



**Suburban
Water Systems**
A SouthWest Water Company

2016 Water Quality Report

WHITTIER SYSTEM

This report reflects
water quality testing
conducted during 2016.



A Word of Assurance about

Your 2016 Water Quality Report

Suburban has four, full-time employees in the Quality Assurance Department who test the quality of water from Suburban's wells, reservoirs and distribution system in its Whittier system each day. Collectively, this group holds ten state and water industry certifications.

The certified quality assurance professionals collect several thousand water samples each year to safeguard the quality of your tap water. These samples are analyzed in the field at the time of sample collection or by independent, state-certified laboratories for various substances as mandated by law. The results of these samples are then submitted to the State Water Board (SWB), which oversees water quality compliance for all public water systems in California. California Domestic Water Company (Cal Domestic) has its own drinking monitoring programs that comply with the United States Environmental Protection Agency (USEPA) and California regulatory requirements.

Your drinking water is constantly monitored from source to tap for regulated and unregulated constituents through comprehensive drinking water quality compliance testing programs carried out by dedicated Suburban and Cal domestic professionals.





For more than 60 years, Suburban Water Systems (Suburban) has provided dependable, high-quality water that complies with federal and state health safety standards to thousands of families in the San Gabriel Valley and nearby areas. We are proud to report that 2016 was no exception.



Who We Serve

Suburban's Whittier system provides drinking water to portions of the cities of Whittier, La Habra and La Habra Heights. Suburban serves approximately 65,000 people in its Whittier system service area. In 2016, all of Suburban's water supply came from local groundwater wells. Suburban Water Systems provides drinking water for its Whittier service area from its four active wells in the Main San Gabriel Groundwater Basin. Suburban also distributes supplemental drinking water from Cal Domestic. Cal Domestic water comes from wells in the Main San Gabriel Groundwater Basin.

Suburban's Drinking Water Complies with All Health and Safety Regulations

In order to ensure that tap water is safe to drink, the USEPA and the SWB prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. SWB 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 SWB 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 comprehensive 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 independent accredited laboratories during 2016 or from the most recent tests. Most, but not all, of these chemicals are minerals, metals and radiologicals occurring naturally in the water. Some of these chemicals, however, are the result of 1) drinking water treatment processes – chlorine residual, disinfection byproducts; 2) agricultural/industrial practices that occurred many decades ago – nitrate, tetrachloroethylene, trichloroethylene; and 3) household plumbing – copper.

To help you understand what these test results mean, we have also included information about significant constituents, measurements, water quality definitions and advisories.



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.



Household Issues that May Affect You or Your Water Quality...

Hot Water Heaters: Many odor complaints may be traced to the home's hot water heater. Remember to follow manufacturer's instructions and flush hot water heaters regularly. This will flush out any sediments that may have accumulated, provide good water turnover to maximize water quality, and help keep your unit in good working order.

Point of Use or Home Water Filtration Units: Be vigilant in changing or cleaning any filters or media on your home units. Always follow the manufacturers instructions. Remember, the water is only as clean as the filter allows. Improperly maintained filters can deliver very poor quality water.



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/lead.



Suburban Water Systems ~ Whittier Drinking Water Sources Tested in 2016

			California Domestic Water Company		Suburban Water Systems			
			Source/Percent of Total 2016 Usage: Groundwater: 53%		Source/Percent of Total 2016 Usage: Groundwater: 47%			
Chemical	MCL	PHG (MCLG)	Average	Range	Average	Range	MCL Violation?	Typical Source of Contaminant
Organic Chemicals								
Tetrachloroethylene (ppb)	5	0.06	0.7	ND – 1	ND	ND	No	Industrial Solvent Contamination
Trichloroethylene	5	1.7	1	ND – 2	ND	ND	No	Industrial Solvent Contamination
Radiologicals								
Alpha Radiation (pCi/L)	15	(0)	<3	ND – 4	ND	ND	No	Erosion of Natural Deposits
Uranium (pCi/L)	20	0.43	3	2 – 3	2	1 – 2	No	Erosion of Natural Deposits
Inorganic Chemicals								
Arsenic (ppb)	10	0.004	2	2	ND	ND	No	Erosion of Natural Deposits
Barium (ppm)	1	2	0.1	0.1	ND	ND	No	Erosion of Natural Deposits
Fluoride (ppm) naturally-occurring	2	1	0.3	0.3	0.2	0.2 – 0.3	No	Erosion of Natural Deposits
Chromium, hexavalent (ppb) (2013)	10	0.02	3	3	ND	ND	No	Erosion of Natural Deposits
Nitrate (ppm as N) (2016)	10	10	4	3 – 5	3	1 – 4	No	Fertilizers, Septic Tanks
Secondary Standards*								
Chloride (ppm)	500*	n/a	19	19	105	97 – 120	No	Erosion of Natural Deposits
MBAS – surfactants (ppb)	500*	n/a	ND	ND	43	ND – 70	No	Municipal and Industrial Waste
Odor (TON)	3*	n/a	1	1	1	1	No	Naturally-Occurring Organics
Specific Conductance (µmho/cm)	1,600*	n/a	490	490	921	880 – 960	No	Ions in Water; Seawater Influence
Sulfate (ppm)	500*	n/a	46	42 – 49	125	120 – 140	No	Erosion of Natural Deposits
Total Dissolved Solids (ppm)	1,000*	n/a	305	280 – 330	564	540 – 620	No	Erosion of Natural Deposits
Turbidity (NTU)	5*	n/a	ND	ND	<0.1	ND – 0.1	No	Erosion of Natural Deposits
Unregulated Contaminants								
Alkalinity, total (ppm CaCO ₃)	Not Regulated	n/a	165	160 – 170	164	150 – 180	n/a	Erosion of Natural Deposits
Calcium (ppm)	Not Regulated	n/a	68	67 – 68	82	78 – 88	n/a	Erosion of Natural Deposits
Hardness, total (ppm CaCO ₃)	Not Regulated	n/a	220	220	270	260 – 290	n/a	Erosion of Natural Deposits
Hardness, total (grains/gal)	Not Regulated	n/a	13	13	15	15 – 17	n/a	Erosion of Natural Deposits
Magnesium (ppm)	Not Regulated	n/a	13	13	15	14 – 17	n/a	Erosion of Natural Deposits
pH (pH units)	Not Regulated	n/a	7.8	7.8	7.8	7.7 – 7.9	n/a	Acidity, Hydrogen Ions
Potassium (ppm)	Not Regulated	n/a	4	4	5	5	n/a	Erosion of Natural Deposits
Sodium (ppm)	Not Regulated	n/a	16	16	78	74 – 88	n/a	Erosion of 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; µmho/cm = micromho per centimeter; < = average is less than the detection limit for reporting purposes; MCL = Maximum Contaminant Level; (MCLG) = federal MCL Goal; PHG = California Public Health Goal; NL = Notification Level

*Contaminant is regulated by a secondary standard to maintain aesthetic qualities.

Suburban Water Systems ~ Whittier Distribution System Tested in 2016

Chemical	MCL (MRDL/MRDLG)	Average	Range	MCL Violation?	Typical Source of Contaminant
Disinfection Byproducts					
Total Trihalomethanes (ppb)	80	20	2 -24	No	Byproducts of Chlorine Disinfection
Haloacetic Acids (ppb)	60	2	ND – 4	No	Byproducts of Chlorine Disinfection
Chlorine Residual (ppm)	(4 / 4)	1	0.4 – 2	No	Disinfectant Added for Treatment
Aesthetic Quality					
Color (Color Units)	15*	ND	ND	No	Erosion of Natural Deposits
Turbidity (NTU)	5*	0.1	ND – 8	No	Erosion of Natural Deposits
Odor (threshold odor number)	3*	1	1 – 5	No	Erosion of Natural Deposits

Eight locations in the distribution system are tested quarterly for total trihalomethanes and haloacetic acids; six 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;

< = average is less than the detection limit for reporting purposes; **NL** = Notification Level; **NA** = not applicable

*Contaminant is regulated by a secondary standard to maintain aesthetic qualities.

Bacterial Quality	MCL	MCLG	Highest Monthly Percent Positives	MCL Violation?	Typical Source of Contaminant
Total Coliform Bacteria	No more than 5% monthly positives	0	1%	No	Naturally present in the environment

Lead and Copper Action Levels at Residential Taps

Metal	Action Level	Public Health Goal (PHG)	90% Percentile Value	Exceeding AL / No. of Samples	AL Violation	Typical Source of Contaminant
Copper (ppm)	1.3	0.3	0.25	0 / 30	No	Corrosion of Household Plumbing
Lead (ppb)	15	0.2	<5	0 / 30	No	Corrosion of Household Plumbing

The most recent lead and copper at-the-tap samples were collected from residences in 2016. None of the 30 samples for lead and copper exceeded the respective Action Level (AL).

PHG = California Public Health Goal

A regulatory Action Level is the concentration of a contaminant which if exceeded triggers treatment or other requirements that a water system must follow.

Water Quality Goals

The water Suburban delivers to your home meets standards required by USEPA, SWB 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 SWB 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.



Source Water and Water Quality Assessments

Suburban Water Systems provides drinking water for its Whittier Service Area from its four active wells in the Main San Gabriel Groundwater Basin. Suburban also distributes supplemental drinking water from California Domestic Water Company (Cal Domestic). Cal Domestic water comes from wells in the Main San Gabriel Groundwater Basin.

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, the sources are considered most 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, Quality Assurance Manager, at (626) 543-2575 or you may request a complete copy from the SWB at (818) 551-2049.



How to Read Your Water Meter

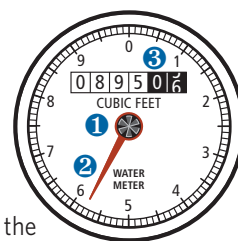
Your water meter is usually located between the sidewalk and curb under a cement cover. Remove the cover by inserting a screwdriver in the hole in the lid and then carefully lift the cover. The meter reads straight across, like the odometer on your car. Read only the black numbers (0895).

If you are trying to determine if you have a leak, turn off all the water in your home, both indoor and outdoor faucets, and then check the dial for any movement of the low-flow indicator. If there is movement, that indicates a leak between the meter and your plumbing system.

❶ **Low-Flow Indicator** ~ The low flow indicator will spin if any water is flowing through the meter.

❷ **Sweep Hand** ~ Each full revolution of the sweep hand indicates that one cubic foot of water (7.48 gallons) has passed through the meter. The markings at the outer edge of the dial indicate tenths and hundredths of one cubic foot.

❸ **Meter Register** ~ The meter register is a lot like the odometer on your car. The numbers keep a running total of all the water that has passed through the meter. The register shown here indicates that 89,505 cubic feet of water has passed through this meter.



The Quality of Your Water Is Our Primary Concern



This report contains important information
about your drinking water.
Translate it, or speak with someone who understands it.

يحتوي هذا التقرير على معلومات هامة عن نوعية ماء الشرب في منطقتك. يرجى ترجمته، أو ابحث التقرير مع صديق لك يفهم هذه المعلومات جيداً.

Arabic

この資料には、あなたの飲料水についての大切な情報が書かれています。内容をよく理解するために、日本語に翻訳して読むか説明を受けてください。

Japanese

这份报告中有些重要的信息，讲到关于您所在社区的水的品质。请您找人翻译一下，或者请能看得懂这份报告的朋友给您解释一下。

Chinese

이 보고서는 귀하의 거주하는 지역의 수질에 관한 중요한 정보가 들어 있습니다. 이것을 번역하거나 충분히 이해하시는 친구와 상의하십시오.

Korean

Ang ulat na ito ay naglalaman ng mahalagang impormasyon tungkol sa iyong pag-inom ng tubig. Isalin ito, o makipag-usap sa isang tao na nauunawaan ito.

Tagalog

इस रिपोर्ट में "पाने के पानी" के विषय पर बहुत जरूरी जानकारी दी गई है। कृपया इसका अनुवाद कीजिये, या किसी जानकार से इस बारे में पूछिये।

Hindi

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

Spanish

Bản báo cáo có ghi những chi tiết quan trọng về phẩm chất nước trong cộng đồng quý vị. Hãy nhờ người thông dịch, hoặc hỏi một người bạn biết rõ về vấn đề này.

Vietnamese



Public Participation Opportunities

We value your input, concerns and suggestions. Please contact **Lauren James, Communications Manager**, at (626) 543-2531 or email her at LJames@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:

Main San Gabriel Basin Watermaster

First Wednesday of the month, (626) 815-1300

San Gabriel Basin Water Quality Authority

Third Wednesday of every month, (626) 338-5555

Upper San Gabriel Valley Municipal Water District

First and third Tuesday of the month, (626) 443-2297



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