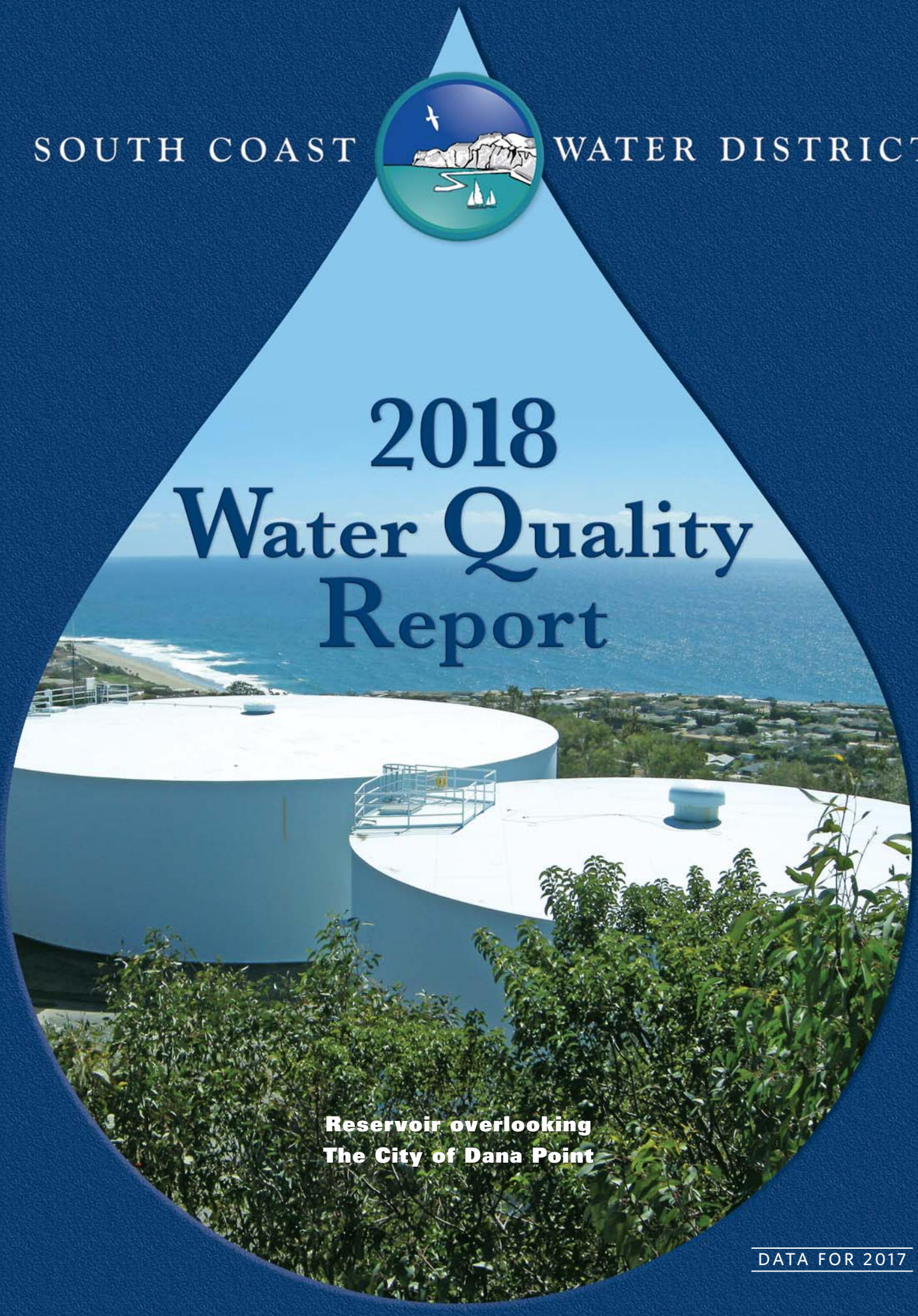
SOUTH COAST WATER DISTRICT

2018 Water Quality Report

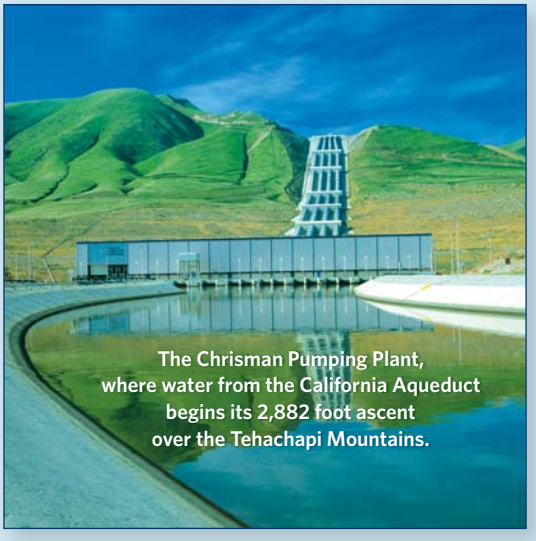


Reservoir overlooking
The City of Dana Point

DATA FOR 2017

Your Drinking Water Meets All Quality Standards

Since 1990, California public water utilities have provided an annual Water Quality Report to their customers. **This year's report covers calendar year 2017 water quality results.** South Coast Water District vigilantly safeguards your water supply. As in years past, the water delivered to your home or business meets the quality standards required by the U.S. Environmental Protection Agency (USEPA) and the State Water Resources Control Board, Division of Drinking Water (DDW). The State 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.



The Chrisman Pumping Plant, where water from the California Aqueduct begins its 2,882 foot ascent over the Tehachapi Mountains.

Current Water Supply Sources

Approximately 90% of the water we need in our service area is imported treated surface water from Northern California and the Colorado River, and from the Santiago Reservoir (Irvine Lake). About 10% of our water comes from our local Groundwater Recovery Facility (GRF), which extracts water from the San Juan Basin and converts it to potable water using reverse osmosis technology. The balance of our water supply consists of locally recycled water, which is non-potable and used to irrigate larger landscaped areas.

Investing in Future Water Supply Sources

Over the next 10 years, we will reduce our reliance on imported water supplies, which are decreasing and unreliable. The District will increase the use of recycled water for landscape irrigation.

Imported water will remain an important source of the state's water supply. Two-thirds of the state currently relies on the Bay-Delta area in Northern California for water, including Southern California. There is significant work ahead to address long-term water supply challenges in the Bay-Delta that will require considerable resources to preserve this critical source of drinking water for our state.

Thank you to everyone for the steps you have taken to use water wisely. Your efforts are making a significant difference. Please keep up the good work.

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

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

Questions About Your Water? Contact Us for Answers.

- For further information about this report, or about your water quality in general, please contact Jason Shim at (949) 499-4555, ext. 3129.
- Our Board meets on the 2nd Thursday of the month at the Dana Point City Council Chambers, 33282 Golden Lantern, Dana Point, at 6:30 p.m., and on the 4th Thursday of the month at the District's Administrative Offices, 31592 West Street, Laguna Beach at 6 p.m. You are encouraged to attend or may view meetings live on Cox Channels 30 or 855. In addition, you may view all Board and Committee meetings live or recorded on our website, www.scwd.org/meetings.

Join us on Facebook: *facebook.com/SouthCoastWD*

Follow us on Twitter: *@SouthCoastWater*

The Quality of Your Water Is Our Primary Concern

Drinking Water Contaminants

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 land or through the layers of the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animal and human activity.

Contaminants that may be present in source water include:

- **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- **Inorganic contaminants**, such as salts and metals, which can be naturally-occurring or result from urban/stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining and farming.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gasoline stations, urban/ stormwater runoff, agricultural applications and septic systems.

Save Money & Water: Learn to Stop Leaks in Your Home

Nationwide, more than 1 trillion gallons of water are lost annually due to household leaks. That's equal to the annual water use of more than 11 million homes. The average household can waste more than 10,000 gallons each year due to correctable leaks. That's enough to wash 270 loads of laundry!

Ten percent of homes have leaks that waste 90 gallons or more per day! Common sources include toilets, faucets, showerheads, and landscape irrigation. But you should also consider less obvious sources of leaks: water heaters, ice makers, dishwashers, and filtration systems. Many of these are easily correctable, and fixing them can save about 10 percent on the average water bill.

Be sure to check your toilet for leaks at least once a year. Put food coloring in the tank. If it seeps into the bowl without flushing, there's a leak. And if your toilet flapper doesn't close properly after flushing, replace it. Remember, one drip a second adds up to five gallons lost per day! So regularly check your faucets and showerheads, as well as all hoses and connectors.

Many household leaks can be solved with simple tools and a little education — and fortunately, Do-It-Yourselfers have access to multiple resources. But even if you must pay for repairs, you will still save money in the long run. For more information on water conservation, visit www.ocwatersmart.com.

- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban/stormwater runoff and residential uses.
- **Radioactive contaminants**, which can be naturally-occurring or be the result of oil and gas production or mining activities.

In order to ensure that tap water is safe to drink, USEPA and the DDW prescribe regulations that limit the amount of certain contaminants in water provided by public water systems.

The U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that must provide the same protection for public health. 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 at (800) 426-4791.

Immuno-Compromised People

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people, such as those with cancer who are undergoing chemotherapy, persons who have had organ transplants, people with HIV/AIDS or other immune system disorders, some elderly persons, and infants can be particularly at risk from infections. They should seek advice about drinking water from their health care providers.

Cryptosporidium

Metropolitan Water District of Southern California (MWD) tested its source water and treated surface water for *Cryptosporidium* in 2017 and did not detect it.

Cryptosporidium is a microscopic organism that comes from animal or human waste. If ingested, it can cause diarrhea, fever, and other gastrointestinal symptoms. If detected in water, *Cryptosporidium* is eliminated by an effective treatment of sedimentation, filtration and disinfection.

The USEPA and the federal Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the USEPA's Safe Drinking Water Hotline at (800) 426-4791 or on the web at: www.epa.gov/safewater.

Federal and State Water Quality Regulations

— Water Quality Issues that Could Affect Your Health —

Drinking Water Fluoridation

In December 2007, Metropolitan Water District of Southern California joined a majority of the nation's public water suppliers in adding fluoride to drinking water to prevent tooth decay.

In line with recommendations from the DDW and the U.S. Centers for Disease Control and Prevention, Metropolitan adjusted the natural fluoride level in treated water from the Colorado River and State Water Project to the optimal range for dental health of 0.6 to 1.2 parts per million. Fluoride levels in drinking water are limited under California regulations to a maximum of two parts per million.

For information about water fluoridation, check:

U.S. Centers for Disease Control and Prevention:
www.cdc.gov/fluoridation/

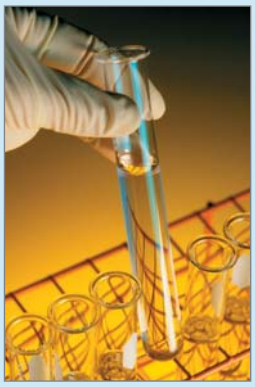
State Water Resources Control Board, Division of Drinking Water
www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.html

For information about Metropolitan's fluoridation program, contact Edgar G. Dymally at (213) 217-5709 or you may write him at edymally@mwdh2o.com.

Disinfectants and Disinfection Byproducts

Disinfection of drinking water was one of the major public health advances in the 20th century.

Chlorine disinfection has almost completely eliminated from our lives the risks of microbial waterborne diseases. Sufficient chlorine is added to your drinking water at the source of supply so that it does not completely dissipate through the distribution system pipelines. This "residual" chlorine helps prevent the growth of bacteria in the pipelines that carry drinking water from the source to your home.



However, chlorine can react with naturally-occurring materials in the water to form unintended chemical byproducts that may pose health risks, called disinfection byproducts (DBPs). Trihalomethanes (THMs) and Haloacetic Acids (HAAs) are the most common and most studied DBPs.

All of South Coast Water District's water is disinfected with chloramines, a combination of chlorine and ammonia. Chloramines are effective killers of bacteria and other microorganisms that may cause disease. Compared to chlorine alone, chloramines last longer in the distribution system, form lower levels of THMs and HAAs, and have no odor when used properly.

A major challenge is how to balance the risks from microbial pathogens and DBPs. The Safe Drinking Water Act requires the USEPA to develop rules to achieve these goals. In 1979, the USEPA set the maximum amount of total THMs allowed in drinking water at 100 parts per billion as an annual running average. Effective in January 2002, the Stage 1 Disinfectants/ Disinfection Byproducts Rule lowered that maximum amount to 80 parts per billion. It also added HAAs to the list of regulated chemicals in drinking water. **Your drinking water complies with the Stage 1 Disinfectants/ Disinfection Byproducts Rule.**

In 2006, the USEPA finalized Stage 2 of the regulation, which further controls allowable levels of DBPs in drinking water without compromising disinfection. In 2008, South Coast Water District completed a distribution system evaluation in compliance with the Stage 2 regulation. **The DDW has approved the District's Stage 2 Monitoring Plan. Full Stage 2 compliance began in 2012.**

It is critical for individuals who use kidney dialysis machines or maintain fish ponds, tanks or aquaria to be aware of the disinfectants in their public water system. In this way, they can make necessary adjustments in water quality for safe dialysis treatment and marine environment.

Arsenic

While your drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The U.S. Environmental Protection Agency continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

About Lead in Tap Water

If present, elevated levels of lead 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.

South Coast Water District is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components within your home. When your water has been sitting for several hours within your home, 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 exposure is available on the web at www.epa.gov/safewater/lead, or you may call the the USEPA's Safe Drinking Water Hotline at (800) 426-4791.

Source Water Assessments

Imported Water Assessment

Every five years, MWD is required by DDW to examine possible sources of drinking water contamination in its State Water Project and Colorado River source waters.

The most recent watershed sanitary surveys of its source water supplies from the Colorado River was updated in 2015 and the State Water Project was updated in 2016. The Irvine Ranch Water District watershed sanitary survey for Santiago Reservoir (Irvine Lake) was updated in 2014.

Water from the Colorado River is considered to be most vulnerable to contamination from recreation, urban/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/stormwater runoff, wildlife, agriculture, recreation, and wastewater. Water supplies from the Santiago Reservoir are most vulnerable to contamination from landfill/dumps, grazing animals and septic systems.

USEPA also requires water purveyors to complete one Source Water Assessment (SWA) that utilizes information collected in the watershed sanitary surveys. MWD completed its SWA in December 2002. The most recent SWA for Santiago Reservoir was completed in 2001. The SWA is used to evaluate the vulnerability of water sources to contamination and helps determine whether more protective measures are needed.

A copy of the most recent summary of the Watershed Sanitary Surveys or the Source Water Assessments can be found on the SCWD website at www.scwd.org or by calling the District at (949) 499-4555, ext 1.

Groundwater Assessment

An assessment of South Coast Water District's groundwater source was completed in June 2007.

This local water source is considered most vulnerable to contamination from gas stations, dry cleaners and a wastewater treatment plant in the general area.

South Coast Water District carefully tests its well water to assure that the water is safe and in compliance with all Drinking Water Standards.

A copy of the complete groundwater source assessment can be obtained by calling (949) 499-4555, ext 1.

Chart Legend

Mandatory Water Quality Standards

Drinking water standards established by the USEPA and DDW set limits for substances that may affect consumer health or aesthetic qualities of drinking water. The charts in this report show the following types of water quality standards:

- **Primary Drinking Water Standard:** Maximum Contaminant Levels (MCLs) for contaminants that affect health along with their monitoring and reporting requirements and water treatment requirements.
- **Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the Public Health Goals or Maximum Contaminant Level Goals as is economically and technologically feasible.
- **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.
- **Secondary Maximum Contaminant Levels (MCLs)** are set to protect the odor, taste, and appearance of drinking water.
- **Regulatory Action Level (AL):** The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that a water system must follow.

Voluntary Water Quality Goals

In addition to mandatory water quality standards, the USEPA and DDW have set voluntary water quality goals for some contaminants. Water quality goals are often set at such low levels that they are not achievable in practice and are not directly measurable. Nevertheless, these goals provide useful guideposts and direction for water management practices. The charts in this report include three types of water quality goals:

- **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.
- **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.
- **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.

2017 Metropolitan Water District of Southern California Treated Surface Water

Chemical	MCL	PHG, or (MCLG)	Average Amount	Range of Detections	MCL Violation?	Typical Source of Chemical
Inorganic Chemicals – Tested in 2017						
Aluminum (ppm)	1	0.6	0.16	ND – 0.13	No	Treatment Process Residue, Natural Deposits
Fluoride (ppm) treatment-related	Control Range 0.6 – 1.2 ppm Optimal Level 0.7 ppm		0.7	0.6 – 0.9	No	Water Additive for Dental Health
Secondary Standards* – Tested in 2017						
Aluminum (ppb)	200*	600	160	ND – 130	No	Treatment Process Residue, Natural Deposits
Chloride (ppm)	500*	n/a	50	34 – 66	No	Runoff or Leaching from Natural Deposits
Color (color units)	15*	n/a	1	1	No	Naturally-occurring Organic Materials
Odor (threshold odor number)	3*	n/a	2	2	No	Naturally-occurring Organic Materials
Specific Conductance (µmho/cm)	1,600*	n/a	490	351 – 630	No	Substances that Form Ions in Water
Sulfate (ppm)	500*	n/a	96	65 – 127	No	Runoff or Leaching from Natural Deposits
Total Dissolved Solids (ppm)	1,000*	n/a	294	213 – 374	No	Runoff or Leaching from Natural Deposits
Unregulated Chemicals – Tested in 2017						
Alkalinity, total as $CaCO_3$ (ppm)	Not Regulated	n/a	61	48 – 74	n/a	Runoff or Leaching from Natural Deposits
Boron (ppm)	NL = 1	n/a	0.1	0.1	n/a	Runoff or Leaching from Natural Deposits
Calcium (ppm)	Not Regulated	n/a	28	20 – 36	n/a	Runoff or Leaching from Natural Deposits
Hardness, total as $CaCO_3$ (ppm)	Not Regulated	n/a	119	82 – 156	n/a	Runoff or Leaching from Natural Deposits
Hardness, total (grains/gallon)	Not Regulated	n/a	7	4.8 – 9.1	n/a	Runoff or Leaching from Natural Deposits
Magnesium (ppm)	Not Regulated	n/a	12	8.1 – 16	n/a	Runoff or Leaching from Natural Deposits
pH (pH units)	Not Regulated	n/a	8.4	8.2 – 8.6	n/a	Hydrogen Ion Concentration
Potassium (ppm)	Not Regulated	n/a	2.8	2.4 – 3.2	n/a	Runoff or Leaching from Natural Deposits
Sodium (ppm)	Not Regulated	n/a	51	39 – 63	n/a	Runoff or Leaching from Natural Deposits
Total Organic Carbon (ppm)	TT	n/a	2.4	1.8 – 3.0	n/a	Various Natural and Man-made Sources

ppb = parts per billion; **ppm** = parts per million; **µmho/cm** = micromhos per centimeter; **ND** = not detected; **MCL** = Maximum Contaminant Level; **(MCLG)** = federal MCL Goal; **PHG** = California Public Health Goal; **NL** = Notification Level; **n/a** = not applicable; **TT** = treatment technique *Chemical is regulated by a secondary standard.

Turbidity – combined filter effluent Metropolitan Water District Diemer Filtration Plant	Treatment Technique	Turbidity Measurements	TT Violation?	Typical Source of Chemical
1) Highest single turbidity measurement	0.3 NTU	0.08	No	Soil Runoff
2) Percentage of samples less than 0.3 NTU	95%	100%	No	Soil Runoff

Turbidity is a measure of the cloudiness of the water, an indication of particulate matter, some of which might include harmful microorganisms. **NTU** = nephelometric turbidity units
Low turbidity in Metropolitan'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.

Unregulated Chemicals Requiring Monitoring

Chemical	Notification Level	PHG	Average Amount	Range of Detections	Most Recent Sampling Date
Bromochloromethane (ppb)	n/a	n/a	<0.06	ND – 0.1	2015
Chlorate (ppb)	800	n/a	80	38- 160	2015
Chromium, Hexavalent (ppb)	n/a	0.02**	0.18	0.037 – 1.1	2015
Chromium, Total (ppb)***	MCL = 50	MCLG = 100	0.3	ND – 1.1	2015
Molybdenum, Total (ppb)	n/a	n/a	4.8	4.4 – 5.1	2015
Strontium, Total (ppb)	n/a	n/a	1,100	960 – 1,200	2015
Vanadium, Total (ppb)	50	n/a	2.7	2.3 – 3.3	2015

**There is currently no MCL for hexavalent chromium. The previous MCL of 10 ppb was withdrawn on September 11, 2017.
***Total chromium is regulated with an MCL of 50 ppb but was not detected, based on the detection limit for purposes of reporting of 10 ppb. Total chromium was included as part of the unregulated chemicals requiring monitoring.

2017 Irvine Ranch Water District Baker Water Treatment Plant

Chemical	MCL	PHG, or (MCLG)	Avg. Amount	Range of Detections	MCL Violation?	Typical Source of Chemical
Radiologicals – Tested in 2017						
Alpha Radiation (pCi/L)	15	(0)	6.2	6.2	No	Erosion of Natural Deposits
Uranium (pCi/L)	20	0.43	2.7	2.7	No	Erosion of Natural Deposits
Inorganic Chemicals – Tested in 2017						
Barium (ppm)	1	2	< 0.1	ND – 0.127	No	Refinery Discharge, Erosion of Natural Deposits
Fluoride (ppm)	2.0	1	0.30	0.27 – 0.32	No	Erosion of Natural Deposits; Water Additive for Dental Health
Nitrate (as Nitrogen) (ppm)	10	10	< 0.4	ND – 1.3	No	Runoff and Leaching from Fertilizer Use; Leaching from Septic Tanks and Sewage; Erosion of Natural Deposits
Secondary Standards* – Tested in 2017						
Chloride (ppm)	500*	n/a	84	69 – 100	No	Runoff or Leaching from Natural Deposits
Odor (threshold odor number)	3*	n/a	2	2	No	Naturally-occurring Organic Materials
Specific Conductance (µmho/cm)	1,600*	n/a	974	928 – 1,021	No	Substances that Form Ions in Water
Sulfate (ppm)	500*	n/a	234	218 – 250	No	Runoff or Leaching from Natural Deposits
Total Dissolved Solids (ppm)	1,000*	n/a	616	582 – 650	No	Runoff or Leaching from Natural Deposits
Turbidity (NTU)	5*	n/a	0.1	0.1	No	Soil Runoff
Unregulated Chemicals – Tested in 2017						
Alkalinity, total as $CaCO_3$ (ppm)	Not Regulated	n/a	134	128 – 140	n/a	Runoff or Leaching from Natural Deposits
Boron (ppm)	NL = 1	n/a	0.116	0.108 – 0.125	n/a	Runoff or Leaching from Natural Deposits
Calcium (ppm)	Not Regulated	n/a	80	77 – 83	n/a	Runoff or Leaching from Natural Deposits
Hardness, total as $CaCO_3$ (ppm)	Not Regulated	n/a	316	310 – 323	n/a	Runoff or Leaching from Natural Deposits
Hardness, total (grains/gallon)	Not Regulated	n/a	19	18 – 19	n/a	Runoff or Leaching from Natural Deposits
Magnesium (ppm)	Not Regulated	n/a	28	28	n/a	Runoff or Leaching from Natural Deposits
pH (pH units)	Not Regulated	n/a	8.3	8.2 – 8.4	n/a	Hydrogen Ion Concentration
Potassium (ppm)	Not Regulated	n/a	4.6	4.4 – 4.8	n/a	Runoff or Leaching from Natural Deposits
Sodium (ppm)	Not Regulated	n/a	90	76 – 104	n/a	Runoff or Leaching from Natural Deposits
Total Organic Carbon (ppm)	TT	n/a	3.2	2.3 – 4.1	n/a	Various Natural and Man-made Sources

ppb = parts per billion; **ppm** = parts per million; **pCi/L** = picoCuries per liter; **µmho/cm** = micromhos per centimeter; **ND** = not detected; **NTU** = nephelometric turbidity units; **MCL** = Maximum Contaminant Level; **(MCLG)** = federal MCL Goal; **PHG** = California Public Health Goal; **NL** = Notification Level; **n/a** = not applicable; **TT** = treatment technique *Chemical is regulated by a secondary standard.

Turbidity – combined filter effluent Metropolitan Water District Diemer Filtration Plant	Treatment Technique	Turbidity Measurements	TT Violation?	Typical Source of Chemical
1) Highest single turbidity measurement	0.1 NTU	0.06	No	Soil Runoff
2) Percentage of samples less than 0.1 NTU	95%	100%	No	Soil Runoff

Turbidity is a measure of the cloudiness of the water, an indication of particulate matter, some of which might include harmful microorganisms. **NTU** = nephelometric turbidity units
Low turbidity in the 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.

2017 Capistrano Beach Groundwater Recovery Facility Water Quality

Chemical	MCL	PHG, or (MCLG)	Average Amount	Range of Detections	MCL Violation?	Most Recent Sampling Date	Typical Source of Chemical
Radioactive Contaminants							
Combined Radium (pCi/L)	5	(0)	1.1	1.1	No	2009	Erosion of Natural Deposits
Inorganic Contaminants							
Arsenic (ppm)	10	0.004	2.5	ND – 27	No	2017	Erosion of Natural Deposits
Fluoride (ppm)	2	1	0.42	0.42	No	2017	Erosion of Natural Deposits
Nitrate (ppm as N)	10	10	2.2	1.8 – 2.5	No	2017	Fertilizers, Septic Tanks
Secondary Standards*							
Chloride (ppm)	500*	n/a	106	106	No	2017	Erosion of Natural Deposits
Color (color units)	15*	n/a	1	1	No	2017	Erosion of Natural Deposits
Odor (threshold odor number)	3*	n/a	1	1	No	2017	Erosion of Natural Deposits
Specific Conductance (µmho/cm)	1,600*	n/a	726	715 – 736	No	2017	Erosion of Natural Deposits
Total Dissolved Solids (ppm)	1,000*	n/a	468	420 – 490	No	2017	Erosion of Natural Deposits
Sulfate (ppm)	500*	n/a	135	135	No	2017	Erosion of Natural Deposits
Turbidity (NTU)	5*	n/a	0.3	0.3	No	2017	Erosion of Natural Deposits
Unregulated Contaminants							
Alkalinity (ppm as $CaCO_3$)	Not Regulated	n/a	83	72 – 101	n/a	2017	Erosion of Natural Deposits
Magnesium (ppm)	Not Regulated	n/a	13	13	n/a	2017	Erosion of Natural Deposits
Calcium (ppm)	Not Regulated	n/a	54	41 – 92	n/a	2017	Erosion of Natural Deposits
pH (units)	Not Regulated	n/a	8	7.6 – 8.4	n/a	2017	Acidity, hydrogen ions
Sodium (ppm)	Not Regulated	n/a	61	55 – 66	n/a	2017	Erosion of Natural Deposits
Total Hardness (ppm as $CaCO_3$)	Not Regulated	n/a	197	197	n/a	2017	Erosion of Natural Deposits

ppb = parts-per-billion; **ppm** = parts-per-million; **pCi/L** = picoCuries per liter; **NTU** = nephelometric turbidity units; **n/a** = not applicable;
MCL = Maximum Contaminant Level; **(MCLG)** = federal MCL Goal; **PHG** = California Public Health Goal, **µmho/cm** = micromho per centimeter
*Contaminant is regulated by a secondary standard to maintain aesthetic qualities (taste, odor, color).

Unregulated Chemicals Requiring Monitoring

Chemical	Notification Level	PHG	Average Amount	Range of Detections	Most Recent Sampling Date
Chlorate (ppb)	800	n/a	1,200	360 – 2,000	2014
Chromium, Hexavalent (ppb)	n/a	0.02**	0.6	ND – 1.2	2014
Chromium, Total (ppb)***	MCL = 50	MCLG = 100	0.73	0.25 – 1.2	2014
Molybdenum, Total (ppb)	n/a	n/a	1.2	1.1 -1.3	2014
Strontium, Total (ppb)	n/a	n/a	310	290 – 320	2014

**There is currently no MCL for hexavalent chromium. The previous MCL of 10 ppb was withdrawn on September 11, 2017.
***Total chromium is regulated with an MCL of 50 ppb but was not detected, based on the detection limit for purposes of reporting of 10 ppb.
Total chromium was included as part of the unregulated chemicals requiring monitoring.

2017 South Coast Water District Distribution System Water Quality

Disinfection Byproducts	MCL (MRDL/MRDLG)	Average Capo Beach	Range Capo Beach	Average So. Coast	Range So. Coast	MCL Violation?	Typical Source of Contaminant
Total Trihalomethanes (ppb)	80	35	6.4 – 40	54	16 – 67	No	Byproducts of Chlorine Disinfection
Haloacetic Acids (ppb)	60	18	5.5 – 20	26	5.6 – 34	No	Byproducts of Chlorine Disinfection
Chlorine Residual (ppm)	(4 / 4)	1.5	0.5 – 2.2	1.6	0.3 – 2.3	No	Disinfectant Added for Treatment
Aesthetic Quality							
Color (color units)	15*	1	1	1	1	No	Erosion of Natural Deposits
Odor (threshold odor number)	3*	1	1	1	1	No	Erosion of Natural Deposits
Turbidity (NTU)	5*	0.21	0.1 – 0.31	0.21	ND – 0.36	No	Erosion of Natural Deposits

South Coast – Four locations in the distribution system are tested quarterly for total trihalomethanes and haloacetic acids; ten locations are tested weekly for color, odor and turbidity.
Capistrano Beach – Four 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
*Contaminant is regulated by a secondary standard to maintain aesthetic qualities (taste, odor, color).

Lead and Copper Action Levels at Residential Taps

	Action Level (AL)	Public Health Goal	90% Value Capo Beach	90% Value So. Coast	Sites Exceeding AL Capo Beach	Sites Exceeding AL So. Coast	AL Violation?	Typical Source of Contaminant
Copper (ppm)	1.3	0.3	0.082	0.17	0 out of 30	0 out of 30	No	Corrosion of Household Plumbing
Lead (ppb)	15	0.2	ND	ND	0 out of 30	0 out of 30	No	Corrosion of Household Plumbing

In the **Capistrano Beach** service area, the most recent lead and copper at-the-tap samples were collected at 30 residences in 2016. Lead was detected in 0 homes and copper was detected in 8 homes; but none of the samples for lead and copper exceeded the Action Level (AL).

In the **South Coast** service area, the most recent lead and copper at-the-tap samples were collected from 30 residences in 2017. Lead was detected in 1 home and copper was detected in 10 homes, but none of the samples for lead and copper exceeded their respective ALs.

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

- In 2017, no school submitted a request to be sampled for lead.

Unregulated Chemicals Requiring Monitoring in the Distribution System

Chemical	Notification Level	PHG	Average Capo. Bch.	Range Capo. Bch.	Average So. Coast	Range So. Coast	Most Recent Sampling Date
Chlorate (ppb)	800	n/a	71	40 – 110	129	62 – 250	2015
Chromium, Hexavalent (ppb)	n/a	0.02**	0.047	0.041 – 0.056	0.048	0.042 – 0.052	2015
Chromium, Total (ppb)***	MCL = 50	MCLG = 100	<0.2	ND – 0.26	0.2	ND – 0.34	2015
Molybdenum, Total (ppb)	n/a	n/a	4.4	4 – 5.2	4.9	4.8 – 5.1	2015
Strontium, Total (ppb)	n/a	n/a	1,000	900 – 1,300	1,200	1,200	2015
Vanadium, Total (ppb)	50	n/a	2.6	2.1 – 3.5	2.6	2.5 – 2.7	2015

**There is currently no MCL for hexavalent chromium. The previous MCL of 10 ppb was withdrawn on September 11, 2017.
***Total chromium is regulated with an MCL of 50 ppb but was not detected, based on the detection limit for purposes of reporting of 10 ppb.
Total chromium was included as part of the unregulated chemicals requiring monitoring.

WHERE DOES OUR WATER COME FROM?

California Delta

The water from the Sierras travels down the Feather River into the Sacramento River and the Delta.

Colorado River Aqueduct

Water travels 242 miles from Lake Havasu to Lake Mathews.

California Aqueduct

Water travels 422 miles down the California Aqueduct from the Delta down to Lake Perris.

North and Central Orange County

Typically gets more than half its water from a deep aquifer - about 70 percent.

South Coast Water District

We are 90% dependent on imported water from the California Delta and/or the Colorado River.

SOURCE: South Coast Water District

Did you know that only 2 out of 10 plastic water bottles are recycled

Source: California's Beverage Container Recycling Fund

The Need to Conserve Water Remains A High Priority Throughout California

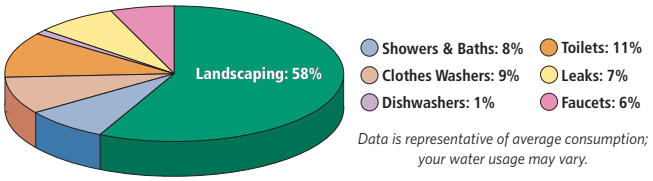
Southern California has an arid climate and the need for wise water use must remain a part of everyone's daily lives. Simple water saving acts like the ones listed here can save countless gallons of water every day.

- Soak pots and pans instead of letting water run while you scrub them clean. ***This both saves water and makes the job easier.***
- Keep a pitcher of drinking water in the refrigerator. ***This can save gallons of water every day and it's always cold!***
- Plug the sink instead of running water to rinse your razor or wet your toothbrush. ***This can save upwards of 300 gallons of water a month.***
- Use a broom instead of a hose to clean off sidewalks and driveways. ***It takes very little time to sweep and the water savings quickly adds up.***
- Check your sprinkler system for leaks, overspray, and broken sprinkler heads and repair promptly. ***This can save countless gallons each time you water.***
- Water plants in the early morning. ***It reduces evaporation and ensures deeper watering.***

Where Do We Use Water the Most?

Outdoor watering of lawns and gardens makes up approximately 60% of home water use. By reducing your outdoor water use — by either cutting back on irrigation or planting more drought tolerant landscaping — you can dramatically reduce your overall water use.

Save the most where you use the most: Make your outdoor use efficient.



Data is representative of average consumption; your water usage may vary.

Where Can You Learn More?

There's a wealth of information on the internet about Drinking Water Quality and water issues in general. Some good sites to begin your own research are:

Metropolitan Water District of So. California: www.mwdh2o.com
California Department of Water Resources: www.water.ca.gov
The Water Education Foundation: www.watereducation.org

To learn more about **Water Conservation & Rebate Information**:
www.bewaterwise.com • www.ocwatersmart.com

And to see the Aqueducts in action, checkout these two videos:
Wings Over the State Water Project: youtu.be/8A1v1Rr2neU
Wings Over the Colorado Aqueduct: youtu.be/KipMQh5t0f4

SOUTH COAST WATER DISTRICT
Partnering With The Community

31592 West Street
Laguna Beach, California 92651-6907
Phone: (949) 499-4555 • www.scwd.org