



**Suburban
Water Systems**
A SouthWest Water Company

2017 Water Quality Report

COVINA KNOLLS SYSTEM

This report reflects
water quality testing
conducted during 2017.



A Word of Assurance about



Your 2017 Water Quality Report

Certified quality assurance professionals collect hundreds of 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), the source of our water in 2017 has its own comprehensive drinking water source and treatment monitoring programs that comply with the United States Environmental Protection Agency (USEPA) and SWB 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 Water Systems (Suburban) and CIC professionals.





For more than 60 years, Suburban has provided dependable, high-quality water that complies with all federal and state health safety standards to thousands of families in the San Gabriel Valley and nearby areas. We are proud to report that 2017 was no exception.

Who We Serve

Suburban provides drinking water to the area of Covina called Covina Knolls. Suburban serves approximately 2,000 people. In 2017, Suburban purchased all of its Covina Knolls drinking water from 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 a 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 2017 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 practices that occurred many decades ago — nitrate; 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 ~ Covina Knolls Drinking Water Sources Tested in 2017

Covina Irrigating Company

Source: San Gabriel River
100% of Total 2017 Usage

Chemical	MCL	PHG (MCLG)	Average	Range	MCL Violation?	Typical Source of Contaminant
Radiologicals						
Alpha Radiation (pCi/L)	15	(0)	3	3	No	Erosion of Natural Deposits
Uranium (pCi/L)	20	0.43	2	2	No	Erosion of Natural Deposits
Inorganic Chemicals						
Aluminum (ppm)	1	0.6	<0.05	ND - 0.1	No	Treatment Residue, Natural Deposits
Arsenic (ppb)	10	0.004	3	ND - 10	No	Decay of Natural and Man-Made Deposits
Fluoride (ppm)	2	1	0.3	0.3	No	Runoff or Leaching from Natural Deposits
Nitrate (ppm as N)	10	10	0.5	ND - 1	No	Fertilizers, Septic Tanks
Secondary Standards*						
Aluminum (ppb)	200*	600	<50	ND - 130	No	Treatment Residue, Natural Deposits
Chloride (ppm)	500*	n/a	12	10 - 13	No	Runoff or Leaching from Natural Deposits
Color (color units)	15*	n/a	3	ND - 5	No	Naturally-Occurring Organic Substances
Odor (TON)	3*	n/a	1	1	No	Naturally-Occurring Organic Materials
Specific Conductance (µmho)	1,600*	n/a	415	400 - 430	No	Ions in Water
Sulfate (ppm)	500*	n/a	26	19 - 33	No	Runoff or Leaching from Natural Deposits
Total Dissolved Solids (ppm)	1,000*	n/a	225	210 - 240	No	Runoff or Leaching from Natural Deposits
Unregulated Contaminants						
Alkalinity, total (ppm CaCO3)	Not Regulated	n/a	175	170 - 180	n/a	Runoff or Leaching from Natural Deposits
Calcium (ppm)	Not Regulated	n/a	46	46 - 47	n/a	Runoff or Leaching from Natural Deposits
Hardness, total (ppm CaCO3)	Not Regulated	n/a	170	160 - 180	n/a	Runoff or Leaching from Natural Deposits
Hardness, total (grains/gal)	Not Regulated	n/a	10	9 - 11	n/a	Runoff or Leaching from Natural Deposits
Magnesium (ppm)	Not Regulated	n/a	14	12 - 15	n/a	Runoff or Leaching from Natural Deposits
pH (pH units)	Not Regulated	n/a	7.9	7.7 - 8.1	n/a	Acidity, Hydrogen Ions
Potassium (ppm)	Not Regulated	n/a	4	4 - 5	n/a	Runoff or Leaching from Natural Deposits
Sodium (ppm)	Not Regulated	n/a	16	15 - 17	n/a	Runoff or Leaching from Natural Deposits
Total Organic Carbon (ppm)	TT	n/a	3	2 - 3	n/a	Various Natural and Man-Made Sources

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	TT	Measurements	Violation?	Source	Importance of Removing Turbidity in Drinking Water
Covina Irrigating Company Temple Filtration Plant					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.
1) Highest single turbidity measurement	1	0.29	No	Soil Run-Off	
2) Percentage of samples less than 0.3 NTU	95%	100%	No	Soil Run-Off	

NTU = nephelometric turbidity units

Suburban Water Systems ~ Covina Knolls Distribution System Water Quality Tested in 2017

Chemical	MCL (MRDL/MRDLG)	Average	Range	MCL Violation?	Typical Source of Contaminant
Disinfection Byproducts					
Total Trihalomethanes (ppb)	80	46	17 – 54	No	Byproducts of Disinfection
Haloacetic Acids (ppb)	60	26	15 – 34	No	Byproducts of Disinfection
Chlorine Residual (ppm)	(4 / 4)	2.5	1.6 – 3.1	No	Disinfectant for Treatment
Aesthetic Quality					
Color (color units)	15*	<3	ND - 5	No	Erosion of Natural Deposits
Turbidity (NTU)	5*	0.2	ND – 1	No	Erosion of Natural Deposits
Odor (threshold odor number)	3*	1	1 - 2	No	Erosion of Natural Deposits

Two locations in the distribution system are tested quarterly for total trihalomethanes and haloacetic acids; one location is 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 Number Positive	MCL Violation?	Typical Source of Contaminant
Total Coliform Bacteria	No more than one monthly positive	0	No	Bacteria that occur naturally in soils and water

Lead and Copper Action Levels at Residential Taps

Metal	Action Level	Public Health Goal	90% Percentile Value	AL Violation?	Typical Source of Contaminant
Copper (ppm)	1.3	0.3	0.1	No	Corrosion of Household Plumbing
Lead (ppb)	15	0.2	ND	No	Corrosion of Household Plumbing

In the Covina service area, the most recent lead and copper at-the-tap samples were collected from residences in 2016.

PHG = California Public Health Goal

None of the 10 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

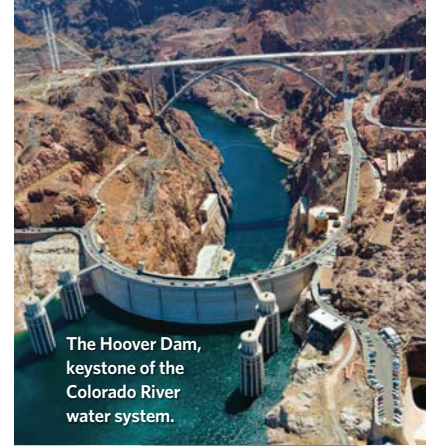
In 2017, Suburban distributed treated surface water from CIC. CIC filters and disinfects local San Gabriel mountains water and California State Project water using a advanced disinfection technology process installed in 2015. CIC replaced sodium hypochlorite (bleach) with ultraviolet light (UV) as the primary disinfectant and chloramines in place of free chlorine as the residual disinfectant.

The change in the disinfection process reduces the level of certain regulated chemicals previously formed by the addition of bleach.

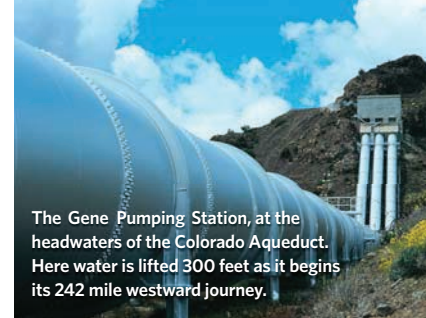
CIC completed source water assessments in accordance with the federal Safe Drinking Water Act. The purpose of the source water assessment is to promote source water protection by identifying types of activities in the proximity of sources which could pose a threat to the water quality. Every five years, CIC is required years, CIC is required to examine and update possible sources of drinking water contamination in their surface water source waters. These reports are called watershed sanitary surveys.

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 Reporting Manager, at (626) 543-2575 or you may request complete

copies from the SWB at (818) 551-2049.



The Hoover Dam, keystone of the Colorado River water system.



The Gene Pumping Station, at the headwaters of the Colorado Aqueduct. Here water is lifted 300 feet as it begins its 242 mile westward journey.

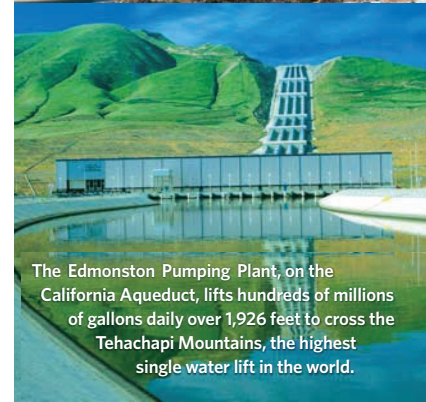


The California Aqueduct, part of the California State Water Project, an elaborate system that conveys water over 700 miles, from the Oroville Reservoir in the North to Lake Perris in Southern California.

Water Quality Advisories

Chloramines

During 2016 Suburban purchased water from MWDSC and CIC. Chlorine and ammonia are combined at the MWDSC and CIC treatment facilities to produce these 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 Reporting Manager at (626) 543-2575 or MWDSC (213) 217-6850.



The Edmonston Pumping Plant, on the California Aqueduct, lifts hundreds of millions of gallons daily over 1,926 feet to cross the Tehachapi Mountains, the highest single water lift in the world.

Arsenic Advisory

Water purchased from the CIC exceeded one-half the arsenic MCL (10 micrograms per liter) during a brief period in 2017. The average level throughout the year was 3 micrograms per liter. The transient increase in arsenic was due to drought conditions in the San Gabriel River watershed source water reservoir. The arsenic standard balances the current understanding of possible 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.

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.

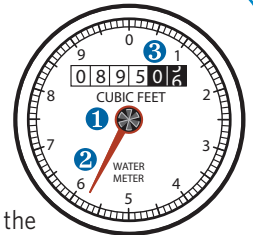
<p>يحتوي هذا التقرير على معلومات هامة عن نوعية ماء الشرب في منطقتك. يرجى ترجمته، أو ابحث التقرير مع صديق لك يفهم هذه المعلومات جيداً.</p> <p>Arabic</p>	<p>这份报告中有重要的信息，讲到关于您所在社区的水的品质。请您找人翻译一下，或者请能看得懂这份报告的朋友给您解释一下。</p> <p>Chinese</p>	<p>इस रिपोर्ट में "पाने के पानी" के विषय पर बहुत जरूरी जानकारी दी गई है। कृपया इसका अनुवाद करें, या किसी जानकार से इस बारे में पूछें।</p> <p>Hindi</p>
<p>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。</p> <p>Japanese</p>	<p>이 보고서는 귀하의 거주지역의 수질에 관한 중요한 정보가 들어 있습니다. 이 것을 번역하거나, 중언하 이해하시는 친구와 상의 하십시오.</p> <p>Korean</p>	<p>Este reporte contiene información importante sobre su agua de beber. Tradúzcalo ó hable con alguien que lo entienda bien.</p> <p>Spanish</p>
<p>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.</p> <p>Tagalog</p>	<p>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.</p> <p>Vietnamese</p>	

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.

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

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



**Suburban
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