



## A Word of Assurance about

## Your 2016 Water Quality Report

buburban has four, full-time employees in the Quality Assurance Department who test the quality of water in the San Jose Hills distribution 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 California State Water Board (SWB), which oversees water quality compliance for all public water systems in California. Covina Irrigating Company (CIC) and Metropolitan Water District of Southern California (MWDSC), the sources of our water, have their own comprehensive drinking water source and treatment 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 hundreds of dedicated Suburban, CIC, and MWDSC 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.



Suburban provides drinking water to West Covina and portions of Walnut, Hacienda Heights, La Puente and City of Industry. Suburban serves approximately 170,000 people in our San Jose Hills System. In 2016, Suburban utilized local groundwater for 75 percent of its supply. Suburban purchased treated surface water for the remainder of its drinking water from the MWDSC and the CIC.

## 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, aluminum; 2) agricultural/industrial practices that occurred many decades ago — nitrate, perchlorate, N-nitrosodimethylamine, tetrachloroethylene, trichloroethylene, 1,1-dichloroethylene; 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

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 ~ San Jose Hills Service Area Drinking Water Sources Tested in 2016

			Source: San G	urface Water abriel/Colorado al 2016 Usage	Local Groundwater Source: Main San Gabriel Basin 75% of Total 2016 Usage			
Chemical	MCL	PHG (MCLG)	Average	Range	Average	Range	MCL Violation?	Typical Source of Contaminant
Organic Chemicals								
1,1-Dichloroethylene (ppb) DCE	6	10	ND	ND	1	ND – 4	No	Industrial Solvent Contamination
Tetrachloroethylene (ppb) PCE	5	0.06	ND	ND	<0.5	ND - 2	No	Industrial Solvent Contamination
Trichloroethylene (ppb) TCE	5	1.7	ND	ND	1	ND – 4	No	Industrial Solvent Contamination
Radiologicals			•				•	
Alpha Radiation (pCi/L)	15	0	<3	ND – 4	<3	ND – 3	No	Erosion of Natural Deposits
Beta Radiation (pCi/L)	50	0	<4	ND - 6	NR	NR	No	Decay of Natural and Man-Made Deposits
Uranium (pCi/L)	20	0.43	2	2 – 3	2	ND – 6	No	Erosion of Natural Deposits
Inorganic Chemicals					•			
Aluminum (ppm)	1	0.6	0.1	ND - 0.2	< 0.05	ND - 0.06	No	Treatment Residue, Natural Deposits
Arsenic (ppb)	10	0.004	<2	ND – 4	ND	ND	No	Decay of Natural and Man-Made Deposits
Barium (ppm)	1	2	<0.1	ND - 0.1	<0.1	ND - 0.2	No	Runoff or Leaching from Natural Deposits
Chromium, hexavalent (ppb)	10	0.02	ND	ND	6	2 – 11	No	Erosion of Natural Deposits
Chromium, total (ppb)	50	(100)	ND	ND	<10	ND – 11	No	Runoff or Leaching from Natural Deposits
Fluoride (ppm) natural	2	1	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	0.7	0.6 – 1	NR	NR	No	Water Additive for Dental Health
Nitrate (ppm as nitrogen)	10	10	ND	ND	3	1 – 8	No	Fertilizers, Septic Tanks
Perchlorate (ppb)	6	1	ND	ND	<4	ND – 5	No	Industiral Contamination
Secondary Standards*								
Aluminum (ppb)	200*	600	103	ND - 220	<50	ND – 58	No	Treatment Residue, Natural Deposits
Chloride (ppm)	500*	n/a	80	43 – 103	23	16 – 43	No	Runoff or Leaching from Natural Deposits
Color (color units)	15*	n/a	<1	ND - 1	ND	ND	No	Naturally-Occurring Organic Substances
Odor (TON)	3*	n/a	2	1 – 2	1	1	No	Naturally-Occurring Organic Materials
Specific Conductance (µmho)	1,600*	n/a	745	410 – 1050	543	450 – 860	No	Ions in Water
Sulfate (ppm)	500*	n/a	147	23 – 259	36	ND – 58	No	Runoff or Leaching from Natural Deposits
Surfactants – MBAS (ppb)	500*	n/a	ND	ND	17	ND - 70	No	Component of Detergent/Foaming Agents
Total Dissolved Solids (ppm)	1,000*	n/a	458	220 – 659	343	280 – 690	No	Runoff or Leaching from Natural Deposits
Unregulated Contaminants								
Alkalinity, total (ppm CaCO₃)	Not Regulated	n/a	113	75 – 140	172	96 – 260	n/a	Runoff or Leaching from Natural Deposits
Calcium (ppm)	Not Regulated	n/a	54	17 – 79	55	42.2 – 95	n/a	Runoff or Leaching from Natural Deposits
Hardness, total (ppm CaCO₃)	Not Regulated	n/a	208	79 – 306	195	160 – 320	n/a	Runoff or Leaching from Natural Deposits
Hardness, total (grains/gal)	Not Regulated	n/a	12	4.62 – 17.9	11	9 – 19	n/a	Runoff or Leaching from Natural Deposits
Magnesium (ppm)	Not Regulated	n/a	18	9 – 27	13	11 – 20	n/a	Runoff or Leaching from Natural Deposits
N-Nitrosodimethylamine (ppt)	NL = 10	3	ND	ND	<2	ND – 5	n/a	Industrial Contamination
pH (units)	Not Regulated	n/a	8.1	7.7 – 8.4	7.8	6.8 – 9.1	n/a	Acidity, Hydrogen Ions
Potassium (ppm)	Not Regulated	n/a	4	2 – 5	3	2 – 5	n/a	Runoff or Leaching from Natural Deposits
Sodium (ppm)	Not Regulated	n/a	74	39 – 106	32	22 – 43	n/a	Runoff or Leaching from Natural Deposits
Total Organic Carbon (ppm)	11	n/a	2	2 – 3	NR	NR	n/a	Various Natural and Man-Made Sources

ppb = parts-per-billion; ppm = parts-per-million; ppt = parts-per-trillion; 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 Goál; PHG = California Public Health Goal; which is regulated by a secondary standard to maintain aesthetic qualities.

Turbidity – Combined Filter Effluent	TT	Measurements	Violation?	Source
Metropolitan Water District – Weymouth Filtration Plant				
1) Highest single turbidity measurement 2) Percentage of samples less than 0.3 NTU	1 NTU 95%	0.03 100%	No	Soil Run-Off
Covina Irrigating Company – Temple Filtration Plant				
1) Highest single turbidity measurement 2) Percentage of samples less than 0.3 NTU	1 NTU 95%	0.24 100%	No	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 chemicals in drinking water that are difficult and sometimes impossible to measure directly.

Importance of Removing Turbidity in Drinking Water

**NTU** = nephelometric turbidity units

## Suburban Water Systems ~ San Jose Hills Distribution System Tested in 2016

Chemical	MCL (MRDL/MRDLG)	Average	Range	MCL Violation?	Typical Source of Contaminant
Disinfection Byproducts					
Total Trihalomethanes (ppb)	80	39	3 – 64	No	Byproducts of Disinfection
Haloacetic Acids (ppb)	60	13	ND - 23	No	Byproducts of Disinfection
Chlorine Residual (ppm)	(4 / 4)	1.4	0.03 - 3.2	No	Disinfectant for Treatment
Aesthetic Quality					
Color (color units)	15*	ND	ND	No	Erosion of Natural Deposits
Turbidity (NTU)	5*	<0.1	ND - 2.7	No	Erosion of Natural Deposits
Odor (threshold odor number)	3*	1	1	No	Erosion of Natural Deposits

Eight locations in the distribution system are tested quarterly for total trihalomethanes and haloacetic acids; thirteen location 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 = Notificaton 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	1%	No	Bacteria that occur naturally in soils and water

#### **Lead and Copper Action Levels at Residential Taps Public Health Goal** 90% Percentile Value Typical Source of Contaminant Metal **Action Level AL Violation?** Copper (ppm) 1.3 0.3 0.3 No Corrosion of Household Plumbing 15 0.2 <5 Lead (ppb) 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 2016. 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.

#### **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 provides drinking water for the San Jose Hills Service Area from its wells in the Main San Gabriel Groundwater Basin. In 2016, Suburban also distributed treated groundwater from 1) La Puente



Valley County Water District (LPVCWD) and Valley County Water District (VCWD) and 2) treated surface water from MWDSC AND CIC. 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 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 SWB at (818) 551-2049.

Suburban, CIC, 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.

MWDSC updated its sanitary surveys of the Colorado River Watershed in 2015, and the State Water Project Watershed in 2011. Water from the Colorado River is considered to be most vulnerable to contamination from recreation, urban and stormwater runoff, increasing urbanization in the watershed, and wastewater. Water supplies from Northern California's State Water Project are most vulnerable to contamination from urban and stormwater runoff, wildlife, agriculture, recreation, and wastewater. A copy of the most recent summary of either assessment can be obtained by calling MWDSC at (800) CALL-MWD (225-5693).

CIC completed an update of its San Gabriel River watershed sanitary survey in 2015. The survey concluded that CIC's surface water is vulnerable to contamination from erosion, debris removal, forest fires and recreational activities. You may request summaries of the assessments by contacting Ken Reich, Suburban Quality Assurance Manager, at (626) 543-2575 or you may request complete copies from the SWB at (818) 551-2049.

## Water Quality Advisories

#### Nitrate Advisory

Nitrate can result from the presence of fertilizer. Nitrate in drinking water at levels above the MCL of 10 milligrams per liter 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 10 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 in 2016 was below 10 milligrams per liter at

all times. Nitrate was less than 50 percent of the MCL in all Suburban water sources, except in drinking water delivered to Suburban by LPVCWD. LPVCWD supplied less than one percent of Suburban's total demand in 2016.

#### Chloramines

Suburban purchases supplemental imported water for its San Jose Hills Service Area from the MWDSC

and CIC. Chlorine and ammonia are combined at the MWDSC and CIC 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.



## 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.

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

この資料には、あたたの飲料水

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、日本語に翻訳して詩む

か説明を受けてください。

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

. विषय पर बहुत जरूरी जानकारी दी गई है। कृपया इसका अनुवाद कीजिये, या किसी जानकार से इस बारे में पुछिये।

이 보고서에는 귀하가 거주하는 지역의 수질에 관한 중요한 정보 가 들어 있습니다. 이것을 변역 하거나 충분히 이해하시는 친구 와 상의하십시오.

Spanish

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

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

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

### 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.

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

2 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.

**3** 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.

## 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:

> 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 Three Valleys Municipal Water District First and third Wednesday of the month, (909) 621-5568.



#### District Office: San Jose Hills

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www.swwc.com/suburban