2023 WATER QUALITY REPORT

CAMEL POINT
Laguna Beach

SOUTH COAST
WATER DISTRICT

Partnering With The Community

Your 2023 Water Quality Report

Since 1990, California public water utilities have provided an annual Water Quality Report to their customers. **This year's report covers calendar year 2022 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.

Englebright Dam on the Yuba River

Current Water Supply Sources

Approximately 85% of the water we need in our service area is imported treated surface water from Northern California and the Colorado River, along with treated surface water from Irvine Ranch Water District's (IRWD) Baker Water Treatment Plant, which utilizes surface water from both MWD and Santiago Reservoir (Irvine Lake). About 15% 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 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.

Every Drop is Golden . . .

"And it never failed that during the dry years the people forgot about the rich years, and during the wet years they lost all memory of the dry years. It was always that way."

~ John Steinbeck, 1952

Torrential rains. A Sierra snowpack over 200% of normal. Blizzards in Southern California! For those of us weary of drought, this Winter's storms were a welcome relief. But gratifying as the season proved, it does not spell the end of drought. For even with full reservoirs and slowly replenishing aquifers, the cyclical nature of California's water fortunes, coupled with our arid climate, guarantees a return to drought in years to come.

Much has changed since Steinbeck's day. Water conservation has become a way of life. No longer seen as a temporary patch for times of drought, conservation's role as protector of our shared waters is engrained in our behavior. We recognize it doesn't mean we must use less water, only that we not waste the water we have. By saving water today, we ensure we'll have it tomorrow — for every drop is golden!

Constant Monitoring Ensures Continued Excellence

Drinking Water Contaminants

The sources of drinking water (both tap 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.
- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban/stormwater runoff and residential uses.
- **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.
- **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.

Cryptosporidium

Metropolitan Water District of Southern California (MWD) tested its source water and treated surface water for *Cryptosporidium* in 2022 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.

Immunocompromised People

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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.

We Invite You to Learn More About Your Water's Quality

For further information about this report, or about your water quality in general, please contact Jason Shim at (949) 499-4555, ext. 3129.

The South Coast Water District Board of Directors holds regular meetings on the second and fourth Thursday of the month at 6 p.m. at the District Administrative Office, 31592 West Street, Laguna Beach, California 92651. You are welcome and encouraged to attend the regular Board meetings in person or virtually.

Please visit SCWD.org/Board for agendas, archived meetings, and to learn more about our Board.

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@SouthCoastWater

To Safeguard Against Issues that May Affect Your Health

We Comply with All State & Federal Water Quality Regulations

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.

Drinking Water Fluoridation

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

MWD was in compliance with all provisions of the State's fluoridation system requirements. Fluoride levels in drinking water are limited under California regulations to a maximum of two parts per million.

Additional information about the fluoridation of drinking water can be found through the following sources:

U.S. Centers for Disease Control and Prevention
1-888-CDC-INFO (1-888-232-4636)
www.cdc.gov/fluoridation/

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

American Dental Association
www.ada.org/en/public-programs/advocating-for-the-public/fluoride-and-fluoridation/ada-fluoridation-resources

American Water Works Association: www.awwa.org

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

2022 Metropolitan Water District of Southern California Treated Surface Water

Chemical	MCL	PHG (MCLG)	Average Amount	Range of Detections	MCL Violation?	Typical Source of Chemical
Radiologicals – Tested in 2020 and 2022						
Gross Alpha Particle Activity (pCi/L)	15	(0)	ND	ND – 3	No	Erosion of Natural Deposits
Gross Beta Particle Activity (pCi/L)	50	(0)	6	ND – 9	No	Decay of Natural and Man-made Deposits
Uranium (pCi/L)	20	0.43	2	1 – 3	No	Erosion of Natural Deposits
Inorganic Chemicals – Tested in 2022						
Aluminum (ppm)	1	0.6	0.14	0.085 – 0.21	No	Treatment Process Residue, Natural Deposits
Barium (ppm)	1	2	0.107	0.107	No	Refinery Discharge, Erosion of Natural Deposits
Fluoride (ppm)	2	1	0.7	0.7 – 0.8	No	Water Additive for Dental Health
Secondary Standards* – Tested in 2022						
Aluminum (ppb)	200*	600	140	85 – 210	No	Treatment Process Residue, Natural Deposits
Chloride (ppm)	500*	n/a	101	98 – 104	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	3	3	No	Naturally-occurring Organic Materials
Specific Conductance (µmho/cm)	1,600*	n/a	988	965 – 1,010	No	Substances that Form Ions in Water
Sulfate (ppm)	500*	n/a	221	213 – 229	No	Runoff or Leaching from Natural Deposits
Total Dissolved Solids (ppm)	1,000*	n/a	628	608 – 648	No	Runoff or Leaching from Natural Deposits
Unregulated Chemicals – Tested in 2022						
Alkalinity, total as $CaCO_3$ (ppm)	Not Regulated	n/a	126	125 – 127	n/a	Runoff or Leaching from Natural Deposits
Boron (ppm)	NL = 1	n/a	0.13	0.13	n/a	Runoff or Leaching from Natural Deposits
Calcium (ppm)	Not Regulated	n/a	68	66 – 70	n/a	Runoff or Leaching from Natural Deposits
Hardness, total as $CaCO_3$ (ppm)	Not Regulated	n/a	278	275 – 281	n/a	Runoff or Leaching from Natural Deposits
Hardness, total (grains/gallon)	Not Regulated	n/a	16	16	n/a	Runoff or Leaching from Natural Deposits
Magnesium (ppm)	Not Regulated	n/a	25	24 – 26	n/a	Runoff or Leaching from Natural Deposits
pH (pH units)	Not Regulated	n/a	8.1	8.1	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	98	95 – 102	n/a	Runoff or Leaching from Natural Deposits
Total Organic Carbon (ppm)	TT	n/a	2.5	2.3 – 2.6	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;
CL = 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 (NTU)	0.3	0.03	No	Soil Runoff
2) Percentage of samples less than or equal to 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
Manganese (ppb)**	SMCL = 50	n/a	1.1	1.1	2019

SMCL = Secondary MCL

**Manganese is regulated with a secondary standard of 50 ppb but was not detected, based on the detection limit for purposes of reporting of 20 ppb. Manganese was included as part of the unregulated chemicals requiring monitoring.

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.

2022 Irvine Ranch Water District – Baker Water Treatment Plant

Chemical	MCL	PHG	Average Amount	Range of Detections	MCL Violation?	Typical Source of Chemical
Radiologicals – Tested in 2022						
Gross Alpha Particle Activity (pCi/L)	15	MCLG = 0	2	2 – 3	No	Erosion of Natural Deposits
Gross Beta Particle Activity (pCi/L)	50	MCLG = 0	6.2	5.4 – 7.1	No	Decay of Natural and Man-made Deposits
Uranium (pCi/L)	20	0.43	1.6	1.5 – 1.7	No	Erosion of Natural Deposits
Inorganic Chemicals – Tested in 2022						
Arsenic (ppb)	10	0.004	<2	ND – 2.24	No	Erosion of Natural Deposits
Barium (ppm)	1	2	<0.1	ND – 0.107	No	Refinery Discharge, Erosion of Natural Deposits
Chlorine Dioxide (ppb)	MRDL = 800	MRDLG = 800	68.5	ND – 120	No	Drinking Water Disinfectant Added for Treatment
Chlorite (ppm)	1.0	0.05	<0.05	ND – 0.08	No	Byproduct of Drinking Water Chlorination
Fluoride (ppm)	2.0	1	0.34	0.32 – 0.35	No	Erosion of Natural Deposits; Water Additive for Dental Health
Secondary Standards* – Tested in 2022						
Chloride (ppm)	500*	n/a	101	99.8 – 103	No	Runoff or Leaching from Natural Deposits
Odor (Threshold Odor Number)	3*	n/a	1	1	No	Naturally-occurring Organic Materials
Specific Conductance (µmho/cm)	1,600*	n/a	991	979 – 1,006	No	Substances that Form Ions in Water
Sulfate (ppm)	500*	n/a	213	201 – 225	No	Runoff or Leaching from Natural Deposits
Total Dissolved Solids (ppm)	1,000*	n/a	627	604 – 650	No	Runoff or Leaching from Natural Deposits
Unregulated Chemicals – Tested in 2022						
Alkalinity, total as $CaCO_3$ (ppm)	Not Regulated	n/a	125	122 – 127	n/a	Runoff or Leaching from Natural Deposits
Boron (ppm)	NL = 1	n/a	0.137	0.133 – 0.141	n/a	Runoff or Leaching from Natural Deposits
Calcium (ppm)	Not Regulated	n/a	71.6	69.9 – 73.3	n/a	Runoff or Leaching from Natural Deposits
Hardness, total as $CaCO_3$ (ppm)	Not Regulated	n/a	292	282 – 302	n/a	Runoff or Leaching from Natural Deposits
Hardness, total (grains/gallon)	Not Regulated	n/a	17	16 – 18	n/a	Runoff or Leaching from Natural Deposits
Magnesium (ppm)	Not Regulated	n/a	27.6	26.2 – 28.9	n/a	Runoff or Leaching from Natural Deposits
pH (pH units)	Not Regulated	n/a	8.2	8 – 8.4	n/a	Hydrogen Ion Concentration
Potassium (ppm)	Not Regulated	n/a	5.14	4.82 – 5.46	n/a	Runoff or Leaching from Natural Deposits
Sodium (ppm)	Not Regulated	n/a	98.8	95.5 – 102	n/a	Runoff or Leaching from Natural Deposits
Total Organic Carbon (ppm)	TT	n/a	2.1	2 – 2.1	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; **NTU** = nephelometric turbidity units; **MCL** = Maximum Contaminant Level; **PHG** = California Public Health Goal; **(MCLG)** = federal MCL Goal; **MRDL** = Maximum Residual Disinfectant Level; **MRDLG** = Maximum Residual Disinfectant Level Goal; **NL** = Notification Level; **n/a** = not applicable; **TT** = treatment technique

*Chemical is regulated by a secondary standard.

Turbidity – combined filter effluent Irvine Ranch Water District Baker Water Treatment Plant	Treatment Technique	Turbidity Measurements	TT Violation?	Typical Source of Chemical
1) Highest single turbidity measurement (NTU)	0.1	0.03	No	Soil Runoff
2) Percentage of samples less than or equal to 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 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.

Quality Water is Our Priority

Turn the tap and the water flows, as if by magic. Or so it seems. The reality is considerably different, however. For delivering high-quality drinking water to our customers is a scientific and engineering feat that requires considerable effort and talent to ensure the water is always there, always safe to drink.

Because tap water is highly regulated by state and federal laws, water treatment plant and system operators must be licensed and are required to commit to long-term, on-the-job training before becoming fully qualified.

Our licensed water professionals have an understanding of a wide range of subjects, including mathematics, biology, chemistry, physics, and engineering. Some of the tasks they complete on a regular basis include:

- Operating and maintaining equipment to purify and clarify water;
- Monitoring and inspecting machinery, meters, gauges, and operating conditions;
- Conducting tests and inspections on water and evaluating the results;
- Documenting and reporting test results and system operations to regulatory agencies; and
- Serving our community through customer support, education, and outreach.

So, the next time you turn on your faucet, think of the skilled professionals who stand behind each drop.

2022 Groundwater Recovery Facility Water Quality

Chemical	MCL	PHG (MCLG)	Average Amount	Range of Detections	MCL Violation?	Most Recent Sampling Date	Typical Source of Contaminant
Inorganic Contaminants							
Fluoride (ppm)	2	1	0.73	0.73	No	2022	Erosion of Natural Deposits
Nitrate (ppm as N)	10	10	1	1	No	2022	Fertilizers, Septic Tanks
Secondary Standards*							
Chloride (ppm)	500*	n/a	112	103 – 133	No	2022	Erosion of Natural Deposits
Color (Color Units)	15*	n/a	1	1	No	2022	Erosion of Natural Deposits
Odor (Threshold Odor Number)	3*	n/a	1	1	No	2022	Erosion of Natural Deposits
Specific Conductance (µmho/cm)	1,600*	n/a	760	755 – 764	No	2022	Erosion of Natural Deposits
Total Dissolved Solids (ppm)	1,000*	n/a	496	445 – 520	No	2022	Erosion of Natural Deposits
Sulfate (ppm)	500*	n/a	167	136 – 200	No	2022	Erosion of Natural Deposits
Turbidity (NTU)	5*	n/a	0.16	0.13 – 0.19	No	2022	Erosion of Natural Deposits
Unregulated Contaminants							
Alkalinity (ppm as $CaCO_3$)	Not Regulated	n/a	68	59.6 – 74.4	n/a	2022	Erosion of Natural Deposits
Magnesium (ppm)	Not Regulated	n/a	18	18	n/a	2022	Erosion of Natural Deposits
Calcium (ppm)	Not Regulated	n/a	54	43 – 75	n/a	2022	Erosion of Natural Deposits
pH (units)	Not Regulated	n/a	7.98	7.91 – 8.18	n/a	2022	Acidity, hydrogen ions
Sodium (ppm)	Not Regulated	n/a	70	70	n/a	2022	Erosion of Natural Deposits
Total Hardness (ppm as $CaCO_3$)	Not Regulated	n/a	220	208 – 231	n/a	2022	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
Manganese (ppb)**	SMCL = 50	n/a	0.87	0.87	2019

SMCL = Secondary MCL

**Manganese is regulated with a secondary standard of 50 ppb but was not detected, based on the detection limit for purposes of reporting of 20 ppb. Manganese was included as part of the unregulated chemicals requiring monitoring.

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 surveys for MWD's source waters are the Colorado River Watershed Sanitary Survey – 2020 Update, and the State Water Project Watershed Sanitary Survey – 2021 Update. The IRWD watershed sanitary survey for Santiago Reservoir (Irvine Lake) was updated in 2019.

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.

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.

2022 South Coast Water District Distribution System Water Quality

Disinfection Byproducts	MCL (MRDL/MRDLG)	Average	Range	MCL Violation?	Typical Source of Contaminant
Total Trihalomethanes (ppb)	80	51	31 – 55	No	Byproducts of Chlorine Disinfection
Haloacetic Acids (ppb)	60	21	7.4 – 26	No	Byproducts of Chlorine Disinfection
Chlorine Residual (ppm)	(4 / 4)	1.5	ND – 2.5	No	Disinfectant Added for Treatment
Aesthetic Quality					
Color (Color Units)	15*	1	1	No	Erosion of Natural Deposits
Turbidity (NTU)	5*	0.18	0.16 – 0.23	No	Erosion of Natural Deposits
Odor (Threshold Odor Number)	3*	1	1	No	Erosion of Natural Deposits

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.

MRDL = Maximum Residual Disinfectant Level; **MRDLG** = Maximum Residual Disinfectant Level Goal; **NTU** = nephelometric turbidity units.

*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	90th Percentile Value	Sites Exceeding AL / Number of Sites	AL Violation?	Typical Source of Contaminant
Copper (ppm)	1.3	0.3	0.25	0 out of 60	No	Corrosion of Household Plumbing
Lead (ppb)	15	0.2	0.0018	0 out of 60	No	Corrosion of Household Plumbing

In 2020, lead and copper samples were collected at 60 locations in an ongoing consolidation process for South Coast Water District and Capistrano Beach system; 30 samples samples were collected on South Coast Water District system and 30 from Capistrano service area. Lead was detected in 23 homes and copper was detected in 48 homes. No samples from the combined 60 sample locations exceeded the lead or copper Action Level (AL).

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

Unregulated Chemicals Requiring Monitoring in the Distribution System

Chemical	Notification Level	PHG	Average Amount	Range of Detections	Most Recent Sampling Date
Haloacetic Acids (HAA5) (ppb)	n/a	n/a	8.1	5.6 – 19	2019
Haloacetic Acids (HAA6Br) (ppb)	n/a	n/a	8.3	6.2 – 14	2019
Haloacetic Acids (HAA9) (ppb)	n/a	n/a	14.7	10.6 – 29.7	2019

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.

Want Additional Information?

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

South Coast Water District: www.scwd.org

U.S. Environmental Protection Agency:
www.epa.gov/safewater

California Department of Water Resources:
www.water.ca.gov

Metropolitan Water District of Southern California:
www.mwdh2o.com

Drought and Water Conservation Tips:
www.SCWD.org/conserve
www.BeWaterWise.com
www.SaveOurWater.com

Rebate Information, Water Saving Resources:
www.OCWaterSmart.com

Where Does Our Water Come From?

...and How Does It Get to Us?

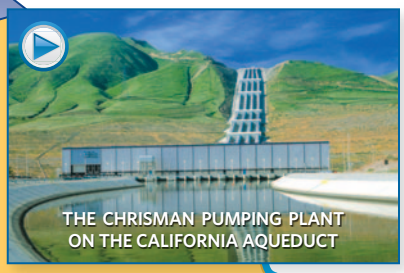
Have you ever wondered where your water comes from? Here in South Coast Water District our water is drawn from local groundwater supplies then blended with water imported from both Northern California and the Colorado River.

Water from Northern California travels to us through a complex delivery system known as the California State Water Project. Designed and built in the 1960s, the State Water Project is one of the largest public water and power utilities in the world, providing drinking water for more than 25 million people statewide.

Managed by the California Department of Water Resources, the project stretches over 700 miles, from Lake Oroville in the north to Lake Perris in the south. Water stored in Lake Oroville, Folsom Lake, and other tributaries, and fed by snow melt from the Sierra Nevada Mountains, flows into the Sacramento and San Joaquin rivers, and from there into reservoirs in the Bay-Delta region.

From the Bay-Delta, giant pumps lift the water into the 444-mile-long California Aqueduct, there to flow southward to cities and farms in Central and Southern California. Composed mainly of concrete-lined canals, the Aqueduct also includes over 20 miles of tunnels, more than 130 miles of pipelines, and 27 miles of siphons. Along the way, the water is pumped 2,882 feet over the Tehachapi Mountains. The Edmonston Pumping Plant alone lifts millions of gallons a day up 1,926 feet, the highest single water lift in the world.

Is it any wonder the State Water Project is the largest single consumer of power in the State of California?



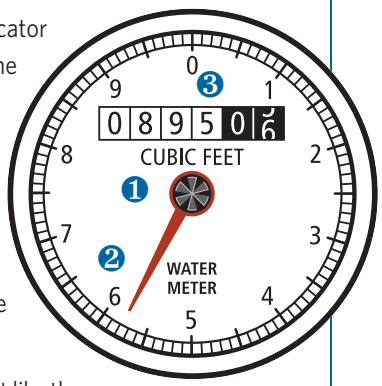
Managed by the Metropolitan Water District of Southern California, the Colorado River Aqueduct begins near Parker Dam on the Colorado River. There, the Gene Pumping Station lifts the water over 300 feet as it begins its 242 mile journey to Lake Mathews, just outside the City of Corona. Along the way, the water passes through two reservoirs, five pumping stations, 62 miles of canals, and 176 miles of tunnels, buried conduits and siphons. All told, the water is lifted four times, a total of more than 1,300 feet.

After its journey across the Mojave Desert, the water descends into the Coachella Valley and through the San Gorgonio Pass. Near Cabazon, the aqueduct flows underground, passing beneath the San Jacinto Mountains and continuing until it reaches its terminus at Lake Mathews. From there, 156 miles of distribution lines, along with eight more tunnels and five drinking water treatment plants, delivers treated water throughout Southern California.

How to Read Your Residential 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 white 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 red or black triangular 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.

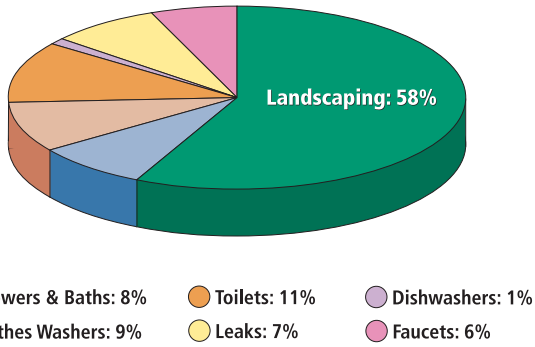
❷ **Sweep Hand** — Each full revolution of the sweep hand indicates that one cubic foot of water (7.48 gallons) has passed through the meter. The markings at the outer edge of the dial indicate tenths and hundredths of one cubic foot.

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.

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.

Water Conservation is Always a Priority

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 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

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

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