# Water Quality **Report** 2011



### **Suburban** Water Systems

A SouthWest Water Company

## **Quality. Reliability. Dependability.**

For more than 50 years, Suburban Water Systems (Suburban) has provided dependable, high-guality 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 2011 was no exception.

0

### Who We Serve

Our service area is divided into two geographic areas: the San Jose Hills Service Area provides drinking water to West Covina and portions of Covina, Glendora, Walnut, Hacienda Heights, City of Industry and La Puente. The Whittier/La Mirada Service Area provides drinking water to La Mirada and portions of Whittier, Buena Park and La Habra.

### Purpose of the Report

This annual water quality report has been developed in compliance with the state of California Department of Public Health (CDPH) and the United States Environmental Protection Agency (USEPA) regulations to keep you informed about Suburban's drinking water quality. You will find charts on the following pages that summarize the results of our year-long water quality testing program. To help you understand what these test results mean, we have also included information about significant constituents, measurements and water quality definitions.

### Dedicated to Quality

Suburban has nine full-time employees in its Quality Assurance Department. Collectively this group holds 30 state and water industry certifications. The certified quality assurance technicians collect more than 9,000 water samples, testing more than 100 constituents from wells, reservoirs, distribution systems, and residences each year to safeguard the quality of tap water. These samples are analyzed by independent, state-certified laboratories for various substances as mandated by law. The results of these samples are then submitted, by the independent labs, directly to the CDPH, which oversees water quality for all public water systems in California. Through drinking water quality compliance testing programs carried out for groundwater, treated surface water and the distribution system, Suburban's drinking water is monitored from source to tap for regulated and unregulated constituents. CDPH 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.

000

The water quality tables in this report provide specific results from Suburban's testing program and show how our water compares to state and federal standards.

(continued on last page)

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

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

這個資訊非常之重要 請他人為您翻譯

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 trọn Xin nhở người dịch cho quý

यह सूचना महत्वपूर्ण है । करके किसी से ःसका अनुवाद करायें । هذه المعلومات هامة

这一信息非常重要。 请别人为您翻译一下。

alaga ang impormasyong ito. Mangyaring ipasalin ito.

ਇਹ ਸੂਚਨਾ ਮਹਤੱਵਪੂਰਣ ਹੈ । ਕ੍ਰਿਪਾ ਕਰਕੇ ਕਿਸੀ ਤੋਂ ਇਸ ਦਾ ਅਨੁਵਾਦ ਕਰਾਉ ।

이 안내는 매우 중요합니다. 본인을 위해 번역인을 사용하십시요.

الرجاء أن تجعل أحد الأشخاص يساعدك في ترجمتها.

### San Jose Hills Service Area

### Including West Covina and Portions of Covina, Glendora, City of Industry, Hacienda Heights and La Puente

Source Water and Water Quality Assessments Suburban provides drinking water for the San Jose Hills Service Area from its wells in the Main San Gabriel Basin. In 2011, Suburban also purchased and 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); 2) treated San Gabriel River water from Covina Irrigating Company (CIC); and 3) treated imported surface water from Metropolitan Water District of Southern California (Metropolitan).

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 threat to water quality. You may request summaries of the assessments by contacting Ken Reich, Suburban's Quality Assurance Manager (626) 543-2575 or you may request complete copies from the California Department of Public Health (818) 551-2049.

### **Groundwater Assessments**

Suburban, VCWD and LPVCWD source water assessments were completed from 2002 through 2008 and concluded that 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.

### Surface Water Assessments

Every five years, Metropolitan 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. Metropolitan'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 stormwater 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.

SUBURBAN WATER SYSTEMS SAN JOSE HILLS DISTRIBUTION SYSTEM WATER QUALITY TESTED IN 2011											
Ok and and	мсі	Covina		Glendora		West Covina (1)		MCL	Turi a l Gauna Of Gautania ant		
Chemical	(MRDĹ/MRDLG)	Average	Range	Average	Range	Average	Range	Violation?	Typical Source of Contaminant		
Disinfection Byproducts											
Total Trihalomethanes (ppb)	80	32	16 - 55	38	5 - 66	4	ND - 25	No	Byproducts of Disinfection		
Haloacetic Acids (ppb)	60	33	3 - 66	37	2 - 88	1	ND - 11	No	Byproducts of Disinfection		
Chlorine Residual (ppm)	(4 / 4)	1.0	0.6 - 1.2	0.7	0.4 - 1.2	1.1	1.0 - 1.3	No	Disinfectant Added for Treatment		
Aesthetic Quality											
Color (color units)	15*	ND	ND	ND	ND	ND	ND	No	Erosion of Natural Deposits		
Turbidity (ntu)	5*	0.2	ND - 0.7	<0.1	ND - 0.1	0.1	ND - 0.4	No	Erosion of Natural Deposits		
Odor (threshold odor number)	3*	1	1	1	1	1	1	No	Erosion of Natural Deposits		
Covina - 1 location in the distribution s	ystem is tested quarterly for to system is tested quarterly for	otal trihalomet	hanes and hald	acetic acids;	1 location is te	ested weekly fo	r color, odor and	turbidity.			

MRDL = Maximus (1) West Covina \*Covina iocation in the distribution system is tested quarterly for total trihalomethanes and haloacetic acids; 1 location is tested weekly for color, odor and turbidity. - 12 locations in the distribution system are tested quarterly for total trihalomethanes and haloacetic acids; 13 locations are tested weekly for color, odor and turbidity. Imum Residual Disinfectant Level; MRDLG = Maximum Residual Disinfectant Level Goal; ntu = nephelometric turbidity units; ND = not detected; < = average is less than the detection limit for reporting purposes ina area includes the cities of West Covina, La Puente, Industry, Hacienda Heights, and Walnut.

lated by a secondary sta rd to

Bacterial Quality				Highest Num	ber Positive		Highest Percent Positive		MCL	Typical Source Of Contaminant	
		MCL (MCLG = 0)	Cov	vina	Glendora		Wes	West Covina		Typical Source of Contaminant	
Total Coliform Bacteria		No more than 5% monthly positive samples for West Covina; no more than one monthly positive for Glendora and Covina	1		1		2.0%		No	Bacteria that occur naturally in soils and water	
LEAD AND COPPER ACTION LEVELS AT RESIDENTIAL TAPS											
	Ninetieth Percentile Value Sites Exceeding the AL/Sites Tested										
	Action		Ninetie	eth Percentile	Value	Sites Exc	eeding the AL	/Sites Tested			
Metal	Action Level	Public Health Goal	Ninetie Covina	eth Percentile Glendora	Value West Covina	Sites Exc Covina	eeding the AL Glendora	/Sites Tested West Covina	AL Violation?	Typical Source Of Contaminant	
Metal Copper (ppm)	Action Level	Public Health Goal	Ninetie Covina 0.5	Glendora 0.5	Value West Covina 0.5	Sites Exc Covina 0 / 10	eeding the AL Glendora 0 / 20	/Sites Tested West Covina 0 / 53	AL Violation?	Typical Source Of Contaminant Corrosion of Household Plumbing	
Metal Copper (ppm) Lead (ppb)	Action Level 1.3 15	Public Health Goal	Ninetie Covina 0.5 ND <5	Glendora 0.5 ND <5	Value West Covina 0.5 ND <5	Sites Exc   Covina   0 / 10   0 / 10	Glendora 0 / 20 0 / 20	/Sites Tested West Covina 0 / 53 0 / 53	No	Typical Source Of Contaminant Corrosion of Household Plumbing Corrosion of Household Plumbing	

SUBURBAN WA			ER SYSTE	R SYSTEMS SAN JOSE HILLS SERVICE AREA DRINKING WATER SOUL		ATER SOUR	CES TESTED IN 2011			
		Covina Irrigating Company San Gabriel River Treated Surface Water		Metropolitan Water District Imported Treated Surface Water		Local Treated Groundwater Suburban Water Systems La Puente Valley County WD Valley County Water District				
Areas Served by Drinking Water Sources in 2011			Covina, Glendora, West Covina		West Covina, Covina, Hacienda Heights, Walnut, City of Industry La Puente, Glendora		West Covina Hacienda Heights, Walnut, La Puente, City of Industry		Areas Served by Drinking Water Sources in 2011	
Chemical	MCL	PHG (MCLG)	Average	Range	Average	Range	Average	Range	MCL Violation?	Typical Source of Contaminant
Organic Chemicals	1									
1,1-Dichloroethylene (ppb)	6	10	ND	ND	ND	ND	<0.5	ND - 2	No	Industrial Solvent Contamination
Tetrachloroethylene (ppb)	5	0.06	ND	ND	ND	ND	<0.5	ND - 2	No	Industrial Solvent Contamination
Trichloroethylene (ppb)	5	1.7	ND	ND	ND	ND	<0.5	ND - 3	No	Industrial Solvent Contamination
Radiologicals	1						1		1	
Alpha Radiation (pCi/L)	15	(0)	ND	ND	<3	ND - 3	<3	ND - 8	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 - 2	No	Decay of Natural and Man-Made Deposits
Uranium (pCi/L)	20	0.43	ND	ND	2	1 - 2	3	ND - 8	No	Erosion of Natural Deposits
Inorganic Chemicals							•			
Aluminum (ppm)	1	0.6	0.2	0.1 - 0.5	0.1	ND - 0.2	ND	ND	No	Treatment Residue, Natural Deposits
Barium (ppm)	1	2	ND	ND	ND	ND	<0.1	ND - 0.2	No	Runoff or Leaching from Natural Deposits
Fluoride (ppm) Naturally-Occurring	2	1	0.3	0.3 - 0.4	NR	NR	0.4	0.2 - 0.6	No	Runoff or Leaching from Natural Deposits
Fluoride (ppm) Treatment-Related	Control Range 0.7 - 1.3 ppm Optimal Level 0.8 ppm		NR	NR	0.8	0.7 - 1.0	NR	NR	No	Water Additive for Dental Health
Nitrate (ppm as Nitrate)	45	45	<2	ND - 3	<2	ND - 2	13	ND - 31	No	Fertilizers, Septic Tanks
Nitrate+Nitrite (ppm as Nitrogen)	10	10	<0.4	ND - 1	<0.4	ND - 0.5	3	ND - 7	No	Fertilizers, Septic Tanks
Perchlorate (ppb)	6	4	ND	ND	ND	ND	<2	ND - 5	No	Industrial Contamination
Secondary Standards*										
Aluminum (ppb)	200*	600	220	98 - 450	110	ND - 220	ND	ND	No	Treatment Residue, Natural Deposits
Chloride (ppm)	500*	n/a	6	5 - 6	70	63 - 76	21	14 - 41	No	Runoff or Leaching from Natural Deposits
Color (color units)	15*	n/a	ND	ND	2	2	ND	ND	No	Naturally-Occurring Organic Substances
Odor (TON)	3*	n/a	1	1	2	2	1	1	No	Naturally-Occurring Organic Materials
Specific Conductance (µmho/cm)	1,600*	n/a	270	260 - 310	630	320 - 870	481	420 - 710	No	Ions in Water
Sulfate (ppm)	500*	n/a	17	14 - 19	150	120 - 170	39	26 - 59	No	Runoff or Leaching from Natural Deposits
Total Dissolved Solids (ppm)	1,000*	n/a	160	150 - 170	440	390 - 480	334	250 - 470	No	Runoff or Leaching from Natural Deposits
Turbidity (ntu)	5*	n/a	0.1	ND - 0.2	0.05	0.02 - 0.07	0.1	ND - 0.2	No	Runoff or Leaching from Natural Deposits
Unregulated Contaminants	n		1			r	1			
Alkalinity, Total (ppm as CaCO3)	Not Regulated	n/a	145	140 - 150	82	43 - 110	184	49 - 270	n/a	Runoff or Leaching from Natural Deposits
Calcium (ppm)	Not Regulated	n/a	41	40 - 41	48	41 - 54	54	41 - 110	n/a	Runoff or Leaching from Natural Deposits
Hardness, Total (ppm as CaCO3)	Not Regulated	n/a	145	140 - 150	170	60 - 250	188	140 - 360	n/a	Runoff or Leaching from Natural Deposits
Hardness, Total (grains/gal)	Not Regulated	n/a	8.4	8.2 - 8.8	9.9	3.5 - 15	11	8.2 - 21	n/a	Runoff or Leaching from Natural Deposits
Magnesium (ppm)	Not Regulated	n/a	10	10 - 11	18	16 - 21	13	10 - 21	n/a	Runoff or Leaching from Natural Deposits
N-Nitrosodimethylamine (ppt)	NL = 10	n/a	ND	ND	<2	ND - 3	<2	ND - 7	n/a	Industrial Contamination, Disinfection Byproduct
pH (pH units)	Not Regulated	n/a	7.9	7.9	8.1	7.8 - 8.8	/./	7.3 - 8.1	n/a	Acidity, Hydrogen Ions
Potassium (ppm)	Not Regulated	n/a	3	3 - 4	4	3 - 4	3	2 - 5	n/a	Runoff or Leaching from Natural Deposits
Sodium (ppm)	Not Regulated	n/a	10	9 - 10	69	62 - 76	32	21 - 41	n/a	Runoff or Leaching from Natural Deposits
Total Organic Carbon (ppm)		n/a	1.6	0.9 - 3.2	2.3	1.7 - 2.9		NR NR	n/a	Various Natural and Man-Made Sources
<pre>pb = parts-per-billion; ppm = parts &lt; = average is less than the detectii NL = Notification Level; TT = Treatr</pre>	on limit for repor nent Technique;	t = parts-p rting purpo *Contamii	ses; MCL = Ma ant is regulat	L = picocuries per aximum Contaminar ed by a secondary s	iter; ntu = ne it Level; (MCL) tandard to ma	G) = federal M G) = federal M intain aestheti	c qualities.	California Public	Health Goal;	plicable; NR = not required to be tested; imho/cm = micromho per centimeter;
Turbidity - Combined	Filter Effluent		Treatment Technique	Turbidity Measurements	TT Violation?	Typical Source		Importan	ce of Remov	ing Turbidity in Drinking Water
Metropolitan Water District Wey 1) Highest single turbidit	mouth Filtration	Plant	1 NTU	0.07	No	Soil Run-Off	Turbidity is a	measure of the	cloudiness of t	the water, an indication of particulate matter, some of
2) Percentage of samples I	less than 0.3 NTI	U	95%	100%	No	Soil Run-Off	which might	include harmful	microorganis	ms. Low turbidity in Metropolitan's and CIC's treated
Covina Irrigating Company Te	mple Filtration P	lant	1 NTU	0.19	No	Soil Run-Off	treatment tec	hnique is a requi	red process in	tended to reduce the level of contaminants in drinking netimes impossible to measure directly
2) Percentage of samples I	U	95%	100%	No	Soil Run-Off		water that are difficult and sometimes impossible to measure directly.			

### Whittier/La Mirada Service Area

### Including La Mirada and Portions of Whittier, La Habra and Buena Park Source Water and Water Ouality Assessments

Suburban provides drinking water for its Whittier/La Mirada Service Area (La Mirada and portions of Whittier, La Habra and Buena Park) from its four active wells in the Main San Gabriel Basin and two wells in the Central Basin. Suburban also purchased supplemental drinking water from California Domestic Water Company (Cal Domestic). Cal Domestic water comes from wells in the Main San Gabriel Basin. Suburban has a connection to purchase imported water from the Metropolitan Water District of Southern California (Metropolitan). This water was not served during 2011. during 2011.

Suburban and Cal Domestic 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 threat to the water quality.

Suburban and Cal Domestic source water assessments were completed in 2002 and concluded that groundwater sources are most vulnerable to the following activities or facilities associated with contaminants detected in the water supply: leaking underground storage tanks, known contaminant plumes from industrial waste discharges, and gas stations. In addition, these sources are vulnerable to the following activities and facilities not associated with contaminants detected in the water supply: pesticide/fertilizer/petroleum storage and transfer areas, metal and machine shops, and agricultural drainage. You may request a summary of the assessments by contacting Ken Reich, Suburban's Quality Assurance Manager (626) 543-2575, or you may request a complete copy from the California Department of Public Health (CDPH) (818) 551-2049.

**Cal Domestic Monitoring Violation** On November 23, 2011, one of Cal Domestic's wholesale water customers, Brea, reported a total coliform positive result in its distribution system. On November 24, 2011, Brea collected repeat samples which returned absent results for any further total coliform being present, thus indicating no problems were occurring in its distribution system. Upon being notified by Brea of the initial positive result, Cal Domestic was required under the Groundwater Rule to collect follow-up samples for E. coli from its wells operating on November 23, 2011. These samples were not collected until December 5, 2011, which indicated the absence of E. coli. Cal Domestic cannot be sure of the quality of its drinking water during the time period between November 23 and December 5, 2011. Cal Domestic failed to complete required sampling in a timely manner resulting in a non-health related monitoring violation issued by the CDPH.

SUBURBAN WATER SYSTEMS WHITTIER AND LA MIRADA AREA DISTRIBUTION SYSTEM WATER QUALITY TESTED IN 2011											
	MCL	Whittier and	La Habra (1)	La Mirada and	Buena Park (2)						
Chemical	(MRDL/MRDLG)	Average	Range	Average	Range	MCL Violation?	Typical Source of Contaminant				
Disinfection Byproducts											
Total Trihalomethanes (ppb)	80	11	6 - 17	11	ND - 68	No	Byproducts of Chlorine Disinfection				
Haloacetic Acids (ppb)	60	3	ND - 5	2	ND - 5	No	Byproducts of Chlorine Disinfection				
Chlorine Residual (ppm)	(4 / 4)	0.9	0.98 - 1.8	1	0.2 - 2.7	No	Disinfectant Added for Treatment				
Aesthetic Quality	Aesthetic Quality										
Turbidity (ntu)	5*	<0.1	ND - 0.3	<0.1	ND - 0.3	No	Erosion of Natural Deposits				
Odor (threshold odor number)	3*	1	1	1	1	No	Erosion of Natural Deposits				

locations in the distribution system are tested quarterly for total trihalomethanes and haloacetic acids; 6 locations are tested weekly for color, odor and turbidity. 12 locations in the distribution system are tested quarterly for total trihalomethanes and haloacetic acids; 5 locations are tested weekly for color, odor and turbidity. dual Disinfectant Level; MRDLG = Maximum Residual Disinfectant Level Goal; ntu = nephelometric turbidity units; ND = not detected n the detection limit for reporting purposes; \*Contaminant is regulated by a secondary standard tomaintain aesthetic qualities. - 3 locations m - 12 locatio

				Highest Monthly F							
Bacterial Quality	MCL	MCLG	Whittier and La Habra	MCL Violation?	La Mirada and Buena Park	MCL Violation?	Typical Source of Contaminant				
Total Coliform Bacteria	No more than 5% monthly positives	0	1.1	No	1.7	No	Natu	arally present in the enviroment			
	LEAD AND COPPER ACTION LEVELS AT RESIDENTIAL TAPS										
Metal	Action Level	PHG	Ninetieth Pe	rcentile Value	AL Violation?	Typical Source of Contaminant					
			Whittier/LH	La Mirada/BP	Whittier/LH	La Mirada/BP					
Copper (ppm)	1.3	0.3	0.2	0.2	0/30	0/30	No	Corrosion of Household Plumbing			
Lead (ppb)	15	0.2	ND <5	ND <5	0/30	0/30	No	Corrosion of Household Plumbing			

er and La Mirada service areas, the most recent lead and copper at-the-tap samples were collected from residences in 2010. None of the samples for lead and copper exceeded the respective Action Level (AL). Action Level is the concentration of a contaminant which if exceeded triggers treatment or other requirements that a water system must follow. regulatory

SUBURBAN WATER SYSTEMS WHITTIER AND LA MIRADA SERVICE AREA DRINKING WATER SOURCES TESTED IN 2011										
			California Do Grou	omestic Water Co. undwater	Suburban Wa Ground	ter Systems water				
Areas Served by Drinking Water Sources in 2011			Whittier, La M La	lirada, Buena Park, a Habra	Whittier, La Mirao La Ha	la, Buena Park, bra	Areas Served by Drinking Water Sources in 2011			
Chemical	MCL	PHG (MCLG)	Average	Range	Average	Range	MCL Violation?	Typical Source of Contaminant		
Organic Chemicals										
cis-1,2-Dichloroethylene (ppb)	6	100	ND	ND	<0.5	ND - 1	No	Industrial Solvent Contamination		
Tetrachloroethylene (ppb)	5	0.06	<0.5	ND - 1	ND	ND	No	Industrial Solvent Contamination		
Trichloroethylene	5	1.7	1	1 2	ND	ND	No	Industrial Solvent Contamination		
Radiologicals		1								
Alpha Radiation (pCi/L)	15	(0)	2	ND - 8	<3	ND - 5	No	Erosion of Natural Deposits		
Uranium (pCi/L)	20	0.43	3	2 - 5	2	ND - 3	No	Erosion of Natural Deposits		
Inorganic Chemicals										
Arsenic (ppb)	10	0.004	ND	ND	<2	ND - 3	No	Erosion of Natural Deposits		
Barium (ppm)	1	2	0.1	0.1	<0.1	ND - 0.1	No	Erosion of Natural Deposits		
Fluoride (ppm) Naturally-Occurring	2	1	0.33	0.31 - 0.34	0.25	0.20 - 0.29	No	Erosion of Natural Deposits		
Nitrate (ppm as Nitrate)	45	45	16	7 - 20	5	ND - 14	No	Fertilizers, Septic Tanks		
Nitrate+Nitrite (ppm as N)	10	10	4	2 - 5	<2	ND - 3	No	Fertilizers, Septic Tanks		
Secondary Standards*										
Chloride (ppm)	500*	n/a	20	19 - 21	99	88 - 110	No	Leaching from Natural Deposits		
Color (color units)	15*	n/a	ND	ND	<3	ND - 15	No	Naturally-Occurring Organic Substances		
Manganese (ppb)	50*	n/a	ND	ND	<20	ND - 47				
MBAS - Surfactants (ppb)	500*	n/a	50	ND - 100	ND	ND	No	Municipal and Industrial Waste		
Odor (TON)	3*	n/a	1	1	<1	ND - 1	No	Naturally-Occurring Organic Materials		
Specific Conductance (µmho/cm)	1,600*	n/a	500	480 - 520	808	580 - 930	No	Ions in Water; Seawater Influence		
Sulfate (ppm)	500*	n/a	41	36 - 45	109	75 - 130	No	Erosion of Natural Deposits		
Total Dissolved Solids (ppm)	1,000*	n/a	305	290 - 320	509	370 - 590	No	Erosion of Natural Deposits		
Turbidity (ntu)	5*	n/a	0.02	ND - 0.1	0.1	ND - 1.6	No	Erosion of Natural Deposits		
Unregulated Contaminants										
Alkalinity, total (ppm as CaCO3)	Not Regulated	n/a	170	160 - 180	165	150 - 180	n/a	Erosion of Natural Deposits		
Calcium (ppm)	Not Regulated	n/a	67	62 - 71	59	39 - 84	n/a	Erosion of Natural Deposits		
Hardness, Total (ppm as CaCO3)	Not Regulated	n/a	225	220 - 230	209	160 - 280	n/a	Erosion of Natural Deposits		
Hardness, Total (grains/gal)	Not Regulated	n/a	13	13-14	12	9-16	n/a	Erosion of Natural Deposits		
Magnesium (ppm)	Not Regulated	n/a	12	12	15	12 - 18	n/a	Erosion of Natural Deposits		
pH (pH units)	Not Regulated	n/a	7.7	7.5 - 7.9	8.0	7.7 - 8.2	n/a	Acidity, Hydrogen Ions		
Potassium (ppm)	Not Regulated	n/a	4	3 - 4	4	2 - 5	n/a	Erosion of Natural Deposits		
Sodium (ppm)	Not Regulated	n/a	15	15 - 16	90	59 - 140	n/a	Erosion of Natural Deposits		
pph = parts-per-billion: ppm = parts-per-million: ppt = parts-per-trillion: pCi/L = picoCuries per liter: ptu = penhelometric turbidity units: ND = pot detected: p/a = pot applicable: NR = pot required to be tested: TT = Treatment Technique:										

arage is less than the detection limit for reporting purposes; MCL = Maxim minant is regulated by a secondary standard to maintain aesthetic qualities. nt Level; (MCLG) = federal MCL Goal; PHG = California Public

### Water Quality Data 2011

To determine how the water quality in your area compares to government standards, find the average and range in the column(s) in the charts for your area and compare these values to the MCL and the PHG columns. For instance, Whittier, La Mirada, La Puente and La Habra customers should refer to the tables for "Suburban Water Systems Whittier and La Mirada Service Area Drinking Water Sources Tested in 2011". Covina, West Covina, Walnut, Hacienda Heights, City of Industry, La Puente and Glendora customers should refer to the tables for "Suburban Water Systems San Jose Hills Service Area Drinking Water Sources Tested in 2011". Please note that some customers receive water from more than one of our groundwater and surface water sources and should refer to the appropriate columns that represent their area. The cities served by a particular source of water are indicated in the tables beneath the description of the source. Results reported in the tables were detected in the water during the year 2011 or from the most recent tests.

### Water Quality Standards

The quality of drinking water in the United States is regulated by the USEPA. Two state agencies, the CDPH and the California Public Utilities Commission (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 tables 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 head and the fourth of the fourtho 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, and 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.

In order to ensure that tap water is safe to drink, USEPA and 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 that must provide the same protection for public health.

### Water Quality Goals

The water Suburban delivers meets standards required by USEPA, CDPH, and 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.

### 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, that 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 pregiding high guality dripking water, but cappet 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 (800) 426-4791 or at **www.epa.gov/safewater/lead.**

### 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 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 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 13 milligrams per liter and was never above 31 milligrams per liter.

### 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 bealth care providers. USEPA/ 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 feel free to contact Michael Nutt, Communications Manager (626) 543-2531 or email us at: mnutt@swwc.com to inquire about possible future public participation opportunities. Also, please feel free to contact Ken Reich, Quality Assurance Manager (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.
- Main San Gabriel Basin Watermaster first Wednesday of the month, (626) 815-1300.
- **Upper San Gabriel Valley Municipal Water District** first and third Tuesday of the month, (626) 443-2297.
- **Central Basin Municipal Water District** fourth Monday of the month, (310) 217-2222.
- Three Valleys Municipal Water District first and third Wednesday of the month, (909) 621-5568.

### Chloramines

During the summer months Suburban purchases supplemental imported water for its San Jose Hills Service Area from Metropolitan. Chlorine and ammonia are combined at Metropolitan treatment facilities to produce chloramines. Also, water delivered year-round to some of our customers in La Mirada and Buena Park also contain chloramines which are added at one of Suburban's treatment facilities. 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 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. Chloraminated water is safe for people and animals to drink, and for all other general uses.

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 chloramines removal equipment, such as carbon adsorption units. Aquarium owners can use readily available products to remove or neutralize chloramines.

Should you have any questions or concerns regarding chloramines in your water, please contact Ken Reich, Suburban's Quality Assurance Manager (626) 543-2575 or Metropolitan (213) 217-6850.

### Drinking Water Fluoridation

All water delivered by Suburban contains naturally-occurring fluoride. All water delivered by Suburban contains naturally-occurring fluoride. In November 2007, Metropolitan joined a majority of the nation's public water suppliers in adding fluoride to drinking water in order to prevent tooth decay. In line with recommendations from the CDPH, as well as the CDC, Metropolitan adjusts the natural fluoride level in imported water from the Colorado River and State Project water to the optimal range for dental health of 0.7 to 1.3 parts per million. Fluoride levels in the drinking water are limited under California state regulations at a maximum dosage of 2 parts per million. regulations at a maximum dosage of 2 parts per million.

There are many places to go for additional information about the fluoridation of drinking water:

### U.S. Center for Disease Control & Prevention www.cdc.gov/fluoridation/

California Department of Public Health www.cdph.ca.gov/certlic/drinkingwater/Pages/Fluoridation.aspx Suburban Water Systems

www.swwc.com/suburban/fluoride



Suburban Water Systems A SouthWest Water Company 1325 N. Grand Avenue Suite 100 Covina, CA 91724-4044 www.swwc.com/suburban (626) 543-2500