided by Suburban was well below 45 milligrams per liter. The average nitrate concentration in water delivered to customers was 8 milligrams per liter and was never above 33 milligrams per liter.

**Arsenic Advisory** Water purchased from the CIC exceeded the arsenic MCL during a brief period in 2013. The average level throughout the year was less than the MCL. The transient increase in arsenic was due to drought conditions in the San Gabriel River watershed source water reservoir. Upon discovery of the elevated arsenic, CIC immediately discontinued use of this source. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The USEPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

**Chloramines** Suburban purchases supplemental imported water for its San Jose Hills Service Area from the MWDSC. Chlorine and ammonia are combined at the MWDSC treatment facilities to produce chloramines. Chloramines are added to the water for public health protection because they prevent regrowth of bacteria in the distribution system pipes and also reduce the formation of certain chemicals that are regulated in drinking water. All of Suburban's water has some form of chlorine disinfectant residual at all times.

**Be advised that kidney dialysis units and aquarium owners must remove chloramines from water prior to use.** Hospitals or dialysis centers should be aware of the chloramines from water and should install proper chloramine removal equipment, such as carbon adsorption units. Aquarium owners can use readily available products to remove or neutralize chlorine. Chloraminated water is safe for people and animals to drink, and for all other general uses. Should you have any questions or concerns regarding chloramine in your water, please contact Ken Reich, Quality Assurance Manager at (626) 543-2575 or MWDSC (213) 217-6850.



**This information is important!** Please have someone translate it for you.

Esta información es importante.  
Por favor pídale a alguien que se la traduzca.

這個資訊非常之重要。  
請他人為您翻譯一下。

この情報は重要です。  
翻訳を依頼してください。

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

这一信息非常重要。  
请别人为您翻译一下。

Mahalaga ang impormasyong ito.  
Mangyaring ipasalin ito.

ਇਹ ਸੂਚਨਾ ਮਹੱਤਵਪੂਰਨ ਹੈ।  
ਕਿ੍ਹਾ ਕਰਕੇ ਕਿਸੀ ਤੋਂ ਇਸ ਦਾ ਅਨੁਵਾਦ ਕਰਾਉ।

이 안내는 매우 중요합니다.  
본인을 위해 번역인을 사용하십시오.

यह सूचना महत्वपूर्ण है।  
कृपा करके किसी से सहाय अनुवाद करावें।

هذا المعلومات هامة  
الرجاء أن تجعل أحد الأشخاص يساعدك في ترجمتها.

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**SUBURBAN WATER SYSTEMS SAN JOSE HILLS SERVICE AREA DRINKING WATER SOURCES TESTED IN 2013**

Chemical	Company or Agency Source		Covina Irrigating Company		Metropolitan Water District		Local Treated Groundwater		MCL Violation?	Typical Source of Contaminant
	MCL	PHG (MCLG)	San Gabriel River		Delta and Colorado River		Main San Gabriel Basin			
			2%	44%	44%	54%				
			Average	Range	Average	Range	Average	Range		
<b>Organic Chemicals</b>										
1,1-Dichloroethane (ppb)	5	3	ND	ND	ND	ND	<0.03	ND - 0.13	No	Industrial Solvent Contamination
1,1-Dichloroethylene (ppb)	6	10	ND	ND	ND	ND	<0.5	ND - 1.7	No	Industrial Solvent Contamination
Tetrachloroethylene (ppb)	5	0.06	ND	ND	ND	ND	<0.5	ND - 1.4	No	Industrial Solvent Contamination
Trichloroethylene (ppb)	5	1.7	ND	ND	ND	ND	0.8	ND - 2.6	No	Industrial Solvent Contamination
<b>Radiologicals</b>										
Alpha Radiation (pCi/L)	15	(0)	ND	ND	<3	ND - 3	<3	ND - 7.6	No	Erosion of Natural Deposits
Beta Radiation (pCi/l)	50	(0)	ND	ND	4	ND - 6	NR	NR	No	Decay of Natural and Man-Made Deposits
Radium 226 + 228 (pCi/L)	5	(0)	ND	ND	ND	ND	<1	ND - 1.7	No	Decay of Natural and Man-Made Deposits
Uranium (pCi/L)	20	0.43	ND	ND	2	1 - 2	2.6	ND - 7.1	No	Erosion of Natural Deposits
<b>Inorganic Chemicals</b>										
Aluminum (ppm)	1	0.6	ND	ND	0.2	0.1 - 0.2	ND	ND	No	Treatment Residue, Natural Deposits
Arsenic (ppb)	10	0.004	9.2	4.2 - 13	ND	ND	ND	ND	No	Decay of Natural and Man-Made Deposits
Barium (ppm)	1	2	0.1	0.1	ND	ND	<0.1	ND - 0.2	No	Runoff or Leaching from Natural Deposits
Chromium, total (ppb)	50	(100)	0.46	0.44 - 0.47	ND	ND	5.8	2.3 - 8.7	No	Runoff or Leaching from Natural Deposits
Fluoride (ppm) natural	2	1	0.4	0.35 - 0.48	n/a	n/a	0.4	0.2 - 0.5	No	Runoff or Leaching from Natural Deposits
Fluoride (ppm) treatment	Control Range 0.7 - 1.3 ppm		n/a	n/a	0.8	0.7 - 1.0	n/a	n/a	No	Water Additive for Dental Health
Nitrate (ppm as Nitrate)	45	45	0.6	1	0.5	0.5	15	6.7 - 33	No	Fertilizers, Septic Tanks
Perchlorate (ppb)	6	6	ND	ND	ND	ND	<4	ND - 4.8	No	Industrial Contamination
<b>Secondary Standards*</b>										
Aluminum (ppb)	200*	600	ND	ND	180	95 - 220	ND	ND	No	Treatment Residue, Natural Deposits
Chloride (ppm)	500*	n/a	7.5	7.4 - 7.6	88	84 - 91	22	15 - 41	No	Runoff or Leaching from Natural Deposits
Color (color units)	15*	n/a	ND	ND	1	1	ND	ND	No	Naturally-Occurring Organic Substances
Odor (TON)	3*	n/a	1	1	4	3 - 6	1	1	No	Naturally-Occurring Organic Materials
Specific Conductance (µmho)	1,600*	n/a	380	360 - 400	870	850 - 890	496	440 - 710	No	Ions in Water
Sulfate (ppm)	500*	n/a	28	23 - 32	180	170 - 190	32	ND - 61	No	Runoff or Leaching from Natural Deposits
Total Dissolved Solids (ppm)	1,000*	n/a	220	210 - 230	530	520 - 540	344	240 - 730	No	Runoff or Leaching from Natural Deposits
<b>Unregulated Contaminants</b>										
1,4-Dioxane (ppb)	NL = 1	n/a	ND	ND	<0.07	ND - 0.09	<0.07	ND - 0.15	n/a	Industrial Solvent Contamination
Alkalinity, total (ppm CaCO3)	Not Regulated	n/a	180	180	110	76 - 130	173	85 - 200	n/a	Runoff or Leaching from Natural Deposits
Bromochloromethane (ppb)	Not Regulated	n/a	ND	ND	<0.06	ND - 0.12	ND	ND	n/a	Fire Suppression (banned in 2002)
Calcium (ppm)	Not Regulated	n/a	42	39 - 45	58	56 - 61	54	41 - 99	n/a	Runoff or Leaching from Natural Deposits
Chlorate (ppb)	NL = 800	n/a	185	150 - 220	56	55 - 56	138	71 - 200	n/a	Disinfection Byproduct
Chromium, Hexavalent (ppb)	10 (proposed)	0.02	0.6	0.5 - 0.6	0.05	0.05 - 0.06	6.1	2.6 - 8.9	n/a	Runoff or Leaching from Natural Deposits
Hardness, total (ppm CaCO3)	Not Regulated	n/a	165	150 - 180	240	230 - 250	181	140 - 333	n/a	Runoff or Leaching from Natural Deposits
Hardness, total (grains/gal)	Not Regulated	n/a	9.6	8.8 - 11	14	13 - 15	11	8.2 - 19	n/a	Runoff or Leaching from Natural Deposits
Magnesium (ppm)	Not Regulated	n/a	14	12 - 15	22	21 - 23	13	10 - 21	n/a	Runoff or Leaching from Natural Deposits
Molybdenum (ppb)	Not Regulated	n/a	2.5	2.4 - 2.6	4.0	3.9 - 4.1	9.0	4.2 - 24	n/a	Runoff or Leaching from Natural Deposits
N-Nitrosodimethylamine (ppt)	NL=10	3	NR	NR	ND	ND	<2	ND - 5.6	n/a	Industrial Contamination
pH (pH units)	Not Regulated	n/a	7.8	7.8	8.1	8.1	7.7	6.8 - 8.1	n/a	Acidity, Hydrogen Ions
Potassium (ppm)	Not Regulated	n/a	4.2	3.6 - 4.8	4.2	4.0 - 4.3	2.8	2.1 - 5.0	n/a	Runoff or Leaching from Natural Deposits
Sodium (ppm)	Not Regulated	n/a	16	14 - 17	82	79 - 85	31	21 - 41	n/a	Runoff or Leaching from Natural Deposits
Strontium (ppb)	Not Regulated	n/a	470	450 - 490	845	820 - 870	299	250 - 410	n/a	Runoff or Leaching from Natural Deposits
Total Organic Carbon (ppm)	TT	n/a	NR	NR	2.4	2.1 - 2.7	NR	NR	n/a	Various Natural and Man-Made Sources
Vanadium (ppb)	NL = 50	n/a	2.6	2.4 - 2.7	2.3	2.2 - 2.4	8.2	3.7 - 11	n/a	Runoff or Leaching from Natural Deposits

ppb = parts-per-billion; ppm = parts-per-million; ppt = parts-per-trillion; pCi/L = picoCuries per liter; ntu = nephelometric turbidity units; ND = not detected; n/a = not applicable; NR = not required to be tested; < = average is less than the detection limit for reporting purposes; MCL = Maximum Contaminant Level; (MCLG) = federal MCL Goal; PHG = California Public Health Goal; µmho/cm = micromho per centimeter; NL = Notification Level; TT = Treatment Technique; \*Contaminant is regulated by a secondary standard to maintain aesthetic qualities.

Turbidity - Combined Filter Effluent	Treatment Technique	Turbidity Measurements	TT Violation?	Typical Source	Importance of Removing Turbidity in Drinking Water
<b>Metropolitan Water District Weymouth Filtration Plant</b>	1) Highest single turbidity measurement 2) Percentage of samples less than 0.3 ntu	0.05 100%	No	Soil Run-Off Soil Run-Off	Turbidity is a measure of the cloudiness of the water, an indication of particulate matter, some of which might include harmful microorganisms. Low turbidity in Metropolitan's and CIC's treated water is a good indicator of effective filtration. Filtration is called a treatment technique (TT). A treatment technique is a required process intended to reduce the level of contaminants in drinking water that are difficult and sometimes impossible to measure directly.
<b>Covina Irrigating Company Temple Filtration Plant</b>	1) Highest single turbidity measurement 2) Percentage of samples less than 0.2 ntu	0.3 95%	No	Soil Run-Off Soil Run-Off	

**SUBURBAN WATER SYSTEMS SAN JOSE HILLS DISTRIBUTION SYSTEM WATER QUALITY TESTED IN 2013**

Chemical	MCL (MRDL/MRDLG)	Average	Range	MCL Violation?	Typical Source Of Contaminant
<b>Disinfection Byproducts</b>					
Total Trihalomethanes (ppb)	80	39	1 - 54	No	Byproducts of Disinfection
Haloacetic Acids (ppb)	60	17	ND - 22	No	Byproducts of Disinfection
Chlorine Residual (ppm)	(4 / 4)	1.3	0.1 - 4.4	No	Disinfectant for Treatment
<b>Aesthetic Quality</b>					
Color (color units)	15	<3	ND - 13	No	Erosion of Natural Deposits
Turbidity (ntu)	5*	0.1	ND - 20	No	Erosion of Natural Deposits
Odor (threshold odor number)	3*	1	1 - 3	No	Erosion of Natural Deposits
<b>Unregulated Contaminants</b>					
Chlorate (ppb)	NL = 800	124	58 - 180	n/a	Erosion of Natural Deposits
Chromium, hexavalent (ppb)	10 (proposed)	3	0.06 - 5.1	n/a	Erosion of Natural Deposits
Molybdenum (ppb)	n/a	5	3.8 - 7.4	n/a	Erosion of Natural Deposits
Strontium (ppb)	n/a	476	1.5 - 830	n/a	Erosion of Natural Deposits
Vanadium (ppb)	NL = 50	5	2.5 - 6.9	n/a	Erosion of Natural Deposits

Eight locations in the distribution system are tested quarterly for total trihalomethanes and haloacetic acids; thirteen locations are tested weekly for color, odor and turbidity. MRDL = Maximum Residual Disinfectant Level; MRDLG = Maximum Residual Disinfectant Level Goal; ntu = nephelometric turbidity units; ND = not detected; NL = Notification Level; < = average is less than the detection limit for reporting; ppb = parts-per-billion; ppm = parts-per-million; MCL = Maximum Contaminant Level

Bacterial Quality	MCL (MCLG=0)	Highest Percent Positive	MCL Violation?	Typical Source Of Contaminant
Total Coliform Bacteria	No more than 5% monthly positive samples	0.7	No	Bacteria that Occur Naturally in Soils and Water

**LEAD AND COPPER ACTION LEVELS AT RESIDENTIAL TAPS**

Metal	Action Level	Public Health Goal	90th Percentile Value	AL Violation?	Typical Source Of Contaminant
Copper (ppm)	1.3	0.3	0.28	No	Corrosion of Household Plumbing
Lead (ppb)	15	0.2	<5	No	Corrosion of Household Plumbing

In the San Jose Hills Service Area, the most recent lead and copper at-the-tap samples were collected from residences in 2013. None of the 50 samples for lead and copper exceeded the respective Action Level (AL). A regulatory Action Level is the concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that a water system must follow.