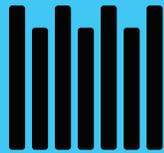


# 2013

# WATER QUALITY REPORT



*Every time you open the faucet to fill your glass with tap water, you can be proud that it is being delivered by an award-winning agency known for its reliability, efficiency, quality and “green approach.” Santa Ana's water ranked the nation's best tasting and highest quality on tap.*



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

Daimntawv tshaj tawm no muaj lus tseemceeb txog koj  
cov dej haus. Tshab bxbais nws, los yog tham nrog tej  
tug neeg uas totaub txog nws.

Mahalaga ang impormasyong ito. Mangyaring ipasalin ito.

此份有关你的食水报告, 内有重要资料和讯息, 请找  
他人替你翻译及解释清楚。

Chi tiet này thât quan trong.  
Xin nhô người dịch cho quý vị.



# MESSAGE FROM WILLIAM GALVEZ

I am pleased to present the 2013 Consumer Confidence Report (CCR) where you can learn about the sources and quality of water we deliver to you, our customer. Perhaps one of the most important topics we discuss in this year's report is water conservation. Governor Brown declared a state of emergency because of California's record dry conditions, calling on all of us to cut back our water use by at least 20 percent. The drought—which officials say could be one of the worst in the state's history—is a critical issue Californians face, and we all must do our part to become more efficient in our water use.

The City of Santa Ana adopted a strategic plan earlier this year, which—among other important initiatives—focuses on completing the City's Climate Action Plan with measures to address water conservation, energy efficient buildings (city and community) and greenhouse gas emissions. Creating awareness for and educating the community about water conservation is an important component of the plan.

You will find in this report simple water-saving tips that will also help you save money. With just a few small changes, we can all do our part to conserve, build a sustainable future together, and protect our most precious resource.

You will also learn about the California State Water Project, a backbone of California's water system, and what's at stake if upgrades to its water delivery infrastructure are not made. These upgrades, along with measures to protect the Delta ecosystem, are part of the Bay Delta Conservation Plan (BDCP), which is being reviewed for adoption. Supporting the BDCP is essential to preserving a reliable water supply and our future sustainability.

What's more, did you know your tap water ranked the best tasting and highest quality in the nation? The City was thrilled to earn this prestigious distinction, receiving the top award among all other municipal water districts in the nation. I believe it is testimony to the stringent standards we set for our tap water, which exceed the drinking water health standards required by both the State of California Department of Public Health and the United States Environmental Protection Agency. These requirements and how our water tested throughout the year are detailed in the charts of this report.

I hope you enjoy reading this year's report and will use it as a valuable resource. Please share this information with anyone who drinks Santa Ana water, especially those who may not have received this report. Starting today, particularly as we approach the summer months, my wish is that the word "conservation" comes first to your mind every time you turn on the faucet!

Sincerely,

**William Galvez**  
*Interim Executive Director*  
Public Works Agency  
City of Santa Ana





# ABOUT THIS REPORT

The focal point of the water quality report is a table that lists the results of year-round monitoring for more than 120 constituents. Only the constituents that are found are listed in the water quality data tables. Bottled water is not covered in this report. Santa Ana met all primary drinking water standards in 2013.

By reading the table from left to right, you will learn the quantity of a constituent found in Santa Ana's water supply and how that compares with the allowable state and federal limits.

You'll also learn the range and average of the constituent measured as well as its origin. The questions and answers starting on this page, numbers 1 through 7, will explain the important elements of the table.

## WATER SOURCE & COMPONENTS

### 1. What are the sources of the water Santa Ana delivers?

The City of Santa Ana depends on two sources for the 12.5 billion gallons of water we supply each year—68 percentage is groundwater and 32 percentage is imported water, purchased from the Metropolitan Water District of Southern California (MWD).

The groundwater accumulates and is stored beneath the surface of the earth and then pumped to the surface by 20 City-owned wells. MWD brings Colorado River water from Lake Havasu and runoff from the snow pack in the Sierra Nevada Range in Northern California. The water is then treated at either the Diemer Filtration Plant in Yorba Linda or the Weymouth Filtration Plant in LaVerne before it is delivered to Santa Ana.

There are seven MWD connections located in the city. Most of our customers receive a blending of the two sources, groundwater and imported water. For more details, see the Water Quality Standards for each of these sources in the data that follow. We have listed groundwater and imported water in separate columns.

### 2. What's in my drinking water?

Your tap water may contain different types of chemicals (organic and inorganic), microscopic organisms (e.g., bacteria, algae, viruses) and radioactive materials (radionuclides), many of which are naturally occurring. Health agencies require monitoring for these constituents, because at certain levels they could make a person sick. The column marked "Parameter" lists the constituents found in the water used by Santa Ana.

### 3. What are the maximum allowed levels for constituents in drinking water?

Health agencies have maximum contaminant levels for constituents so that drinking water is safe and looks, tastes and smells good. A few constituents have the letters "TT" in the MCL column because they do not have a numerical MCL. Instead, they have certain treatment requirements that have to be met. One of the constituents, total chlorine residual, has an MRDL (maximum residual disinfection level) instead of an MCL.

The MRDL is the maximum level of a disinfectant added for water treatment that is allowed in water. While disinfectants are necessary to kill harmful microbes, drinking water regulations protect against too much disinfectant being added. Another constituent, turbidity, has a requirement that 95 percent of the measurements taken must be below a certain number. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the efficiency of the filtration system.



## WATER SOURCE & COMPONENTS *(continued)*

### 4. Why are some of the constituents listed in the section labeled “Primary Standards” and others in the “Secondary Standards”?

Constituents that are grouped in the primary standards section may be unhealthy at certain levels. Constituents that are grouped under the secondary standards section can affect the appearance, taste and smell of water, but do not affect the safety of the water unless they also have a primary standard. Some constituents (e.g., aluminum) have two different MCLs (Maximum Contaminant Level), one for health-related impacts, and another for non-health-related impacts not related to health.

### 5. How do I know how much of a constituent is in my water and if it is at a safe level?

With a few exceptions, if the average amount of a constituent found in tap water over the course of a year is no greater than the MCL, then the regulatory requirements are considered to be satisfied. The highest and lowest levels measured over a year are shown in the range. Requirements for safety, appearance, taste and smell are based on the average levels recorded and not the range.

### 6. How do constituents get into our water?

Drinking water (tap water and bottled water) comes from 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 human activity. The most likely source for each constituent is listed in the last column of the table.

### 7. Are there any potential sources of contamination in our system?

An assessment of the drinking water wells for the City of Santa Ana was completed in December 2013. The City wells are considered most vulnerable to the following activities associated with contaminants detected in the water supply: historic agricultural activities, golf courses, and application of fertilizers.

The City’s wells are considered most vulnerable to the following activities not associated with detected contaminants: chemical/petroleum pipelines, chemical/petroleum processing/stores, dry cleaners, gas stations, junk/scrap/salvage yards, metal plating/finishing/fabrication, plastics/synthetics producers, and sewer collection systems.

## GET INVOLVED.

If you would like to be involved in issues and decisions that affect the quality and cost of your drinking water, City Council meetings are open to the public and held at 5:45 p.m. on the first and third Tuesday of each month. The meeting location is at City Council Chambers, 22 Civic Center Plaza, Santa Ana, CA 92701.

*For more information, contact:*

**Santa Ana City Council**

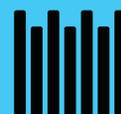
20 Civic Center Plaza

P.O. Box 1988, M31

Santa Ana, CA 92702

phone: 714-647-6900

fax: 714-647-6954



# YOUR WATER, YOUR 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 the water poses a health risk. You can learn more about contaminants and potential health effects by calling the U.S. Environmental Protection Agency's (USEPA) Safe Drinking Water Hotline at 800-426-4791 or visiting the website at [epa.gov/safewater/](http://epa.gov/safewater/).

To ensure that tap water is safe to drink, the USEPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water. Both sets of requirements protect public health. Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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/CDC (U.S. Centers for Disease Control and Prevention) 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. Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. To date, cryptosporidium has not been detected in our water supply.

Beginning in October 2007, water that is received by the City of Santa Ana from MWD will have fluoride added to it. Our well water has a naturally occurring fluoride range level of 0.18 to 0.56 ppm. Water provided by MWD will have a fluoride level of 0.7 to 0.8 ppm. This plan was approved by the CDC and the California Department of Public Health. Additional information may be found by calling MWD's Water Quality Information Hotline at 800-354-4420. You can also download a fact sheet at [mwdh2o.com/fluoridation/fluoridationfactsheet.pdf](http://mwdh2o.com/fluoridation/fluoridationfactsheet.pdf) or visit [ada.org/fluoride.aspx](http://ada.org/fluoride.aspx).

## QUESTIONS ABOUT YOUR WATER QUALITY REPORT?

A copy of the complete assessment is available at the Water Resources Division office. You can request a summary of the assessment be sent to you by contacting us at 714-647-3320. If you have questions about your water quality, contact:

### City of Santa Ana, Water Resources Division

Nabil Saba, P.E., Water Resources Manager  
Cesar Barrera, P.E., Principal Civil Engineer  
Thomas Dix, Water Quality Coordinator

220 South Daisy Avenue , Bldg A  
Santa Ana, California 92703  
phone: 714-647-3320  
fax: 714-647-3345  
[www.santa-ana.org](http://www.santa-ana.org)



# TERMS AND ABBREVIATIONS

The following glossary of definitions will help you understand the terms and abbreviations used in this report.

**Constituents:** Components or elements found in drinking water.

**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 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 (MRDL):** The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

**Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by the USEPA.

**Primary Drinking Water Standard (PDWS):** The MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

**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.

**Regulatory Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow. The adjacent table lists data on the levels of regulated contaminants that were detected in our water supply from January 1 through December 31, 2013. The presence of these contaminants in the drinking water does not necessarily indicate that the water poses a health risk.

**Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.

## THE FOUR TERMS TO EXAMINE

### Primary Standards



Mandatory health-related standards that may cause health problems in drinking water.

### Secondary Standards



Aesthetic standards (non health-related) that could cause odor, taste, or appearance problems in drinking water.

### Unregulated Parameters



Information about contaminants that are monitored but are not currently regulated by federal and state health agencies.

### Additional Parameters



Information that may also be of interest to our customers.

# WATER QUALITY DATA



## ADDITIONAL ABBREVIATIONS USED IN THIS CHART

<b>MFL:</b> million fibers per liter	<b>NS:</b> no standard	<b>ppm:</b> parts per million, or milligrams per liter (mg/L)
<b>NA:</b> not applicable	<b>NTU:</b> nephelometric turbidity units – a measure of suspended material in water	<b>ppt:</b> parts per trillion, or nanograms per liter (ng/L)
<b>ND:</b> not detectable at testing limit	<b>pCi/L:</b> picocuries per liter (a measure of radioactivity)	<b>ppq:</b> parts per quadrillion, or picograms per liter
<b>NR:</b> not required	<b>ppb:</b> parts per billion, or micrograms per liter (ug/L)	<b>uS/cm:</b> microsiemens per centimeter
<b>NC:</b> not collected	<b>NL:</b> notification level	<b>AI:</b> aggressiveness index
<b>AL:</b> action level	<b>CFU:</b> colony-forming units	<b>PHG:</b> public health goal



## Primary Standards - Mandatory Health - Related Standards

CLARITY Parameter	MCL	PHG (MCLG)	Imported Water		Groundwater		Typical Source of Contaminant
			Range	Average	Range	Average	
Combined Filter Effluent Turbidity (NTU)	0.3	NA	Highest	0.05	NR	NR	Soil runoff
Combined Filter Effluent Turbidity (%) <sup>1</sup>	95 <sup>2</sup>	NA	%<0.3	100	NR	NR	Soil runoff

MICROBIOLOGICAL Parameter	MCL	PHG (MCLG)	Imported Water		Groundwater		Typical Source of Contaminant
			Range	Average	Range	Average	
Total Coliform Bacteria <sup>3</sup>	NA	NA	ND - 0.2	ND	ND	ND	Naturally present in the environment.
<b>RADIOLOGICALS</b>							
Natural Uranium (pCi/L)	20	0.43	1 - 2	2	ND - 10.20	3.73	Erosion of natural deposits.

INORGANIC CHEMICALS							
Arsenic (ppb)	10	0.004	ND - 2.0	2	ND - 3.50	0.28	Erosion of natural deposits; runoff from orchards, glass and electronics production wastes.
Barium (ppb)	1000	2000	ND	ND	ND - 139.00	17.85	Oil and metal refinery discharges; erosion of natural deposits.
Fluoride (ppm) (naturally occurring)	2	1	NO.1 - 0.4	0.3	0.15 - 0.80	0.35	Erosion of natural deposits; discharge from fertilizer and aluminum factories.
Fluoride (ppm) (Treatment - related)	(see notes) <sup>4</sup>	1	0.7 - 1.0	0.8	NA	NA	Water additive for dental health.
Nitrate (as NO <sub>3</sub> ppm) <sup>5</sup>	45	45	ND	ND	ND - 37.74	10.69	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits.
Nitrate and Nitrite (as N ppm)	10	10	ND	ND	0.00 - 8.53	2.41	
Perchlorate (ppb) <sup>6</sup>	6	6	ND	ND	ND - 4.00	0.03	Usually gets into drinking water as a result of environmental contamination from historic aerospace or other industrial operations that used or use, store, or dispose of perchlorate and its salts.
Selenium (ppb)	50	(50)	ND	ND	NR	NR	Refineries, mines, and chemical waste discharges; runoff.

# WATER QUALITY DATA



## Primary Standards - Mandatory Health-Related Standards (Continued)

Parameter	MCL	PHG (MCLG)	Imported Water		Groundwater			Typical Source of Contaminant
			Range	Average	90th Percentile	# of Sites Above the AI	# of Sites Sampled	
Copper (ppm)	AL=1.3	0.3	ND	ND	0.14	0	84	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead (ppb)	AL= 15	0.2	ND	ND	ND	0	84	Internal corrosion of household plumbing systems; erosion of natural deposits; discharges from industrial manufacturers.

Parameter	MCL (MRDL)	PHG MCLG (MRDLG)	Imported Water		Groundwater or System		Typical Source of Contaminant
			Range	Average	Range	Average	
<b>Volatile Organic Compounds</b>							
Methyl-tert-butyl-ether (MTBE) (ppb)	5	13	ND	ND	ND	ND	Leaking underground gasoline storage tanks and pipelines; discharge from petroleum and chemical factories.
<b>Disinfection By-Products, Disinfectant Residuals</b> – Values are for the distribution system based on annual running average							
Total Trihalomethanes (TTHM) (ppb) <sup>7</sup>	80	NA	12 - 60	58	ND - 52.8	30.9	Byproduct of drinking water disinfection.
Haloacetic Acids (Five) (ppb)	60	NA	ND - 22	18	ND - 23.5	11.6	Byproduct of drinking water disinfection.
Total Chlorine Residual (ppm)	[4.0]	[4.0]	ND - 2.9	2.3	ND - 1.18	1	Drinking water disinfectant added for treatment.

## Secondary Standards - Aesthetic Standards (Non Health Related)

Parameter	MCLG	PHG (MCLG)	Imported Water		Groundwater		Typical Source of Contaminant
			Range	Average	Range	Average	
Chloride (ppm)	500	NA	84 - 91	87	18.20 - 100.00	53.27	Runoff/leaching from natural deposits; seawater influence.
Color (units)	15	NA	1	1	ND - 3.00	0.3	Naturally occurring organic materials.
Odor, Threshold (units)	3	NA	3 - 6	3	ND	ND	Naturally occurring organic materials.
Spec. Conductance (um/cm)	1600	NA	850 - 900	880	436.00 - 1,130.00	700.23	Substances that form ions when in water, seawater influence.
Sulfate (ppm)	500	NA	170 - 200	185	44.20 - 143.00	91.52	Runoff/leaching from natural deposits, seawater influence.
Total Dissolved Solids (ppm)	1000	NA	520 - 560	535	250.00 - 636.00	420.1	Runoff/leaching from natural deposits.
Turbidity (NTU)	5	NA	ND	ND	ND - 0.300	0.11	Soil runoff.

## Additional Parameters That May Be Of Interest To Our Customers

Parameter	MCL	PHG (MCLG)	Imported Water		Groundwater		Typical Source of Contaminant
			Range	Average	Range	Average	
1,4-Dioxane (ppb)	NA	NA	NC	NC	ND	ND	Runoff/leaching from natural deposits; seawater influence.

# WATER QUALITY DATA



## Unregulated Parameters That May Be Of Interest To Our Customers

Parameter	MCL	PHG (MCLG)	Imported Water		Groundwater	
			Range	Average	Range	Average
Total Alkalinity (as CaCO <sub>3</sub> ) (ppm)	NA	NA	76 - 130	110	141.00 - 237.00	167.4
Bicarbonate (as HCO <sub>3</sub> )	NA	NA	NC	NC	172.00 - 289.00	203.95
Boron (ppb)	NA	NL = 1000	140 - 150	145	0.00 - 0.36	0.02
Bromide (ppm)	NS	NS	NC	NC	0.00 - 0.21	0.09
Calcium (ppm)	NA	NA	56 - 61	59	24.40 - 124.00	74.05
Bicarbonate (as CaCO <sub>3</sub> )	NA	NA	NC	NC	141.00 - 237.00	167.4
Hexavalent Chromium (ppb)	NA	0.02	ND	ND	0.00 - 2.20	1.01
Total Hardness (as CaCO <sub>3</sub> ) (ppm)	NA	NA	230 - 250	245	81.60 - 428.00	245.23
Total Hardness (Grains per gallon)	NS	NS	13.4 - 14.6	14.3	4.76 - 24.97	14.31
Magnesium (ppm)	NA	NA	21 - 23	22	5.00 - 28.70	14.66
N-Nitrosodimethylamine (NDMA) (ppt)	NA	NL = 10	ND - 11	ND		
pH (pH units)	NA	NA	8.1	8.1	7.80 - 8.10	7.94
Potassium (ppm)	NA	NA	4.0 - 4.4	4.2	1.30 - 3.00	2.07
Radon (pCi/L) <sup>8</sup>	NA	NA	ND	ND		
Sodium (ppm)	NA	NA	79 - 87	83	34.10 - 81.00	45.46
TOC (ppm)	TT	NA	2.1 - 2.7	2.4	ND - 0.41	0.14
Vanadium (ppb)	NA	NL = 50	ND - 3.0	ND - 3.0	0.00 - 6.00	0.91

Chlorate (ppb) <sup>9</sup>	NA	NA	38.1 - 67.6	53.25	37.5 - 85.8	55.12
Chromium (ppb) <sup>9</sup>	NA	NA	<0.2 - 0.5	0.06	<0.2 - 0.6	0.28
Hexavalent Chromium (ppb) <sup>9</sup>	NA	NA	0.03 - 0.12	0.07	0.09 - 0.68	0.36
Molybdenum (ppb) <sup>9</sup>	NA	NA	4.5 - 5.3	4.79	4.6 - 5.2	4.75
Strontium (ppb) <sup>9</sup>	NA	NA	854 - 1070	938.38	656 - 959	827.5
Vanadium (ppb) <sup>9</sup>	NA	NA	2.3 - 3.0	2.81	2.4 - 2.8	2.55

# NOTES



- <sup>1</sup> **TURBIDITY:** Is a measure of the cloudiness of the water. It is monitored in our imported water source because it is a good indicator of the effectiveness of the filtration system.
- <sup>2</sup> The turbidity level of the filtered water shall be less than or equal to 0.3 NTU in 95% of the measurements taken each month and shall not exceed 1 NTU at any time. The averages and ranges of turbidity shown in the Secondary Standards were based on the treatment plant effluent.
- <sup>3</sup> The State required raw water coliform monitoring for all treatment plants beginning March 2008. Reporting level is 1 CFU/100mL for total coliform and E. coli.
- <sup>4</sup> Data for the naturally occurring fluoride were taken before the fluoridation treatment began. Fluoridation treatment of water supplies at all five MWD treatment plants started sequentially from October 29, 2007 to December 3, 2007. Metropolitan was in compliance with all provisions of the State's Fluoridation System Requirements.
- <sup>5</sup> **SPECIAL EDUCATIONAL STATEMENT REGARDING NITRATE:**  
Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. Nitrate in drinking water at levels above 45 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, you should ask advice from your health care provider.
- <sup>6</sup> **SPECIAL EDUCATIONAL STATEMENT REGARDING PERCHLORATE:**  
Perchlorate has been shown to interfere with uptake of iodide by the thyroid gland, and to thereby reduce the production of thyroid hormones, leading to adverse effects associated with inadequate hormone levels. Thyroid hormones are needed for normal prenatal growth and development of the fetus, as well as for normal growth and development in the infant and child. In adults, thyroid hormones are needed for normal metabolism and mental function.
- <sup>7</sup> **NOTE:** Eight locations in the distribution system are tested quarterly for total trihalomethanes and haloacetic acids.
- <sup>8</sup> **RADON:** Radon is a radioactive gas that you can't see, taste, or smell. It is found throughout the U.S. Radon can move through the ground and into a home through cracks and holes in the foundation. Radon can build up in high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will in most cases be a small source of radon in indoor air. Radon is a known human carcinogen. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may also cause increased risk of stomach cancer. If you are concerned about radon in your home, test the air in your home. Testing is inexpensive and easy. Fix your home if the level of radon in your air is 4 picocuries per liter of air (pCi/L) or higher. There are simple ways to fix a radon problem that aren't too costly. For additional information, call the California radon program (1-800-745-7236), the EPA Safe Drinking Water Act Hotline (1-800-426-4791), or the National Safe Council Radon Hotline (1-800-SOS-RADON.)
- <sup>9</sup> In 2012, EPA revised the Unregulated Contaminant Rule to establish a new set of unregulated contaminants. This new assessment monitoring is referred to as UCMR3 monitoring. This monitoring is required of all Public Water Systems during a 12 month period from January 2013 to December 2015. The constituents noted are those monitored at designated UCMR3 water sampling locations.



## IMPORTANT INFORMATION ABOUT DRINKING WATER

# MONITORING REQUIREMENTS NOT MET FOR THE CITY OF SANTA ANA

There are many monitoring requirements imposed on every public water system. Our water system staff failed to adequately meet these requirements on one occasion this past year; and therefore, the City's water system was in violation of these regulations. It is important to note that this was not a violation caused by having contaminants exceed allowable levels; rather, it was a violation caused by failing to take the required number of samples within a specific time frame. Even though this failure was not an emergency, as our customers, you have the right to know what you should do, what happened, and what we did to correct this situation. This notice is intended to provide you with this information. Please be sure to share this information with anyone who drinks Santa Ana water.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During a period in March 2013, we did not take the required number of Stage 2 Disinfectant Byproducts Rule samples required under Title 22 California Code of Regulations, Section 64424 (c), and therefore, cannot be sure of the quality of our drinking water during that time.

Upon receipt of notification from a person operating a public water system, the following notification must be given within 10 days [Health and Safety Code Section 116450(g)]:

**Schools:** Must notify school employees, students, and parents (if the students are minors).

**Residential Rental Property Owners or Managers** (including nursing homes and care facilities):  
Must notify tenants.

**Business Property Owners, Managers, or Operators:** Must notify employees of businesses located on the property.



## IMPORTANT INFORMATION ABOUT DRINKING WATER

# MONITORING REQUIREMENTS NOT MET FOR THE CITY OF SANTA ANA *(continued)*

### What happened? What is being done?

We have provided additional training to our staff so there is no misunderstanding in the proper time frame and amount of samples required and when. Additional checks have been established to ensure compliance. We have performed and continue to perform all of the water system monitoring required under Title 22 to ensure the water provided to our customers is in full compliance with all regulations.

### What should I do?

There is nothing you need to do at this time. The table below lists the contaminants we did not properly test for during the last year, how many samples we are required to take, samples that should have been taken, and the date on which follow-up samples were taken.

For more information, please contact Water Resources at (714) 647-3320 or write to: City of Santa Ana 220, South Daisy Avenue, Santa Ana, CA 92703

Contaminant(s)	Number of Samples Required	Number of Samples Taken	When Missing Samples Should Have Been Taken	When Required Samples Were Taken
Stage 2 disinfection by-product; rule samples (TTHM's and HA's)	8 samples every quarter (32 per year)	24 (on required dates) 8 (taken late)	March 2013	June 25, 2013
Total Trihaloanes Halo-acetic	32	24		



# SANTA ANA WINS THE GOLD

No, it wasn't at the winter Olympics. But to the City of Santa Ana, winning the distinction of producing the nation's best and highest quality tap water was exciting news! The City received the gold award in the "Best Municipal Water" category at the 2014 Berkeley Springs International Water Tasting Festival in March. The medal adds to Santa Ana's previous awards, surpassing its bronze and silver medals from 2011 and 2012.

Earning this recognition year after year validates the stringent standards Santa Ana sets for its tap water, which are above and beyond the drinking water health standards required by both state and federal agencies. Details about these standards are outlined in the charts of this Water Quality Consumer Confidence Report, produced by Santa Ana's Water Resources Division.

It is the division's team of dedicated and certified specialists who are responsible for upholding these standards, ensuring water is not only high in quality but also from a reliable and plentiful source.

We are thrilled to receive the nation's top award in our category, winning over four previous gold medalists.

—Nabil Saba, Water Resources Manager, City of Santa Ana

It is not a simple task to maintain a healthy, reliable, and safe drinking water supply. It requires a large investment in infrastructure and resources as well as people.

—William Galvez, Interim Executive Director of Public Works

## The Academy Awards of Water

Touted as the "Academy Awards of Water," the Berkeley Springs International Water Tasting Festival is the largest and longest running water tasting in the world dedicated to preserving and protecting drinking water. It is a serious and accredited competition where waters were tasted in four separate flights over a period of two days. Similar to a wine tasting, judges rate the water for each attribute, including appearance (should be clear), aroma (should be none), taste (should taste clean), mouth feel (should feel light), and aftertaste (should leave people thirsty for more).

### The Winners: Best Municipal Water 2014

- | **Best in the World:** Clearbrook, BC, Canada
- | **Best in the USA:** Santa Ana, CA
- | **Silver:** Hamilton, OH
- | **Bronze:** Greenwood, BC, Canada
- | **4th (tie):** Dickinson, ND & Montpelier, OH

### The Numbers

- | 10 Judges
- | 100 Water Sources
- | 12 Countries
- | 18 U.S. States
- | 3 Canadian Provinces



# CERTIFIED & RATED: SANTA ANA'S FIRST "GREEN" BUILDING EARNS SILVER RATING

Santa Ana works hard to reduce its environmental footprint, increase the reliability of its water system, and improve quality of life for the community. One example is the fall 2014 renovation of the Walnut Pump Station. This older pump station was built in 1953 to pump water into the City's pipe system from an underground storage reservoir.

Upon review of the renovation design, the Walnut Pump Station was verified for its water and energy efficiency. It also was awarded a silver rating by Envision, a third-party rating system used to evaluate and rate the community, environmental and economic benefits of construction projects.



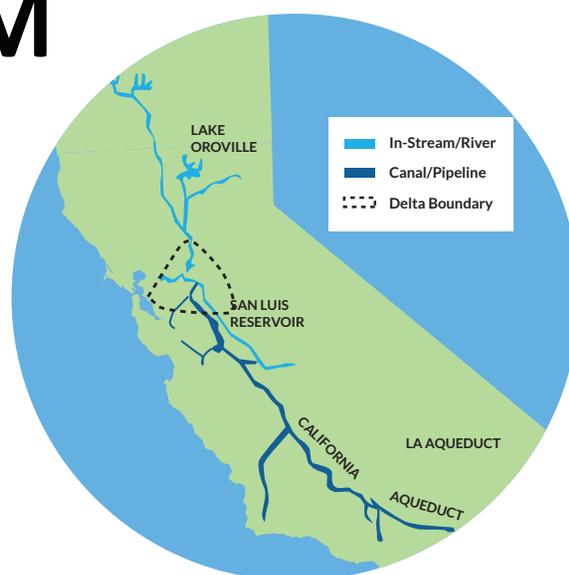
**envision**<sup>tm</sup>



# AN IMPORTANT WATER DELIVERY SYSTEM

For the first time in its 54-year history, the California State Water Project—a backbone of California’s water system—announced it would cease providing water to downstream agencies this year because of the severe drought. The decision was announced shortly after Governor Brown’s call for a voluntary 20 percent reduction in water use.

At this time, regions will have to rely on water stored in local reservoirs, pumped from underground wells, recycled water, and conservation measures to meet demand. What does this mean to Santa Ana residents? While there are sufficient water reserves available, residents will need to curb their water usage. In this report, you can read about simple ways to cut back your water use by 20 percent and take advantage of rebates being offered.



## Why is it important?

Water has always been a scarce resource in California. The State Water Project is operated to deliver a more reliable water supply for farms and communities. It protects our future water resources while protecting fish and wildlife, improving water quality in the Delta, and controlling Feather River floodwaters. As we look forward, the State Water Project’s role in providing a more resilient water resources system will help California endure inevitable challenges in coming decades. It is essential to our future sustainability.

## What is the California State Water Project?

About 30 percent of Orange County’s water supply travels a long distance through a complex delivery system called the California State Water Project. It is the nation’s largest state-built water storage and delivery system of reservoirs, aqueducts, power plants and pumping plants, supplying water to 25 million Californians and 750,000 acres of farmland. The original purpose of the project was to provide water for arid Southern California, whose local water resources and share of the Colorado River were insufficient to sustain the region's growth. Today, it distributes water to 29 urban and agricultural water suppliers in Northern California, the San Francisco Bay Area, the San Joaquin Valley, the Central Coast, and Southern California.

### State Water Project Infrastructure

- | 34 storage facilities
- | Reservoirs and lakes
- | 5 hydroelectric power plants
- | 20 pumping plants
- | 4 pumping-generating plants
- | About 701 miles of open canals and pipelines



# PROTECTING OUR FUTURE WATER SUPPLY

As a Santa Ana resident, you may not realize that about one third of your drinking water comes from the Delta, an expansive inland river delta and estuary in Northern California where the Sacramento and San Joaquin Rivers converge. Measuring a total area of 1,100 square miles, the Delta is an invaluable natural resource that supports a complex ecosystem and supplies water to millions of Californians.

It is here where the state's two most important water delivery systems, the federal Central Valley Project (CVP) and the California State Water Project (SWP), transport water to 25 million people throughout the Bay Area, Central Valley, and Southern California. Water from the Delta also supports the state's agriculture industry that feeds millions.

The Delta is an invaluable natural resource that supports a complex ecosystem and supplies water to millions of Californians.

## What's At Stake

Years of using the Delta as farmland has damaged the delicate ecosystem. Also, in its current state, the Delta's water delivery system is highly unreliable and extremely vulnerable to a natural disaster, such as a large earthquake. Experts predict that the Delta's 20 levees, which hold back salt water from the San Francisco Bay, could simultaneously fail during a magnitude 6.5 quake.

The future of a reliable water supply for Californians depends upon a healthy Delta ecosystem and upgrades to its water delivery infrastructure. Without these upgrades, Southern California residents could be without an adequate drinking water supply for weeks or even months in the event of a large earthquake.

There's a lot at stake, which is why it is important for Santa Ana residents to learn about the Bay Delta Conservation Plan. This 50-year habitat conservation plan was introduced to restore the Sacramento-San Joaquin Delta ecosystem and secure California's water supply by building a new water delivery

infrastructure and operating system. Included in the plan is the construction of two earthquake-safe tunnels that would channel much of the state's drinking water supply around the Delta region rather than through its natural estuary. These improvements are critical to a long-term reliable water supply for all of Southern California, as well as regions throughout Northern and Central California.

## Doing Your Part

We all play an important part in the future of our water supply. Helping to conserve water is one. And we encourage you to learn more about the Bay Delta Conservation Plan, get involved, participate in the discussion, and contact your local representatives to encourage them to support the plan.

### **BDCP Official Site:**

<http://baydeltaconservationplan.com/Home.aspx>

**BDCP Materials:** <http://baydeltaconservation-plan.com/PublicReview/InformationalMaterials.aspx>

**To make a comment:** <http://baydeltaconservation-plan.com/PublicReview/HowtoComment.aspx>



# CHECK FOR WATER LEAKS & SAVE

You can greatly reduce your water use by simply repairing leaks in your faucets, showerheads, pipes, and toilets. A leaky toilet can waste 200 gallons per day. That would be like flushing your toilet more than 50 times for no reason! Outdoor leaks are also a big culprit in driving up your water bill.

## How can you tell if you have a leak inside your house?

Your water meter can help you determine whether your water-using fixtures or inside plumbing have inconspicuous leaks. It's the best place to begin your search.

- 1 Turn off all faucets and water-consuming appliances, including evaporative coolers and icemakers in refrigerators.
- 2 Check the meter register for any movement of the numbers or the "low-flow indicator" and note the time.
- 3 Check the meter register again after 15-30 minutes. Any movement indicates a leak.

## How can you tell if you have a leak outside your house?

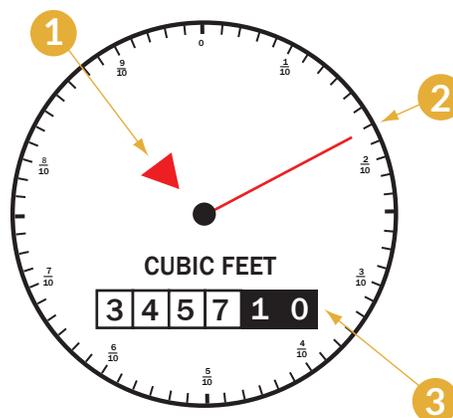
Turn off your house valve (all indoor and outdoor water). Check the meter register for any movement as described above. Any movement indicates a leak between the water meter and your home. If you suspect you have a leak, be sure to contact a plumber. And if you don't, remember to check for leaks periodically.

It's helpful to know how to read your water meter, not only to verify the monthly reading on your water bill, but also to detect water leaks.

## Reading Your Water Meter.

Water meters are usually located between the sidewalk and curb under a cement cover. Remove the cover by inserting a screwdriver in the hole of the lid and then carefully lift the cover. The meter reads straight across, like the odometer on your car. Read only the white numbers. You can refer to the adjacent diagram for details about reading the water meter register.

- 1 Low-Flow Indicator** — The low-flow indicator will spin if any water is flowing through the meter.
- 2 Sweep Hand** — Each full revolution of the sweep hand indicates that one cubic foot of water (7.48 gallons) has passed through the meter. The markings at the outer edge of the dial indicate tenths and hundredths of one cubic foot.
- 3 Meter Register** — The meter register is a lot like the mileage 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 345,710 cubic feet of water has passed through this meter.





# IT DOESN'T TAKE MUCH...

## To save **28** gallons a day

Throughout California's history there have been periods of low rainfall and even drought. However, California's current drought is being referred to as the "driest period in the state's recorded rainfall history," which is why Governor Brown declared a state of emergency and calls on all of us to cut back our water use by at least 20%.

According to the Municipal Water District of Orange County (MWDOC), the amount of water Orange County residents use each day averages 140 gallons per person. Here are some easy tips to help you reduce your water use by 20% or 28 gallons per day.

### INDOORS



1

Shorten your shower by 5 minutes.

**GALLONS  
SAVED  
PER DAY**

**12\***



2

Wash only full loads of laundry.

**GALLONS  
SAVED  
PER DAY**

**14†**



3

Fix leaky toilets and faucets.

**GALLONS  
SAVED  
PER DAY**

**20**



4

Install high efficiency toilets.

**GALLONS  
SAVED  
PER DAY**

**19**

### OUTDOORS



1

Adjust your sprinkler system for leaks and overspray.

**GALLONS  
SAVED  
PER DAY**

**50**



2

Install a smart sprinkler timer.

**GALLONS  
SAVED  
PER DAY**

**40**



3

Use a broom instead of a hose to clean the driveway.

**GALLONS  
SAVED  
PER DAY**

**21**



**WASTE**



# PLUNGE INTO WATER CONSERVATION AND SAVE!

Water conservation should be a way of life, and practicing water-saving habits is something we can all do. But there are water-saving devices we can use as well. Before June 30, 2014, the SoCal Water\$mart Program is offering a number of rebates for water-efficient purchases for your home, indoors and out. By taking advantage of these rebates, you can do your part to conserve water while save money on your water and energy bills.

High-efficiency clothes washers use 55 percent less water than standard ones, saving you 14 gallons of water a day and 75,000 gallons over the washer's lifetime.

## Indoor High -Efficiency Devices

Together, toilets and clothes washers account for approximately 45 percent of the water used inside your home. Imagine how much water you can save when using high-efficiency toilets and clothes washers! Combine this with SoCal Water\$mart [rebates](#) and high efficiency can pay for itself.

### High-Efficiency Toilets (HETs)

The largest amount of water used inside your home, about 30 percent, goes toward flushing the toilet. Saving water inside your home should begin here because the amount of water needed to flush properly is much less than you may think. High-efficiency toilets use 20 percent less water than standard toilets, which means you can save over 8,000 gallons of water in just one year and over \$800 on your water bill over the lifetime of the product!

**Rebates start at \$50 per toilet** and can be submitted online here. [Click here for a list of qualifying models.](#)

### High-Efficiency Clothes Washers

Your clothes washer is the second largest water user in your home. High-efficiency clothes washers use 55 percent less water than standard ones, saving you 14 gallons of water a day and 75,000 gallons over the washer's lifetime. You can save more than \$400 in water over the lifetime of your appliance. And less water means less energy needed for water heating, lowering your energy bill too.

**Rebates start at \$85** (for washers purchased on or after June 1, 2012). For a list of qualifying high-efficiency clothes washers, [click here](#).



# PLUNGE INTO WATER CONSERVATION AND SAVE! *(CONTINUED)*

## Outdoor Water-Saving Devices

Up to 70 percent of California's entire residential water supply is used for home landscapes, yet many residents overwater their landscapes due to the type of sprinkler controllers and nozzles they use. [Here are smart ways to water](#) your landscape.

### *Customized, Smart Watering*

Weather-based irrigation controllers (WBICs) automatically adjust your landscape water schedule to account for changing weather and plant types. Not only will this save you from overwatering your landscape by 13,500 gallons a year, it will save over \$700 on your water bill over its lifetime. Plus your plants will be healthier and happier! Combine this with the SoCal WaterSmart rebate and watch how much you can save over time. **Rebates start at \$80 per controller** for less than one acre of landscape, **\$25 per station** for more than one acre of landscape. [Click here for the list of qualifying WBICs.](#)

### *Rotating Sprinkler Nozzles*

Using SoCal WaterSmart-recommended rotating nozzles will eliminate wasteful runoff by applying more precise, even watering to your landscape. A slower and more uniform distribution of water encourages healthy plant growth and save you 20 percent less water than using conventional spray heads. **Rebates start at \$4/nozzle** when purchasing a minimum quantity of 15 nozzles. [Click here for the list of qualifying sprinkler nozzles.](#)

### *Rain Barrels*

Another way to cut down your water bill is by collecting and reusing rainwater from your home's gutters and downspouts for your lawn and garden. Your plants prefer rainwater because it is free of chlorine, fluoride, and other chemicals. Using rain barrels also minimizes the amount of water flowing into your storm drains, sewer systems, and local waterways. **Rebates start at \$75 per barrel.** Be sure the barrel you purchase qualifies for the rebate by reading [these specifications and guidelines.](#)

## More Rebate Programs and Conservation Links

[Be Water Wise](#)

[Groundwater Replenishment System](#)

[Save Our Water](#)

[Save Water. Save a Buck](#)

[SoCal WaterSmart](#)

[Metropolitan Water District of Southern California](#)

[Municipal Water District of Orange County](#)

\* Please note that funding is limited, and submission of a rebate application does not guarantee that you will receive a rebate. Rebates will be issued on a first-come, first-served basis until funding is exhausted.



# KEEP IT FLOWING

## How to maintain healthy pipes

Fats, oils, and grease (FOG) can be unhealthy for your body. But did you know FOG is bad for your plumbing system too? When FOG is poured down sinks, toilets, and drains, it builds up inside sewer system pipes and restricts the flow of your home's wastewater. Blocked sewage can then overflow into your home, streets, lawns, and storm drains, eventually making its way into our storm water drain system, waterways, and the ocean.

You can protect the environment while avoid the high costs for cleanup by simply keeping your drains FOG free. Here are some do's and don'ts to remember:

### DO'S

- Pour small amounts of grease into a nonrecyclable container (juice can, empty milk carton, coffee can, pet food can). Make sure the grease hardens before disposing of it in the trash.
- Before washing, scrape and dry-wipe pots, pans, and dishes with paper towels and dispose of materials in the trash.
- Minimize the use of your garbage disposal. Foods containing FOG can get caught in the plumbing and cause sewer backups.
- Use a sink strainer to catch food items, then empty the strainer into the trash.

### DON'TS

- Never pour FOG down sink drains or toilets.
- Never pour FOG down garbage disposals.
- Never pour food scraps down the garbage disposal.

## Where does FOG come from?

- | Meat fats (bacon, sausage)
- | Lard
- | Cooking oil
- | Milk, ice cream, yogurt, sour cream
- | Cream based sauces
- | Salad dressings, cheeses, mayonnaise
- | Butter or margarine
- | Food scraps
- | Baking products

## Freeze the Grease!

Grease from cooking meat fats (bacon, sausage), gravy, cooking oil, and sauces may look harmless as a liquid, but when it cools it gets thick and sticky. When you pour grease down your drain, it sticks to pipes and eventually causes clogs and messy overflows.

One way to prevent backups in your home is to pour all bacon, fried chicken, and other cooking grease into a can and then into the freezer before tossing it in the trash.



# GREASE MYTHS

**1** It's okay to pour grease down the drain as long as I run hot water.

**MYTH!**

Hot water only gives the illusion of dissolving grease. The grease will eventually cool and build up in the pipes.

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**2** Liquid oil at room temperature won't clog the pipes.

**MYTH!**

Liquid cooking oils, like canola oil and olive oil, float on wastewater and easily adhere to sewer pipes.

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**3** Using dish soap will prevent grease from hardening in my pipes.

**MYTH!**

While dish soap temporarily breaks up grease as you wash your dishes, the soap will eventually lose its effectiveness causing the grease to solidify in the pipes.



# IMPORTANT TELEPHONE NUMBERS

## **Building Inspection Request Line**

714-667-2738

## **City Manager**

714-647-5200

## **Fire Department**

714-573-6000

(call 911 for emergencies)

## **Mayor and City Council**

714-647-6900

## **Parks & Recreation**

714-571-4200

## **Planning & Building, Planning Division**

(Environmental Review, Historic Preservation & New Development)

714-667-2700

## **Police Department**

714-245-8665

(call 911 for emergencies)

## **Public Library**

714-647-5250

## **Public Works Emergency Repairs**

(after hours)

714-834-4211

## **Public Works Information**

714-647-5690

## **Maintenance Service**

### **Curb & Sidewalks**

714-647-3380

### **Graffiti Removal**

877-786-7824

## **Graffiti Task Force**

714-245-8769

(Police Department)

## **Public Works**

General Maintenance and Repairs

714-647-3380

## **Sanitation**

714-647-3309

## **Shopping Cart Removal**

714-667-2780

## **Street Lights**

714-647-3380

## **Street Sweeping**

714-647-3309

## **Trees**

714-647-3330

## **Weed Abatement**

714-647-3309

## **Water Resources**

### **Sewer/Storm Drain Maintenance**

714-647-3380

### **Water Administration**

714-647-3320

### **Water & Sewer Permits**

714-647-5026

### **Water Customer Service and Billing**

714-647-5454

### **Water Engineering**

714-647-3320

## **Water Maintenance & Construction**

714-647-3346

## **Water Production**

714-647-3382

## **Water Quality & Conservation**

714-647-3320

## **Water Service & Main Location**

714-647-3320

## **Refuse Collection**

### **New Trash Cart/Order Dumpster**

714-558-7761

### **Recycle Used Car Oil & Filter**

714-558-7761

## **Traffic and Transportation**

### **Signal Repairs**

8 a.m.-5 p.m. (Weekdays)

714-647-5620

### **Signal Repairs - Police Department**

(Evenings/Weekends)

714-834-4211

### **Street Work Permits**

714-647-5039

### **Traffic Operations**

714-647-5619

## **Other Helpful Numbers**

### **Bus Information**

714-636-7433

### **Noise Complaints**

714-834-4211

### **Overcrowding**

714-667-2780

### **Poison Center**

800-876-4766