

# FROM THE GROUND UP

Preserving Our Local Water Reserves



# 2022

## Water Quality Report



Water Quality



Sustainability



Kids Section



Santa Ana News



# A Message From Nabil Saba



Dear Santa Ana community,

I am pleased to share with you this year's Water Quality Report where you will learn about the quality of your drinking water and the steps we take to ensure it is safe and healthy for you and your family.

We have had a highly productive year at the Public Works Agency (PWA), where our team has been hard at work maintaining and improving our roads, traffic signals, fleet, city facilities, water infrastructure and more.

New to the PWA is the maintenance and management of all Parks & Recreation sites throughout the city. We have learned from COVID that being outdoors is healthy—both mentally and physically—which is why we remain committed to improving our parks and open spaces.

Last year, we awarded construction contracts at many parks to replace playgrounds, resurface play courts, update public restrooms, clean and maintain our sports fields, and add efficient lighting to increase engagement. We are also adding more open spaces and three new parks in accordance with the Parks Masterplan and are conducting a condition assessment of all our parks to guide our plans for future improvements.

In 2022, we replaced the restrooms at Campesino, Memorial, and Madison parks; completed street paving and maintenance projects; and replaced more than \$4 million in concrete sidewalk throughout the city. In addition, we are managing \$150 million in active construction projects ranging from the San Lorenzo Sewer Lift Station, South Main Corridor Project and Santiago Park Gas House to water pipeline and street paving projects ... all which are near completion.

Slated for 2023-24 are upgrades to the Centennial Lake circulation system, a brand-new Ed Caruthers Park, a new community center at Santa Anita Park, transportation paving and road maintenance projects, and the beautification of the railroad crossing at 1st Street.

And we will not slow down.

While we are working hard at minimizing the traffic and noise impact on our residents' daily lives, we ask you to please be patient with us during street construction.

As the Executive Director of the Santa Ana Public Works Agency, I am committed to improving the quality of life for our residents by efficiently maintaining our infrastructure. I want to acknowledge our talented team of specialists who come up with creative solutions to stretch our limited budget for the benefit of the community, from contract efficiencies to better pricing with materials and services.

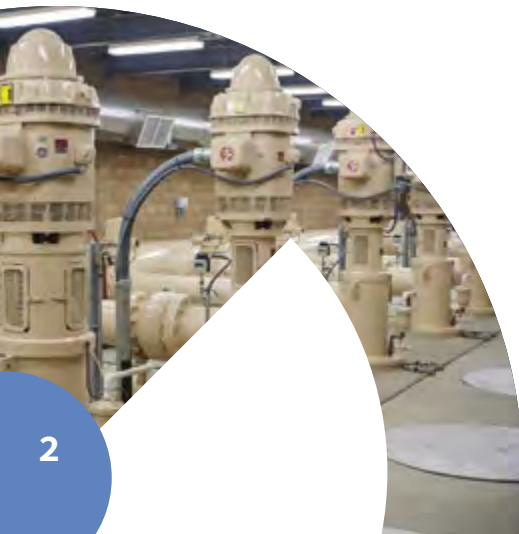
I also want to acknowledge our residents for using the mySanta Ana app, which is now generating over 250,000 requests each year. This helps us to be more efficient and responsive to the community in dealing with graffiti, illegal dumping, potholes, and street signs.

Thank you for being engaged and working with us to make Santa Ana an even better place to live!

Sincerely,

**Nabil Saba P.E.**  
Executive Director  
Public Works Agency

**I am committed to improving the quality of life for our residents by efficiently maintaining our infrastructure.**





# A Message From Cesar E. Barrera

## Capital Investments Produce High-Quality Water Supply

This is an exciting year for Santa Ana's Water Resources Division as we focus on water quality, implementing major water and sewer systems upgrades, and adding a high-tech conservation tool for residents.

The work we do ensures the continued delivery of safe, dependable water to homes and businesses every day!

In this Water Quality Report, you will find the results of thousands of water quality tests conducted throughout 2022. I am proud to say that Santa Ana's water meets or exceeds all state and federal health standards, in addition to winning multiple international awards for its great taste.

The City of Santa Ana is fortunate to have rights to groundwater pumped from the Orange County Groundwater Basin. This year, approximately 75% of the City's water supply came from the basin, which saves customers money by minimizing the use of more expensive imported water.

Our award-winning water is delivered via a network of 20 wells, pipes, pumps, and reservoirs. This past year we invested in our Infrastructure Renewal Program which includes new pipelines, for pumping facilities, and well rehabilitation per- and polyfluoroalkyl substances (PFAS) treatment head-works projects. We will continue to invest in the water system to enhance reliability and resiliency.

We are also beginning full-scale implementation of the Advanced Metering Infrastructure (AMI) program late this summer. The new, smart water meters provide customers with tools to aid conservation, such as access to near real-time water use data and alerts for unexpected usage. The system eliminates the need for regular manual meter readings and provides customers with earlier awareness of their consumption patterns. The City expects to convert all water meters in the City to smart meters by the end of 2025.

Santa Ana's Water Resources Division is committed to delivering high-quality, affordable, and reliable drinking water to our community. We will continue to work on your behalf to uphold that promise.

Sincerely,

**Cesar E. Barrera P.E.**  
Deputy Public Works Director/Water Resources Manager



**Santa Ana's Water Resources Division is committed to delivering high-quality, affordable, and reliable drinking water to our community.**





## About This Report

The Consumer Confidence Report (CCR) is an annual water quality report that informs you where your drinking water comes from and what's in it.

The centerpiece of the CCR is a series of tables that list the results of year-round monitoring for more than 120 constituents. Included in these tables is the quantity of each constituent found in Santa Ana's water supply, how it compares with the allowable state and federal limits, and the constituent's likely origin. Only the constituents that are found in Santa Ana's water are listed in the data tables. Bottled water is not covered in this report. Read this report to learn more about the water provided by Santa Ana and what the City is doing to ensure the highest quality of water is delivered to you year after year.



## Need-To-Know Information Such as:



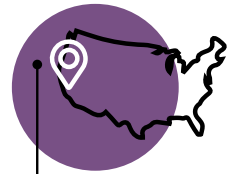
Where your water comes from—such as an aquifer, lake, river, or other source.



A list of regulated contaminants that were detected and their level.



Potential health effects from consuming contaminated water and additional safeguards against water-related illnesses.



Contaminant levels in your drinking water compared to national standards and any violations of health-based standards.

Your tap water met all Federal and State drinking water health standards in 2022. Santa Ana is meticulous at safeguarding its water supplies and, once again, we are proud to report that our system has never violated a maximum contaminant level or any other water quality standard.





# About Your Drinking Water

## Santa Ana's Sources Of Water Supply

The City of Santa Ana relies on two sources for the 11 billion gallons of water it supplies to residents and businesses each year: approximately 77 percent is groundwater and 23 percent is imported water purchased from Metropolitan Water District of Southern California (MWD). MWD is a regional wholesaler that provides water to 26 member public agencies like Santa Ana throughout Los Angeles, Orange, Riverside, San Bernardino, San Diego and Ventura counties.

**Imported Water**—MWD brings Colorado River water from Lake Havasu through the 242-mile Colorado River Aqueduct to Lake Mathews near Riverside. It also transports water from the Sacramento and San Joaquin River junction in Northern California via the State Water Project's 444-mile California Aqueduct. The water is then treated at either the Diemer Filtration Plant in Yorba Linda or the Weymouth Water Treatment Plant in the City of La Verne before it is delivered to Santa Ana. There are seven MWD connections located in the city.

**Groundwater**—Santa Ana sits on the Orange County Groundwater Basin, which contains approximately 500,000 acre-feet (162.9 billion gallons) of usable storage water and covers 270 square miles. The aquifers comprising this underground basin extend over 2,000 feet deep and naturally filter groundwater by forcing it to pass through small pores and between sediments, which helps to remove substances from the water. Santa Ana pumps this groundwater to the surface by 20 city-owned wells.

Most of our customers receive a blending of the two sources: groundwater and imported water.

You can read about the water quality standards for each of these sources in the data tables starting on page 14. We have listed imported water and groundwater in separate tables.

An additional table lists the water quality standards for Santa Ana's water distribution system.



Weymouth Water Treatment Plant



The Colorado River



# Regulatory Requirements

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 or substances, because at certain levels they could make a person sick.

## Water Quality Standards

Drinking water standards established by the U.S. Environmental Protection Agency (U.S. EPA) and the State Water Resources Control Board (State Water Board) set limits on over 90 substances that may affect consumer health or aesthetic qualities of drinking water. U.S. EPA rules also set water-testing schedules and methods that water systems must follow. The data tables in this report show the following types of water quality standards:

### Primary Standards

Mandatory health-related standards regarding potable water. For each contaminant, a Primary Standard either specifies a treatment technique or sets a Maximum Contaminant Level (MCL).



### 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.



## Water Quality Goals

In addition to mandatory water quality standards, the U.S. EPA and California Environmental Protection Agency (Cal/EPA) have set voluntary water quality goals for some contaminants. The data tables in this report include three types of water quality goals:

### Maximum Contaminant Level Goal.

The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. EPA.



### Public Health Goal

The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the Cal/EPA.



### Maximum Residual Disinfectant Level Goal

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.





## Maximum Allowed Levels of Constituents

Health agencies have maximum contaminant levels (MCLs) for constituents so that drinking water is safe and looks, tastes and smells good. A few constituents have the letters "TT" (Treatment Technique) 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.

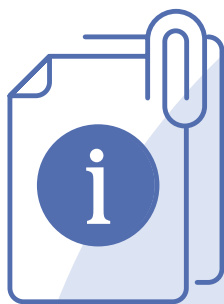
The MRDL is the maximum level of a disinfectant added for water treatment that is allowed in water. While disinfectants are necessary to kill harmful microbes, drinking water regulations protect against too much disinfectant being added. Another constituent, turbidity, has a requirement that 95 percent 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.

## Primary vs. Maximum Allowed Levels of Constituents

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, one for health-related impacts, and another for non-health related impacts.

## Safe Levels of Constituents

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.



### Additional Information

Additional information about drinking water safety and standards can be found at:

#### State Water Resources Control Board Division of Drinking Water

1001 Street, Sacramento, CA 95814 , (916) 449-5577  
[www.waterboards.ca.gov/drinking\\_water/certlic/drinkingwater/Chemicalcontaminants.html](http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Chemicalcontaminants.html)

#### U.S. Environmental Protection Agency Office of Ground Water And Drinking Water

1200 Pennsylvania Avenue, NW, Mail Code 4606M  
Washington, DC 20460-0003  
[www.epa.gov/ground-water-and-drinking-water](http://www.epa.gov/ground-water-and-drinking-water)

#### Consumer Information

[www.epa.gov/ccr](http://www.epa.gov/ccr)

#### Information On How Drinking Standards Are Established

[www.epa.gov/dwstandardsregulations](http://www.epa.gov/dwstandardsregulations)







# Drinking Water & Your Health



The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activity.

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 visiting the U.S. EPA's website at [www.epa.gov/ground-water-and-drinking-water](http://www.epa.gov/ground-water-and-drinking-water) or calling the U.S. EPA's Safe Drinking Water Hotline at 800-426-4791.

## Contaminants That May Be Present

Water agencies are required to use the following language to discuss the source of contaminants that may reasonably be expected to be found in drinking water, including tap water and bottled water.

Contaminants that may be present in sources of drinking water include:

- **Microbial contaminants**, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- **Inorganic contaminants**, such as salts and metals, that can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- **Pesticides and herbicides** that 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 that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application and septic systems.
- **Radioactive contaminants** that can be naturally occurring or be the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, the U.S. EPA and the State Water Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health. Additional information on bottled water is available on the California Department of Public Health's website.

## People with Weakened Immune Systems

Although Santa Ana meets all drinking water standards, some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections.

These people should seek advice about drinking water from their health care providers. U.S. EPA and CDC (U.S. Centers for Disease Control and Prevention) guidelines on appropriate means to reduce the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the U.S. EPA's Safe Drinking Water Hotline at 800-426-4791.

**Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants.**







# Protecting Water Quality at the Source

Source water protection is an important issue for all of California. Treatment to remove specific contaminants can be more expensive than measures to protect water at the source, which is why MWD and the City of Santa Ana invest resources to support improved watershed protection programs that in turn safeguard our groundwater.

**Imported Water Assessment**—Large water utilities, like MWD, are required by the Division of Drinking Water (DDW) to conduct an initial source water assessment, which is then updated through watershed sanitary surveys every five years. Watershed sanitary surveys examine possible sources of drinking water contamination and recommend actions to better protect these 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.

You can request a copy of the most recent Watershed Sanitary Surveys by calling MWD at 213-217-6000.

**Groundwater Assessment**—An assessment of the drinking water wells for the City of Santa Ana was completed in December 2021. As in any urban area, Santa Ana’s wells are considered most vulnerable to historic agricultural activities, golf courses and application of fertilizers, which are associated with contaminants detected in the water supply. Our wells are also considered most vulnerable to chemical/petroleum pipelines, chemical/petroleum processing, dry cleaners, gas stations, junk/scrap/salvage yards, metal plating/finishing/fabrication, plastics/synthetics producers and sewer collection systems, **although constituents associated with these activities were not detected.** These water sources are tested throughout the year to ensure the supplied water remains safe.



## Safeguarding Our Groundwater Is Everyone’s Responsibility

Here’s what you can do to help protect Santa Ana’s drinking water source:

-  Limit your use of fertilizers and pesticides. The hazardous chemicals in both can reach our drinking water source.
-  Pick up after your pets.
-  Dispose of chemicals properly; take used motor oil and paint to a recycling center.
-  Find a watershed protection organization, like the Santa Ana Watershed Association, and volunteer to help.



# Protecting Your Drinking Water: Commonly Used Residential Backflow Prevention

While the City of Santa Ana works hard to deliver the safest water possible, there are common problems, once this water enters your property, that may arise due to improper changes in plumbing or misuse of your plumbing system.

**Cross-connections are dangerous if no protective measures are taken. Cross-connections are when a water supply line is connected to equipment or systems containing a non-potable (unsafe to drink) substance, like a hose submerged in polluted water, a heating boiler with treatment chemical added to prevent internal corrosion, an underground lawn sprinkler system or fountain that has a direct connection with your home's water for filling.**

Below are the most common devices you can easily install to prevent contaminants from entering into your drinking water system as well as the public water distribution system.

## Air Gap:

Air gaps can be found on bathroom sinks, dishwashers, and in countless other applications. Air gaps are effective in preventing backflow.

An air gap is the vertical separation between the supply line and the overflow rim of the receiving vessel, such as a sink. It should measure at least twice the diameter of the supply line and under no circumstances less than one inch. Fill lines to water troughs or tanks must also be physically separated or "air-gapped." If there is no air gap, then the contents of the sink, tub, or tank may be sucked or "backsiphoned" into the water line during a loss of water pressure.

## Atmospheric Vacuum Breaker:

Irrigation systems make outdoor watering easier, but if not properly constructed, contaminants may backflow into your drinking water. For example, water pooling around sprinkler heads may be contaminated by chemicals, fertilizers or animal waste.

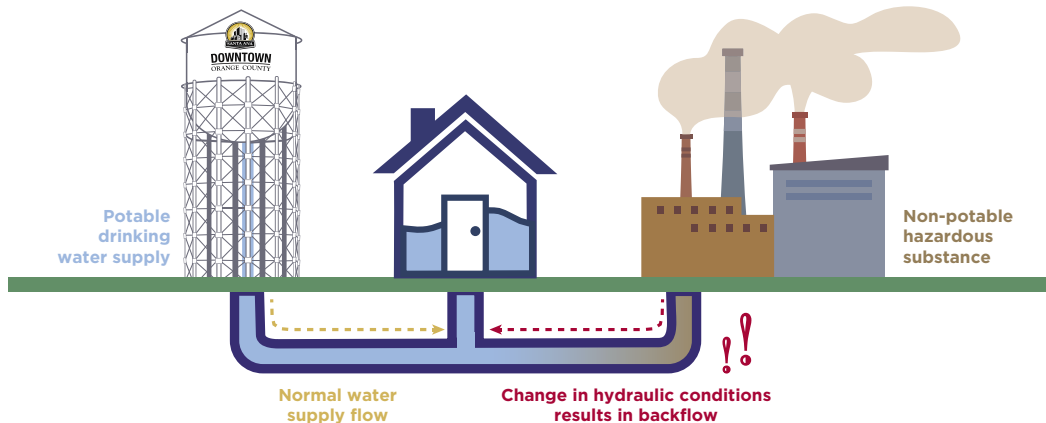
Using an atmospheric vacuum breaker (AVB) can help protect against backflow. It has an air inlet valve that is normally closed when the device is pressurized, preventing potentially contaminated water from entering your home's water system and Santa Ana's water mains.

## Hose Bibb Vacuum Breaker:

Hose bibbs (spigots) are part of our everyday life. They allow us to hook up a garden hose to water the plants, apply pesticides, wash the car or fill the fountain. However, every time you connect a garden hose to a hose bibb, there is the risk that harmful materials from outdoors can seep back into your home's drinking water system.

A vacuum breaker is a simple device that attaches to a spigot and then your garden hose. It prevents water from flowing backward with a spring-loaded check valve, which opens and closes based on the water pressure. When you turn off the water, the pressure against the spring on the valve decreases, the valve closes, and air flows into the space around the valve, preventing backflow.

## THE CROSS-CONNECTION INCIDENT





# Additional Information of Interest

## Cryptosporidium

Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. To date, cryptosporidium has not been detected in our water supply. U.S. EPA and 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 at 800-426-4791. For more information, visit [www.cdc.gov/parasites/crypto/index.html](http://www.cdc.gov/parasites/crypto/index.html).

## 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.



## Lead In Residential Plumbing

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. The City of Santa Ana is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components.

If you live in an older house that has copper piping with lead solder, you can minimize the potential for lead exposure. When your water has been sitting for several hours in the pipes, simply flush your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you do so, consider collecting the flushed water and reuse it for another beneficial purpose, such as watering plants.

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 are available from the U.S. EPA Safe Drinking Water Hotline at 800-426-4791 or at [www.epa.gov/lead](http://www.epa.gov/lead).

## Fluoride

The City of Santa Ana receives approximately 23 percent of its water supply from MWD. Beginning in October 2007, MWD joined a majority of the nation's public water suppliers in adding fluoride to the treated water it supplies to state water agencies, a plan approved by the CDC and the State Water Board. Santa Ana's well water has a naturally occurring fluoride range level of .21 to .45 ppm. Water provided by MWD has been adjusted to the optimal level for dental health of 0.7 to 0.8 parts per million.

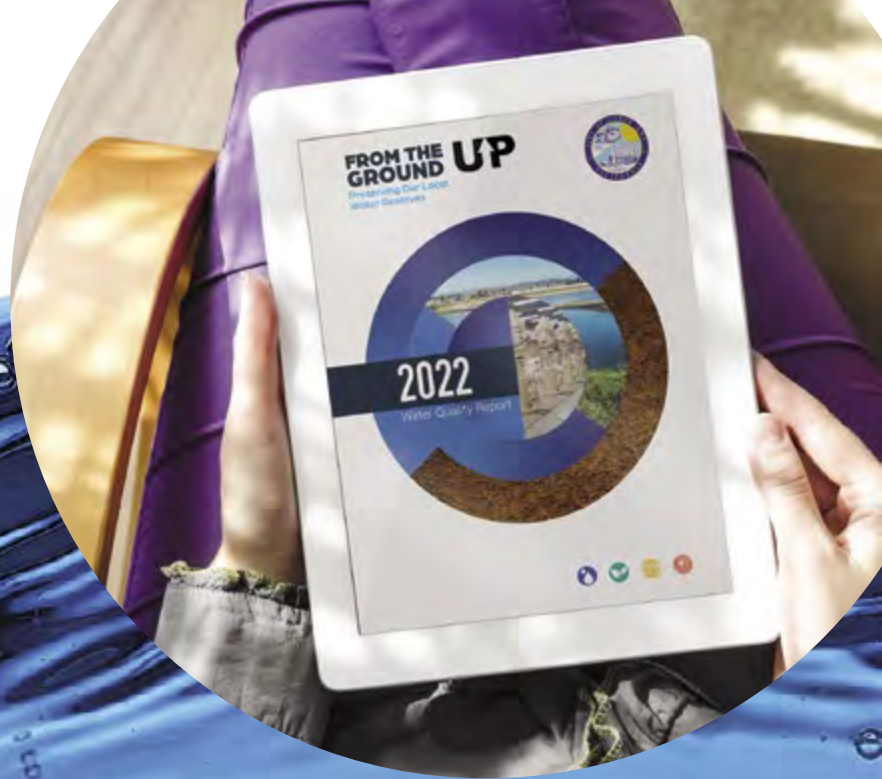
Additional information may be found by calling MWD's Water Quality Information Hotline at 800-354-4420. You can also download MWD's fact sheet at [www.bit.ly/MWD\\_Fluoride](http://www.bit.ly/MWD_Fluoride), visit the State Water Board's fluoridation website at [www.waterboards.ca.gov/drinking\\_water/certlic/drinkingwater/Fluoridation.shtml](http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.shtml) and the American Dental Association's site at [www.bit.ly/ADA\\_Fluoride](http://www.bit.ly/ADA_Fluoride).







# How To Read The Data Tables



The data presented on the following tables are from the most recent monitoring completed in compliance with regulations. 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.

**You will find three data tables showing a list of chemicals tested in each of the following water sources:**

- **Santa Ana Distribution System**
- **Santa Ana Groundwater**
- **Metropolitan Water District of Southern California Treated Surface Water**

## For each table, begin with the chemical and read across.

- 1 The column marked "Chemicals" lists the substances found in the water Santa Ana delivers.
- 2 MCL is the highest level of substance (contaminant) allowed.
- 3 MCLG is the goal level for that substance (this may be lower than what is allowed).
- 4 Average Amount is the average level measured for the substance (less is better).
- 5 Range of Detections is the highest and lowest amounts measured.
- 6 A "No" under MCL Violation indicates government requirements were met.
- 7 Typical Sources in Drinking Water tells you where the constituent usually originates.

Note: Unregulated Constituents are measured, but maximum allowed contaminant (MCL) levels have not been established by the government.



# Glossary

## Terms & Abbreviations

### Chemicals

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 U.S. EPA.

### Maximum Residual Disinfectant Level (MRDL)

The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

### Maximum Residual Disinfectant Level Goal (MRDLG)

The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

### Primary Drinking Water Standard (PDWS)

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 Cal/EPA.

### Regulatory Action Level

The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that a water system must follow.

### Treatment Technique (TT)

A required process intended to reduce the level of contaminants in drinking water that are difficult and sometimes impossible to measure directly.

### Variations and Exemptions

Permissions from the State Water Board to exceed an MCL or not comply with a treatment technique under certain conditions.

## Measurements

Santa Ana conducts extensive sampling and testing to ensure your water meets all water quality standards. In 2022, we collected 16,107 samples for contaminants at various sampling points in our water system; all of which were below state and federal maximum allowable levels.

Contaminants are measured in:

**Parts per million (ppm)**  
or milligrams per liter (mg/L)

**Parts per billion (ppb)**  
or micrograms per liter (µg/L)

**Parts per trillion (ppt)**  
or nanograms per liter (ng/L)

**PicoCuries per liter (pCi/L)**  
A measurement of radioactivity in water.

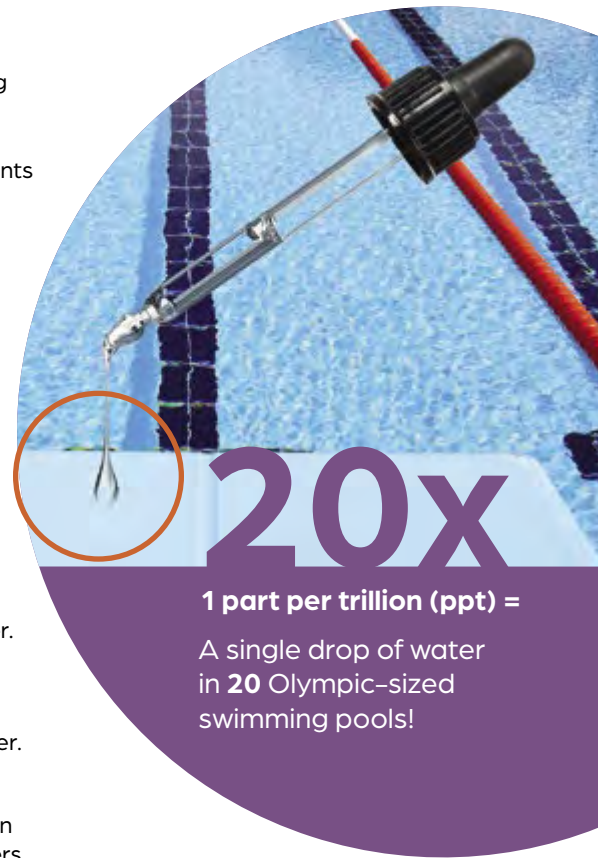
**Micromhos per centimeter (umho/cm)**  
A measurement for conductivity of water.

**Grains per gallon (grains/gal)**  
A measurement of water hardness often used for sizing household water softeners. One grain per gallon is equal to 17.1 mg/L of hardness.

**Nephelometric Turbidity Units (NTU)**  
A measurement of the clarity of water. Turbidity in excess of 5 NTU is noticeable to the average person.

## Additional Abbreviations

- AL** = Regulatory Action Level
- NA** = Not Applicable
- ND** = Not Detected
- NL** = Notification Level
- SMCL** = Secondary MCL





# 2022 Water Quality Tables

## 2022 CITY OF SANTA ANA DISTRIBUTION SYSTEM'S WATER QUALITY

1

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Type	MCL (MRDL/MRDLG)	Average Amount	Range of Detections	MCL Violation?	Typical Source of Chemical
<b>DISINFECTANT RESIDUAL AND DISINFECTION BY-PRODUCTS</b>					
Chlorine Residual (ppm)	(4 / 4)	1.03	ND - 2.9	No	Disinfectant Added for Treatment
Total Trihalomethanes (ppb)	80	32	ND - 38	No	Byproducts of Chlorine Disinfection
Haloacetic Acids (ppb)	60	15	ND - 15	No	Byproducts of Chlorine Disinfection
<b>AESTHETIC QUALITY</b>					
Odor (threshold odor number)	3*	1	1	No	Naturally-Occuring Organic Materials
Turbidity (ntu)	5*	0.17	ND - 0.83	No	Erosion of Natural Deposits

Twelve locations in the distribution system are tested quarterly for total trihalomethanes and haloacetic acids. Fifty locations are tested monthly for color, odor and turbidity. Color was not detected in 2022.

MRDL = Maximum Residual Disinfectant Level; MRDLG = Maximum Residual Disinfectant Level Goal;

< = detected but average is less than the reporting limit; ntu = nephelometric turbidity unit; ND = not detected.

\*Chemical is regulated by a secondary standard to maintain aesthetic qualities (color, odor, and taste).

Microbiological	MCL	MCLG	Highest Number of Detections	No. of Months in Violation	Typical Source of Bacteria
<i>E.coli</i>	(a)	0	0	0	Human and Animal Fecal Waste

(a) Routine and repeat samples are total coliform-positive and either is *E. coli*-positive or system fails to take repeat samples following *E. coli*-positive routine sample or system fails to analyze total coliform-positive repeat sample for *E. coli*.

### LEAD AND COPPER ACTION LEVELS AT RESIDENTIAL TAPS

Chemical	Action Level (AL)	Public Health Goal	90th Percentile Value	Sites Exceeding AL / Number of Sites	AL Violation?	Typical Source of Chemical
Lead (ppb)	15	0.2	ND	0 / 123	No	Internal Corrosion of Household Water Plumbing Systems; Discharges from Industrial Manufacturers; Erosion of Natural Deposits
Copper (ppm)	1.3	0.3	0.16	0 / 123	No	Internal Corrosion of Household Water Plumbing Systems; Discharges from Industrial Manufacturers; Erosion of Natural Deposits

In 2021, 123 residences were tested for lead and copper at-the-tap. Lead was detected in 4 samples, none of which exceeded the AL for lead.

Copper was detected in 98 samples, none of which exceeded the AL for copper. A 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
Bromochloroacetic acid (ppb)	NA	NA	0.94	ND - 3.9	2020
Bromodichloroacetic acid (ppb)	NA	NA	0.68	ND - 2.1	2020
Chlorodibromoacetic acid (ppb)	NA	NA	0.47	ND - 1.4	2020
Dibromoacetic acid (ppb)	NA	NA	0.88	ND - 2.6	2020
Dichloroacetic acid (ppb)	NA	MCLG = 0	1.2	ND - 6.1	2020
Monobromoacetic acid (ppb)	NA	NA	0.1	ND - 0.6	2020
Trichloroacetic acid (ppb)	NA	MCLG = 20	0.7	ND - 2.5	2020

\*\* 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.





# 2022 Water Quality Tables



## 2022 CITY OF SANTA ANA GROUNDWATER QUALITY

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Chemical	MCL	PHG (MCLG)	Average Amount	Range of Detections	MCL Violation?	Most Recent Sampling Date	Typical Source of Chemical
<b>Radiologicals</b>							
Uranium (pCi/l)	20	0.43	2.8	ND - 5.8	No	2021	Erosion of Natural Deposits
<b>Inorganic Chemicals</b>							
Arsenic (ppb)	10	0.004	< 2	ND - 2.2	No	2021	Erosion of Natural Deposits
Barium (ppm)	1	2	<0.1	ND - 0.14	No	2021	Erosion of Natural Deposits
Fluoride (ppm)	2	1	0.36	0.27 - 0.45	No	2021	Erosion of Natural Deposits
Nitrate (ppm as N)	10	10	1.9	0.41 - 4.2	No	2022	Runoff and Leaching from Fertilizer Use; Leaching from Septic Tanks and Sewage; Erosion of Natural Deposits
Nitrate + Nitrite (ppm as N)	10	10	1.9	0.41 - 4.2	No	2022	Runoff and Leaching from Fertilizer Use; Leaching from Septic Tanks and Sewage; Erosion of Natural Deposits
Perchlorate (ppb)	6	1	<2	ND - 3.3	No	2022	Discharge from Industrial Operations
<b>Secondary Standards*</b>							
Chloride (ppm)	500*	NA	52	20 - 107	No	2021	Erosion of Natural Deposits
Specific Conductance (umho/cm)	1,600*	NA	666	461 - 1,040	No	2021	Substance That Forms Ions When In Water
Sulfate (ppm)	500*	NA	85.1	51 - 123	No	2021	Erosion of Natural Deposits
Total Dissolved Solids (ppm)	1,000*	NA	405	258 - 635	No	2021	Erosion of Natural Deposits
Turbidity (ntu)	5*	NA	<0.1	ND - 0.1	No	2021	Soil Runoff
<b>Unregulated Constituents</b>							
Alkalinity, total (ppm as CaCO <sub>3</sub> )	Not Regulated	NA	169	138 - 223	NA	2022	Erosion of Natural Deposits
Bicarbonate (ppm as HC0 <sub>3</sub> )	Not Regulated	NA	206	168 - 272	NA	2022	Erosion of Natural Deposits
Boron (ppm)	NL = 1	NA	<0.1	ND - 0.11	NA	2021	Erosion of Natural Deposits
Calcium (ppm)	Not Regulated	NA	75	35 - 122	NA	2022	Erosion of Natural Deposits
Hardness, total (grains/gal)	Not Regulated	NA	15	7.7 - 24	NA	2021	Erosion of Natural Deposits
Hardness, total (ppm as CaCO <sub>3</sub> )	Not Regulated	NA	248	132 - 410	NA	2021	Erosion of Natural Deposits
Magnesium (ppm)	Not Regulated	NA	14.1	8 - 22.4	NA	2021	Erosion of Natural Deposits
pH (pH units)	Not Regulated	NA	7.9	7.7 - 8.1	NA	2022	Acidity, Hydrogen Ions
Potassium (ppm)	Not Regulated	NA	2.4	1.4 - 3.4	NA	2021	Erosion of Natural Deposits
Sodium (ppm)	Not Regulated	NA	43.7	36.7 - 60.5	NA	2021	Erosion of Natural Deposits

\*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
Bromide (ppm)	NA	NA	0.13	0.062 - 0.3	2020
Manganese (ppb) **	SMCL = 50	NA	0.2	ND - 1	2020
Total Organic Carbon (Unfiltered) (ppm)	NA	NA	0.23	0.08 - 0.57	2020

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.

**Note:** Detection of PFAS in Well 35 has been confirmed. Samples were collected and analyzed, and Santa Ana was informed on 2/8/23.



# 2022 Water Quality Tables

## 2022 METROPOLITAN WATER DISTRICT (MWD) TREATED SURFACE WATER

- ①                      ②                      ③                      ④                      ④                      ⑤                      ⑥                      ⑦

Constituent	MCL	PHG (MCLG)	Diemer Average	Weymouth Average	Range of Detections	MCL Violation?	Typical Source in Drinking Water
<b>Radiologicals – Tested in 2020 and 2022</b>							
Alpha Radiation (pCi/L)	15	(0)	ND	ND	ND – 3	No	Erosion of Natural Deposits
Beta Radiation (pCi/L)	50	(0)	6	6	ND – 9	No	Decay of Natural and Man-made Deposits
Combined Radium (pCi/L)	5	(0)	ND	ND	ND – 1	No	Erosion of Natural Deposits
Uranium (pCi/L)	20	0.43	2	2	1 – 3	No	Erosion of Natural Deposits
<b>Inorganic Chemicals – Tested in 2022</b>							
Aluminum (ppm)	1	0.6	0.14	0.156	0.058 – 0.24	No	Treatment Process Residue, Natural Deposits
Barium (ppm)	1	2	0.107	0.107	0.107	No	Refinery Discharge, Erosion of Natural Deposits
Bromate (ppb)	10	0.1	ND	ND	ND – 7.6	No	Byproduct of Drinking Water Ozonation
Fluoride (ppm) treatment-related	2	1	0.7	0.7	0.6 – 0.8	No	Water Additive for Dental Health
<b>Secondary Standards – Tested in 2022</b>							
Aluminum (ppb)	200*	600	140	156	58 – 240	No	Treatment Process Residue, Natural Deposits
Chloride (ppm)	500*	NA	101	102	98 – 105	No	Runoff or Leaching from Natural Deposits
Color (color units)	15*	NA	1	1	1	No	Runoff or Leaching from Natural Deposits
Odor (threshold odor number)	3*	NA	3	3	3	No	Naturally-occurring Organic Materials
Specific Conductance (µmho/cm)	1,600*	NA	988	992	964 – 1,020	No	Substances That Form Ions In Water
Sulfate (ppm)	500*	NA	221	222	212 – 232	No	Runoff or Leaching from Natural Deposits
Total Dissolved Solids (ppm)	1,000*	NA	628	638	608 – 648	No	Runoff or Leaching from Natural Deposits
<b>Unregulated Chemicals – Tested in 2022</b>							
Alkalinity, total (ppm as CaCO <sub>3</sub> )	Not Regulated	NA	126	127	125 – 128	NA	Runoff or Leaching from Natural Deposits
Boron (ppm)	NL = 1	NA	0.13	0.14	0.13 – 0.14	NA	Runoff or Leaching from Natural Deposits
Calcium (ppm)	Not Regulated	NA	68	70	66 – 71	NA	Runoff or Leaching from Natural Deposits
Hardness, total (ppm as CaCO <sub>3</sub> )	Not Regulated	NA	278	279	275 – 281	NA	Runoff or Leaching from Natural Deposits
Hardness, total (grains/gal)	Not Regulated	NA	16	16	16	NA	Runoff or Leaching from Natural Deposits
Magnesium (ppm)	Not Regulated	NA	25	26	24 – 26	NA	Runoff or Leaching from Natural Deposits
pH (units)	Not Regulated	NA	8.1	8.1	8.1	NA	Hydrogen Ion Concentration
Potassium (ppm)	Not Regulated	NA	4.6	4.6	4.4 – 4.8	NA	Runoff or Leaching from Natural Deposits
Sodium (ppm)	Not Regulated	NA	98	100	95 – 103	NA	Runoff or Leaching from Natural Deposits
Total Organic Carbon (ppm)	TT	NA	2.5	2.4	1.7 – 2.6	NA	Various Natural and Man-made Sources
<b>Turbidity – Combined Filter Effluent Metropolitan Water District Filtration Plants</b>			<b>Treatment Technique</b>	<b>Turbidity Measurements</b>		<b>TT Violation?</b>	<b>Typical Source in Drinking Water</b>
				<b>Diemer</b>	<b>Weymouth</b>		
1) Highest single turbidity measurement (NTU)			0.3	0.03	0.04	No	Soil Runoff
2) Percentage of samples less than or equal to 0.3 NTU			95%	100%	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. Low turbidity in MWD'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. NTU = nephelometric turbidity units.

### UNREGULATED CONSTITUENTS REQUIRING MONITORING

Constituent	Notification Level	PHG	Average Amount	Range of Detections	Most Recent Sampling Date
Germanium (ppb)	NA	NA	0.1	ND – 0.4	2018
Manganese (ppb) **	SMCL = 50	NA	2.2	0.8 – 3.3	2018



# Notes

## Trihalomethanes and Haloacetic Acids

Twelve locations in the distribution system are tested quarterly for total trihalomethanes (TTHMs) and haloacetic acids (HAAS).

## Coliform

No more than 5% of the monthly samples may be positive for total coliform bacteria. The occurrence of 2 consecutive total coliform positive samples, one of which contains fecal coliform/E.coli, constitutes an acute MCL violation.

## Lead and Copper

A regulatory action level (AL) is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

In 2021, 123 residences were tested for lead and copper at-the-tap. Lead was detected in 4 of the samples, **none of which exceeded the AL for lead**. Copper was detected in 98 samples, **none of which exceeded the AL for copper**. No school submitted a request to be sampled for lead.

## Lead and Copper Rule Revisions (LCRR)

The Lead and Copper Rule, recently updated by the U.S. EPA, brings important changes to protect consumers from lead and copper in drinking water. Starting on March 16, 2024, these revisions strengthen the existing regulations to improve public health outcomes.

What does this mean for you? The new rules set stricter guidelines for testing, monitoring, and reducing lead and copper levels in drinking water systems. Water utilities, like the City of Santa Ana, are now required to conduct surveys to find out if there are any lead service lines in their water system that are made of or

contain lead. Service lines connect the water main to individual properties and are owned by customers. Taking this comprehensive inventory helps utilities understand the extent of lead service lines in their systems so they can develop plans to replace or fix them to reduce lead exposure risks.

These changes are all about keeping you safe and ensuring you have access to clean and healthy drinking water. The rules also make it easier for you to find information about water quality and any potential risks. It's a big step forward in protecting your well-being.

## Combined Filter Effluent Turbidity (NTU)

Turbidity is a measure of the cloudiness of the water, an indication of particulate matter, some of which might include harmful microorganisms. Low turbidity in MWD'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.







# FROM THE GROUND UP

## The Metropolitan Water District (MWD) and the Orange County Water District (OCWD) are key players in safeguarding water reserves in Southern California.

Through diversification of water sources, water conservation, recycling and reuse, groundwater storage and management, desalination projects, infrastructure investment, and research and innovation, Santa Ana's partnership with these agencies ensures a resilient and sustainable water future for our community.

Following are answers to some of your questions regarding the drought and what is being done to manage our groundwater basin and protect our water reserves.

### Q. Are we out of the drought due to last winter's heavy rain and snowfall?

**A:** The recent rain and snowfall provided temporary relief after a three-year drought. On March 24, 2023, Governor Newsom modified previous State of Emergency Proclamations, removing the voluntary 15% water conservation target and Level 2 actions required of water agencies. However, California's water supply still grapples with the effects of the drought. With extreme weather patterns becoming more common, Santa Ana must prioritize water conservation and efforts to safeguard a dependable water supply. This requires strategies like capturing and storing stormwater, promoting water recycling and reuse, and supporting groundwater recharge projects.

### Q. What is being done by the Metropolitan Water District and Orange County Water District to ensure a reliable water supply?

**A:** Ensuring a reliable water supply is a top priority for MWD and OCWD. The MWD diversifies its water sources, by importing water from the Colorado River and the State Water Project, which transports water from Northern California. This strategy mitigates the impact of drought or disruptions in any specific source, ensuring a more resilient water supply.

Water conservation is a crucial aspect of the MWD's efforts. The district promotes water-saving measures among member agencies and residents, offering education, resources and financial incentives for water-saving devices and landscape transformation programs. The MWD also supports water recycling and reuse projects by providing funding and technical assistance to local agencies.

Desalination projects have been explored as additional water sources. While desalination can be energy-intensive and costly, the MWD has supported research and pilot projects to evaluate its feasibility and viability.

Infrastructure investment is also a key focus for the MWD, improving and expanding reservoirs, pipelines, and treatment facilities to optimize water delivery and storage capabilities.

Similarly, the OCWD plays a critical role in securing a reliable water supply, particularly in Orange County. OCWD focuses on managing and protecting local water supplies. One of them is the Groundwater Replenishment System (GWRS), the world's largest indirect potable reuse facility. The GWRS purifies highly treated wastewater using a three-step advanced treatment process. The resulting high-quality water is pumped to recharge the Orange County Groundwater Basin.

To protect groundwater quality, the OCWD focuses on preventing seawater intrusion in coastal areas by managing the interface between seawater and freshwater through injection barriers, groundwater replenishment, and monitoring programs.

Groundwater management is a priority for the OCWD, closely monitoring water levels, quality, and subsidence rates. The OCWD implements strategies to prevent overdraft and maintain groundwater health through comprehensive data collection and scientific analysis. Research and innovation are fundamental to the OCWD's approach, investing in R&D to explore new technologies, management practices, and strategies for water supply reliability.





Image Source: Orange County Water District

**Q. What is the City of Santa Ana doing regarding water supply?**

**A:** Santa Ana’s Water Resources Division takes comprehensive measures to ensure a reliable water supply. Investing in the maintenance, repair, and upgrade of pipelines, reservoirs, pump stations, and treatment facilities improves the reliability and efficiency of our water supply system.

To reduce dependency on imported water and promote sustainability, we have implemented a Recycled Water Master Plan. This plan maps out potential new recycled water users, determines funding requirements, and provides a framework for design and construction projects. Increasing the use of recycled water helps alleviate strain on the groundwater supply.

Water conservation is another key focus. We actively engage in public awareness campaigns, educational initiatives, and provide rebates for water-saving devices through our partnership with MWD to encourage residents to reduce their water consumption and adopt water-efficient practices.

For emergency preparedness, plans are in place to address water supply challenges during droughts, natural disasters, or emergencies. We maintain seven connections to MWD’s system and nine emergency connections with surrounding agencies, giving us the ability to share water supplies during short term emergency situations or planned shutdowns.

Collaboration with regional agencies is vital. We work closely with the Metropolitan Water District, Orange County Water District, and Municipal Water District of Orange County to ensure integrated and coordinated water management. This collaboration includes participation in regional water management programs and water recycling projects. For instance, we utilize

recycled water from the OCWD’s Green Acres Project to irrigate median landscape areas, parks and soccer fields in the southern part of the city. We also supply this recycled water to customers where available. This helps us preserve our groundwater resources and helps the region mitigate the risk of seawater intrusion.

**Q. How does recycling non-potable water help our water reserves?**

**A:** Recycling non-potable water conserves and maximizes water reserves. Treating and reusing non-potable water for purposes like landscape irrigation, industrial processes, and groundwater replenishment reduces the demand for fresh water from traditional sources. This practice is especially important during drought periods. Santa Ana actively promotes and implements water recycling initiatives to conserve water resources and ensure a sustainable water future.

**Q. Besides water conservation, what can residents do to protect our water reserves?**

**A:** Residents can contribute to protecting our water reserves by practicing water capturing and storage methods. Here are a few ways residents can help:

- Installing rainwater harvesting systems to collect rainwater for outdoor irrigation.
- Implementing water-efficient landscaping by choosing drought tolerant plants, using mulch, and optimizing irrigation systems.
- Reducing runoff and increasing permeability by creating permeable surfaces like permeable pavements or rain gardens.
- Fixing leaks promptly in faucets, toilets, and irrigation systems.
- Educating and raising awareness about water conservation and encouraging others to adopt water-saving practices.







# Slow The Flow: Protecting Orange County's Water Supply through Stormwater Capture

The City of Santa Ana is privileged to be located above the Orange County Groundwater Basin, a vital resource that supplies most of our drinking water. Safeguarding our groundwater is important, and even more so in the face of climate change and recurring drought conditions. By capturing stormwater, we can prevent pollution from entering our waterways and ocean, replenish the basin, and conserve water.

**Protecting Our Environment**—Stormwater runoff poses a significant threat to the health of our waterways and ecosystems. As rainwater flows over surfaces like roofs, driveways, and streets, it picks up pollutants and transports them into our rivers and the ocean. By capturing stormwater, we mitigate the risk of pollution. Natural filtration processes in rain gardens and bioswales help remove contaminants, preventing them from entering our groundwater basin and local ecosystems.

**Recharging Our Groundwater Basin**—Our underground aquifers play a vital role in managing our water supply for future generations. By capturing stormwater and allowing it to percolate into the ground, we replenish our groundwater basin. This recharge process helps maintain water levels, sustain healthy ecosystems, and support the long-term sustainability of our communities.

**Conserving Every Drop**—Capturing stormwater helps us make the most of our natural water resources. Using rain barrels is one way we can harvest water for landscape irrigation, gardening, or non-potable household needs like toilet flushing and car washing. By actively conserving water and recharging our groundwater basin, we decrease our reliance on imported water sources from MWD.

## The City of Santa Ana's Commitment

The Public Works Agency is dedicated to improving water quality and the environment for Santa Ana residents. Recognizing stormwater as a valuable resource, we have made significant efforts to implement stormwater capture and treatment projects. The Santa Ana Stormwater Program was established to implement inspection programs, conduct public education and outreach activities, maintain the City's storm drain system, clean up pollutant spills, and enforce the Water Quality Ordinance. Since 2018, the City has secured approximately \$14.7 million in statewide grant funding for these projects, including our most recent one at Mabury Park.

## Stormwater Project

The Mabury Park Stormwater Project, completed in 2019, exemplifies the City of Santa Ana's commitment to watershed protection. Beyond its aesthetically pleasing landscaping, the project includes a 7,000 sq. ft. bioretention basin designed to capture and infiltrate approximately 27,000 cubic feet of stormwater during significant rain events. This is equivalent to filling over 10 swimming pools. During larger storms, the basin captures stormwater runoff and naturally filters out pollutants through the soil before releasing it into the storm drain system. This project actively contributes to improved water quality by removing pollutants from stormwater that eventually empties into the Newport Bay Watershed.



The Mabury Park bioretention basin is one of many across Orange County that help control, treat or prevent runoff pollution. And it is the first regional stormwater infiltration in the City of Santa Ana according to Stormwater Program Manager Craig Foster. Five other projects are currently in the planning, design and construction phases throughout the city, including Raitt & Myrtle Park, the King Street Urban Greening Project, Santa Ana Zoo Stormwater Capture and Diversion Project, and the Bristol-Tolliver Street Urban Greening Project.



## Did You Know?

The City's storm drain system is separate from the sewer system and stormwater flows untreated out to the ocean? When it rains, stormwater can convey pollutants such as trash, oil, bacteria, and sediment through the City's storm drain system, into our local creeks and rivers, and out to the ocean. These pollutants are harmful to wildlife and the environment.





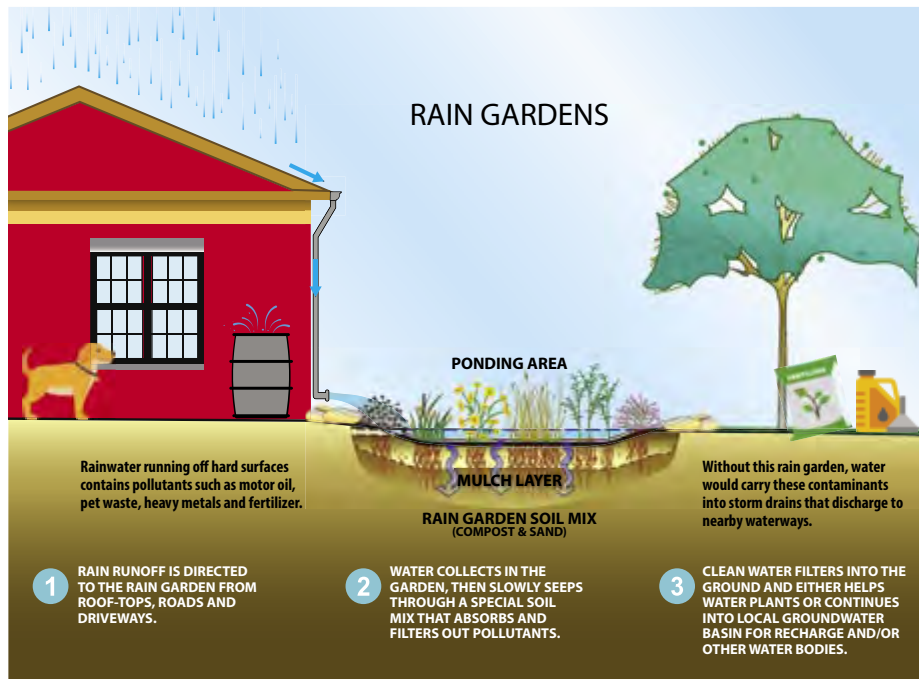


## Individual Participation

The Mabury Park bioretention basin project represents a significant step in preventing stormwater pollution at the community level. However, residents can also be part of the solution and play a key role in improving water quality. Consider the following do-it-yourself projects:

• **Install a Bioswale**—Construct a smaller-scale bioswale that slows down stormwater runoff, removes debris, and filters pollutants. A bioswale is a long, narrow channel or trench that has a gentle slope and is typically lined with rocks or plants, engineered soil and gravel layers. Bioswales prevent pollutants from infiltrating our groundwater basin or entering our storm drains that empty into the ocean.

• **Install Permeable Surfaces:** Use materials like interlocking pavers, pervious asphalt, and pervious concrete that allow water to soak through and seep into the ground. This reduces runoff, prevents flooding, recharges groundwater supplies and prevents pollutants from entering our waterways.



• **Install a Rain Garden**—A rain garden is a small, shallow depression in the ground that is specifically designed to collect rainwater from rooftops, driveways, or other surfaces. The vegetation and rocks in the garden slow the flow of water and allow for soil infiltration. By using native plants adapted to Southern California’s semi-arid climate, a rain garden can absorb pollutants, be maintained all year with minimal additional irrigation, and reduce your water bill.

## Other Ways to Help Protect Our Groundwater

To protect the environment and improve water quality, we encourage you to follow these tips:

- Dispose pet waste in the trash.
- Use proper irrigation practices to prevent water from flowing into gutters.
- Cut down on using fertilizers and pesticides; avoid applying both before rain.
- Keep your vehicles from leaking transmission fluid and oil.
- Dispose toxic chemicals and unwanted household hazardous wastes at one of Orange County’s free disposal facilities. Visit [www.oilandfills.com/hazardous](http://www.oilandfills.com/hazardous) for more information.
- Report illegal dumping and pollutant spills to the City’s Public Works Agency by calling (714) 647-3380 or downloading the mySantaAna App at [www.santaana.org/residents/mysantaana-app](http://www.santaana.org/residents/mysantaana-app).
- Support watershed protection, water pollution cleanup and similar causes.

As residents of Santa Ana, you have the power to make a difference in conserving and protecting our local water resources. Taking simple measures like using rain barrels and installing rain gardens and bioswales can make a positive impact on protecting the delicate balance of our ecosystems and creating a thriving community where every drop matters.

Together, we can contribute to a more sustainable future and ensure a greener, more resilient Santa Ana for generations to come.





# Building for Today and Tomorrow: Your Dollars at Work

As the custodians responsible for delivering water to and diverting wastewater from Santa Ana's 27.2 square-mile service area, we are committed to anticipating new challenges, embracing innovative technologies, and addressing the evolving needs of our growing residential and business community.

Through our Capital Improvement Program (CIP), the Water Resources Division continuously strives to enhance Santa Ana's infrastructure, ensuring that we provide the best service and water quality available today and in the future.

The following major CIP projects have recently been completed, are currently in progress, or are scheduled to begin within the next 18 months. These initiatives will collectively enhance the resilience of our water supply and wastewater treatment facilities, optimize the efficiency of our city's infrastructure, and expand our capacity to meet future demand.

## PFAS Water Treatment Facility

In recent years, Santa Ana has had seven groundwater wells affected by perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS), which were voluntarily taken offline after trace



*Santa Ana's Water Resources team at the PFAS Water Treatment Facility.*

amounts of these compounds were found. These wells are among dozens in Orange County that were removed from service in 2020 after the state of California lowered the Response Level advisories of PFOA and PFOS, two legacy PFAS compounds no longer produced in the United States.

In partnership with the OCWD, Santa Ana's Water Resources Division recently completed construction on the City's first water well treatment head-works dedicated to removing PFAS from local well water. This facility is part of OCWD's comprehensive effort to design and construct 35 PFAS treatment facilities across Orange County over the next two years, ensuring our water supply remains the highest quality in the nation.

Situated within the existing Well 40 site, the new treatment facility is now operational and capable of treating up to 2.5 million gallons of water per day. The facility employs an Ion Exchange (IX) treatment system consisting of highly porous resin that acts as powerful magnets, adsorbing and retaining contaminants. During treatment, contaminants such as PFAS are effectively removed from the water before it enters the distribution system.

With the facility now online, we can finally tap into the well that has remained inactive since 2021, enabling us to pump groundwater, which is a less expensive and more reliable alternative to imported water. Furthermore, we have ongoing plans to set up treatment facilities at two additional sites in Santa Ana.

## Improved SCADA System

We are proud to announce the successful installation of a new technology platform for our Supervisory Control and Data Acquisition (SCADA) control system.

The upgraded SCADA system incorporates networked data communications, graphical user interfaces, and peripheral devices such as programmable controllers to enable the highest level of supervisory management. It allows us to remotely monitor and control our water distribution infrastructure, including operating water pumps, filling reservoirs, maintaining pressure, troubleshooting, and swiftly identifying and resolving service disruptions.

## San Lorenzo Sewer Lift Station

We also completed the relocation and modernization of the San Lorenzo Sewer Lift Station. This \$10.5 million project involved replacing the aging Segerstrom Lift Station, situated beneath Bristol Street, with a new state-of-the-art station located at the end of San Lorenzo Avenue, just east of Bristol Street.

The construction of the new San Lorenzo Lift Station involved the installation of an above-ground block building to house sewage pumps and motors with Variable Frequency Drives (VFDs), new electrical and instrumentation system controls, approximately 1,500 linear feet of sewer pipeline, sewer manholes and gate valves, as well as the demolition of the existing Segerstrom Lift Station.







The City's water infrastructure serves all of Santa Ana's residents and businesses over its 27.2 square mile service area. Our existing infrastructure includes 20 ground water wells, 7 import water connections, 7 pump stations, 10 reservoirs, and 480 miles of transmission and distribution pipelines.

The new lift station is now operational and conveying sewer flows to the Orange County Sanitation District (OCSD) treatment plant through the OCSD's Santa Ana Trunk sewer pipeline.

The improvements made at the new facility will:

- Provide a safer and more accessible working environment for staff.
- Significantly reduce the risk of major sewer spills.
- Alleviate traffic congestion on Bristol Street during routine maintenance activities.
- Enhance the aesthetics of the surrounding area.



## AMI Initiative Moves to Full Deployment

We are excited to report the completion of the beta phase of our \$30 million AMI initiative, marking the beginning of the citywide full-scale deployment. During the alpha and beta phases, we constructed a communications system with four new antenna towers and installed smart meters at 1,800 strategic test sites. Rigorous testing and refinement were carried out to ensure system functionality.

The next phase involves replacing the remaining old meters with smart meters citywide. This phase shall be completed by the end of 2025.

Our AMI initiative offers many benefits to residents, including:

**Water Conservation**—Smart meters empower customers to set conservation goals and manage budgets effectively. By accessing water data online, customers can closely monitor their water consumption so they can make more informed decisions, stay within rate tiers, and save money.

**Detecting Leaks**—Smart meters provide round-the-clock readings and alert customers to anomalies that may indicate a leak.

**Improved Service**—AMI meters enable customers to receive more efficient and prompt service. With 24/7 access to water usage data, residents can proactively address concerns with customer service and identify issues like leaks, without waiting for a bi-monthly bill.

## Future Water Projects

We are investing in capital improvement projects, including the renovation of two wells and a pump station. These projects will involve the installation of new facilities, equipment, and state-of-the-art controls systems. Additionally, we are embarking on the construction of the Washington Well, which marks the first new well in Santa Ana in 15 years.

**Well 29**—This project will encompass a complete renovation of the well, including the installation of a new pump, motor, and well pipe header components. Furthermore, a new building will be constructed to enclose the well pump as well as its mechanical, electrical system, instrumentation and controls.

**Well 32**—Offline for nearly a decade, Well 32 will undergo upgrades to meet new state-regulated code standards. Upgrades include a new above-ground well building and electrical room as well as a new well pump, motor, and corresponding mechanical, electrical and system controls. A conveyance pipeline will connect Well 32 to the Garthe Pump Station, where blending treatment will take place.

**Garthe Pump Station**—As the largest pump and reservoir station in the city, the Garthe Pump Station stores over 15 million gallons of water from four groundwater wells. The improvements planned for this station include the construction of a new disinfection control room, on-site piping, and the installation of new mechanical, electrical, instrumentation and control systems.

**Washington Well**—We're planning to drill a new well in northeastern Santa Ana to further decrease our dependence on imported water. This project will be constructed in two phases. The first phase of the project includes drilling the well. Phase two includes constructing a new well building and disinfection facility, and equipping the new well with electrical, mechanical, and system instrumentation and controls. Thanks to a federal grant, a significant portion of the total cost for the Washington Avenue Well project will be funded.

### Smart Metering: AMI





# Creative Flow

## No Slowing Down For Kids Competing in Santa Ana's Annual Youth Water Poster Contest

Nearly 500 students from 41 schools throughout Santa Ana used their creative talents to compete in the 8th Annual Youth Water Poster Contest. Using the theme "Slow The Flow. Save H2O!", students were challenged to show how capturing rainwater and slowing down water flow can help protect the environment and our water resources.

This year's contest, held citywide in partnership with the Santa Ana Unified School District (SAUSD), saw record-breaking participation and wrapped up in the spring with the selection of twelve winners.

Cesar E. Barrera, Deputy Public Works Director/Water Resources Manager, expressed his gratitude, saying, "Our annual contest, sponsored by the Public Work's Water Resources Division, owes its success to the support and participation of the Santa Ana Unified School District. I want to give special recognition to the district, as well as the dedicated teachers and supportive parents who have encouraged student participation year after year."

The winners were honored at a special Awards Ceremony and Reception Lunch on May 20, 2023, during Santa Ana Public Works Agency's Family Event. Attended by over 1,500 people, the event featured Mayor Amezcua and Councilmember Phan inviting the twelve talented artists onto the stage to receive their certificates and special medals, while the crowd cheered on and celebrated their achievements.

Following the ceremony, the winners—accompanied by their families and a number of SAUSD teachers and principals—were treated to a special luncheon reception. The young winners were presented with a range of exciting prizes, including gift certificates, Play Station 5s (PS5) and iPads. A special drawing for a \$200 gift certificate was held among the teachers who attended the Awards Ceremony and Reception Lunch.

We extend our heartfelt thanks to all the young participants for their outstanding work and to this year's esteemed panel of judges for their invaluable support in making this contest a resounding success:

- **Tram Le**  
Arts & Culture Specialist
- **Savannah Spicer**  
Economic Development Specialist
- **David Flores**  
Community Development Analyst



Grand prize winner Dylann Vasquez receives his trophy and Play Station 5 (PS5) from Santa Ana's Water Resources Manager Cesar E. Barrera.



8th Annual Youth Water Poster Contest Awards Ceremony



Friends and family cheer on the winners.





## 2023 Winners

### GRAND PRIZE



**DYLANN VASQUEZ**  
Heroes Elementary School  
Ages 5-8

### 1ST FINALIST



**SOLINE BASMAJIAN**  
A. G. Minassian Armenian School  
Ages 5-8

### 2ND FINALIST



**EMILY MARTINEZ**  
Franklin Elementary  
Ages 5-8



**YAZMIN OSORIO**  
Lathrop Intermediate  
Ages 9-12



**SAMARA SANTANA**  
Lathrop Intermediate  
Ages 9-12



**DAVANE CHAVARRIA**  
Lathrop Intermediate  
Ages 9-12



**AMBAR CUEVA**  
Lathrop Intermediate  
Ages 13-14



**SOPHIA TRAN**  
James Irvine Intermediate  
Ages 13-14



**VO TRI NGUYEN**  
Sava Santa Ana Academy  
Ages 13-14



**NAZANIN SHKULA**  
Godinez Fundamental High School  
Ages 15-18



**ALBA MARTINEZ**  
Orange County School of the Arts  
Ages 15-18



**MELODY BLANCO**  
Santa Ana Virtual Academy  
Ages 15-18



Slow the flow when it rains and capture water by using rain chains and rain barrels. Using permeable paving on driveways and large patios helps slow water flow during rainfall by giving it a chance to seep into the soil and replenish our watershed. Also landscapes with plants, mulch, rock beds, berms and swales help slow down water's flow and allows more water to infiltrate soil, which replenishes our watershed.



**COLOR ME!**

## **SLOW THE FLOW MAZE**

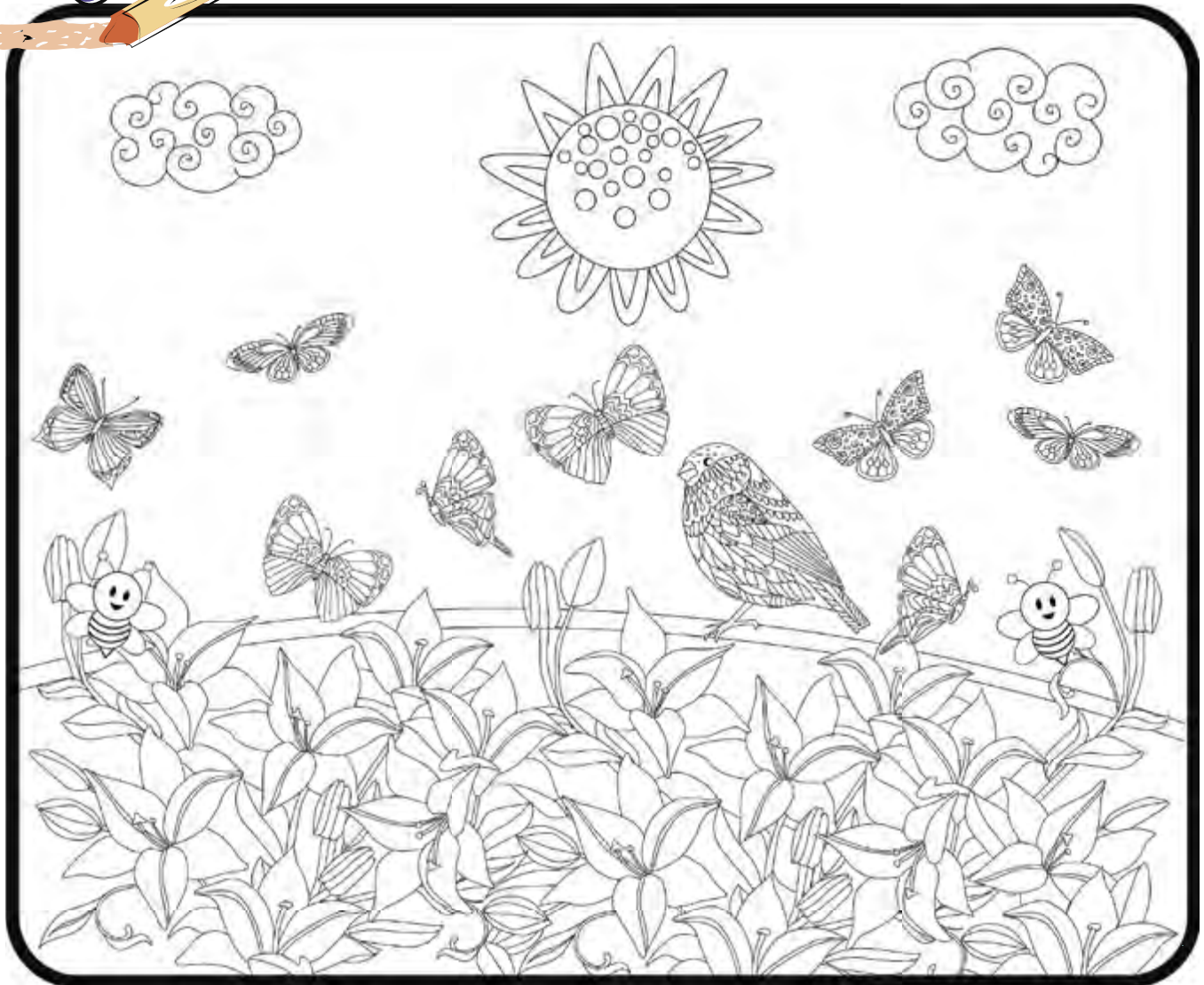




# ***SLOW THE FLOW***

## ***COLOR ME***

When we slow the flow and allow more water to seep into the soil, lots of good things happen. Write why slowing the flow is important, then color the picture!

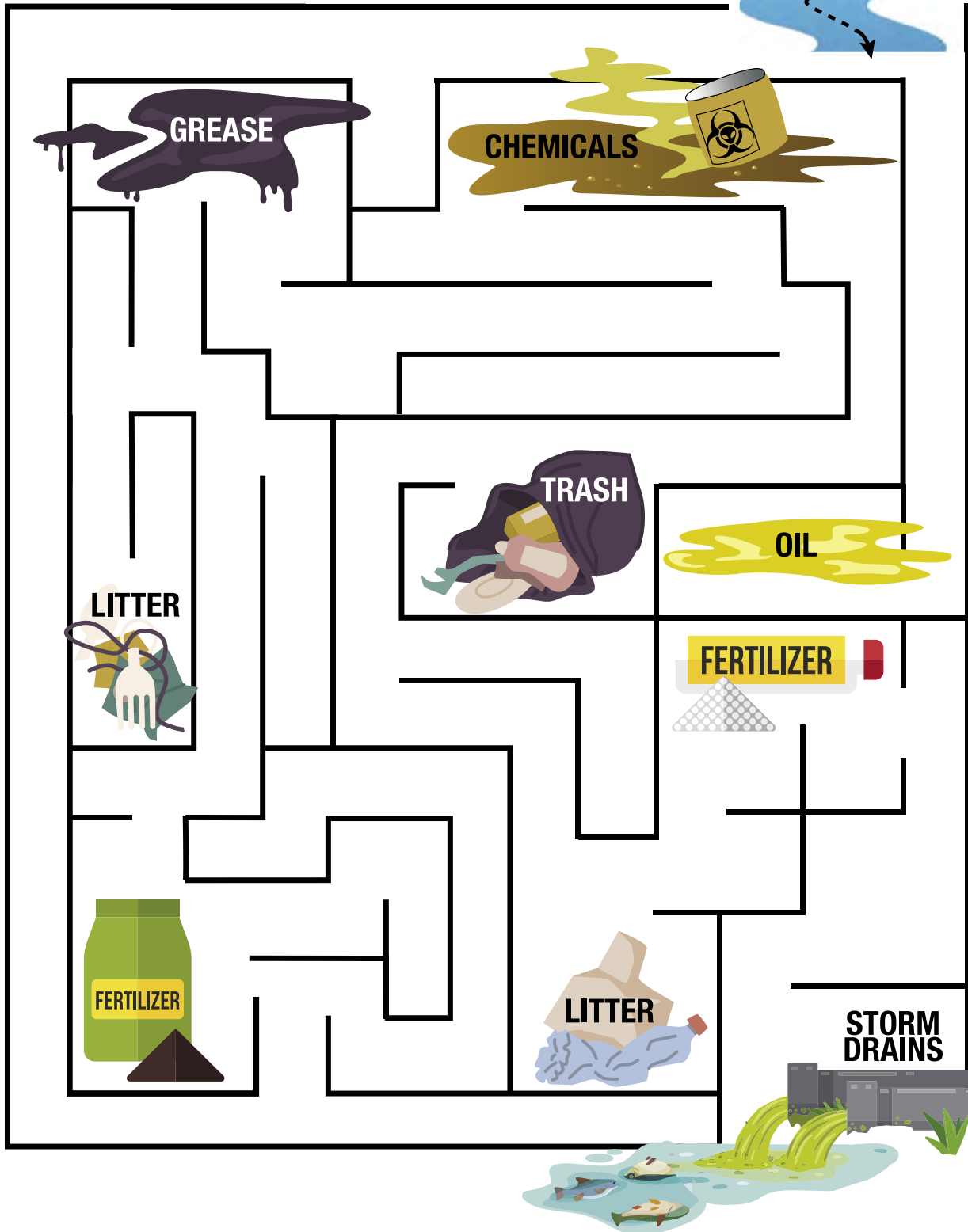






# RAINWATER RUNOFF MAZE

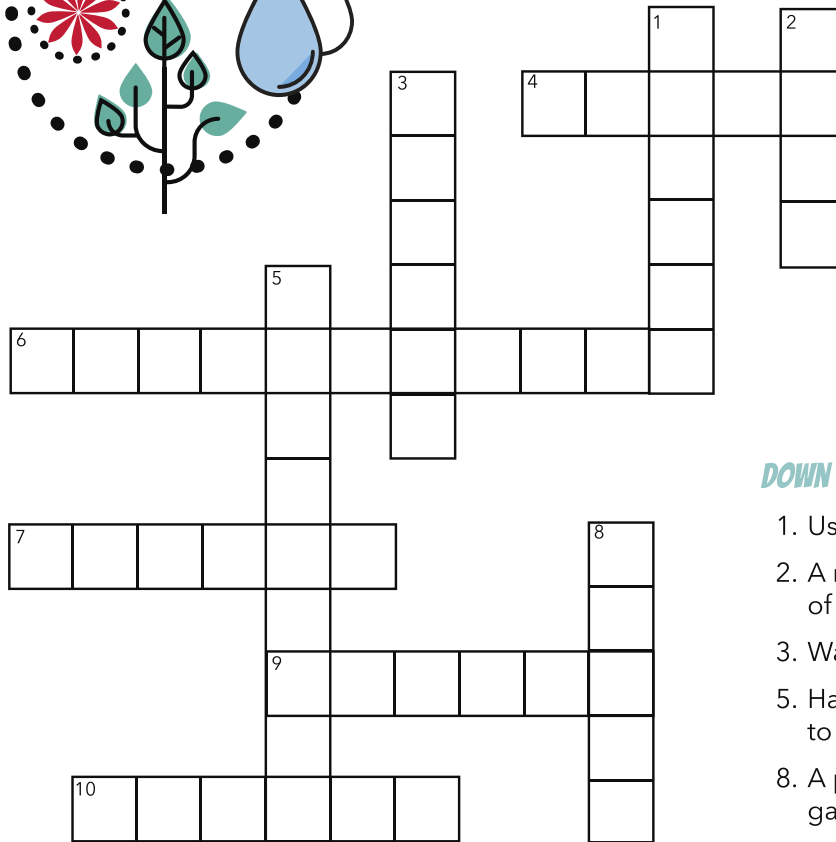
When you **DON'T** slow the flow, water runoff during rainfall can carry litter, grease, chemicals and fertilizer into our storm drains and pollute our ocean. Follow the water runoff and collect every pollutant all the way to the ocean.





# RAINWATER GARDENS

## CROSSWORD



### ACROSS

- 4. A sunken area in the ground.
- 6. Rain gardens with native plants provide a habitat for these.
- 7. Fragments of rock.
- 9. Placed to catch rainwater from a home's eaves.
- 10. An impervious surface used for driveways.

### DOWN

- 1. Used to create walkways and patios.
- 2. A narrow ledge of soil, typically at the top of a slope.
- 3. Water that does not seep into the ground.
- 5. Having pores or openings that allow water to pass through.
- 8. A protective covering for soil used in gardens.



## LABEL THIS PICTURE

Using the descriptions above, label the picture with the corresponding numbers.





# In The Community

## Santa Ana Pumps Up Knowledge and Fun at Family Event

On May 20, 2023, the City of Santa Ana's Public Works Agency (PWA) hosted an amazing community event in celebration of National Public Works Week. With an impressive turnout of over 1,500 attendees between 11 am and 3 pm, the free event provided a wonderful opportunity for residents to explore and learn about the critical public infrastructure and services managed by the PWA, which significantly contribute to the community's overall quality of life.

The event took place at the Walnut Water Pump Station, located at 723 W. Walnut St., and other surrounding areas. Walnut and Parton streets came alive with a captivating display of more than 18 public works equipment vehicles and 20 interactive exhibits. Knowledgeable staff members were readily available throughout the event, offering engaging demonstrations, providing valuable information, and answering questions.

The Water Resources Division played a pivotal role in the event, presenting more than seven informative exhibits covering topics ranging from water production and maintenance to water quality and water-wise landscaping. However, the true centerpiece of the event was the pump station itself, where attendees had the unique opportunity to tour the facility and learn about the process of pumping water from the underground aquifer, its treatment, and its distribution throughout the city, ultimately reaching homes and businesses.

Adding to the enjoyment of the entire family, the event offered food trucks serving ice cream and delicious La Mamalona tacos, raffle drawings, a thrilling water tapping competition, and engaging activities for children, including face painting and an exhilarating jumper obstacle course.



*Sea and Sage Audubon joined the event to educate residents on plants that support Orange County's ecosystem.*

Amidst the festivities, a large stage served as a focal point for the crowd, offering a vibrant atmosphere complete with DJ music, colorful performances, remarks from esteemed Santa Ana public officials, and the highly anticipated Annual Youth Water Poster Contest Awards Ceremony. For more details about the awards ceremony, please refer to pages 24–25 of this report.

The family-oriented event organized by Santa Ana's Public Works Agency truly showcased the significance of the Water Resources Division's role in preserving and managing the city's water resources. Through interactive exhibits and informative demonstrations, attendees gained a deeper appreciation for the vital services provided by the division and the immense effort invested in ensuring the community's access to clean, reliable water.

*The California Native Plant Society (CNPS) provided free OC native plants to our residents, while educating them on how to save water in their gardens.*







# In The Community

## Mayor Valerie Amezcua Inspires Santa Ana to Embrace Conservation

April marks Earth Month when we are all reminded of our responsibility to safeguard our planet. In line with this, Mayor Valerie Amezcua rallied the residents and businesses of Santa Ana last April, urging them to take a simple pledge to conserve water and reduce pollution.

This call to action was made in conjunction with the National Mayor's Challenge for Water Conservation, a friendly competition between cities across the U.S. to determine the most "water-wise" community. Mayors nationwide challenged their residents to conserve water, energy and other natural resources on behalf of their city through a series of easy-to-use pledges online.

Mayor Amezcua emphasized the importance of making conservation a way of life in Santa Ana, stating, "The City of Santa Ana has a long history of environmental stewardship, and protecting our most precious resource is at the heart of it. As a community, we have done an amazing job conserving water, but we can always do more. The National Mayor's Challenge for Water Conservation will actively engage Santa Ana residents and businesses to continue saving water and help preserve our water resources for future generations."

Residents who took the pledge not only helped our planet, but they were entered into daily drawings to win hundreds of prizes as well as the opportunity to win \$3,000 toward their annual utility bills.



The Water Resources Division supported the Mayor's initiative through a targeted direct mail campaign, informative flyers, a social media campaign, and a robust outreach effort at community events. Equipped with iPads, our dedicated staff assisted event attendees in taking the pledge, ensuring broad participation.

While Santa Ana did not emerge as a winner, our community demonstrated unwavering commitment by taking action in the following ways:

- **85%** of participants pledged to adopt new daily habits, fix leaks, and incorporate water-efficient fixtures at home to conserve water.
- **80%** of participants pledged to enhance the community's aesthetics by undertaking simple landscaping projects utilizing water saving irrigation technologies, native plants, and eco friendly techniques to minimize water usage.
- **65%** of participants pledged to actively engage in water-wise community projects, thus sharing the responsibility of environmental stewardship.

The results highlight Santa Ana's dedication to sustainability and set a strong foundation for continued progress in preserving our environment for generations to come.

## Earth Day At Roosevelt-Walker Academy Instilling Water-Wise Practices

Earth Day is another opportunity to educate our youth about water conservation and its impact, especially in Southern California. On April 21, a water conservation specialist from Santa Ana's Water Resources Division visited Roosevelt-Walker Academy to deliver an engaging and interactive presentation about the water cycle and ways to use water wisely.



Students learned practical tips on simple actions they can take to conserve water in their daily lives, from turning off the faucet while brushing teeth to taking shorter showers.

By actively engaging with our youth about water conservation, this Earth Day event was a stepping stone in fostering a generation that values and protects our precious water supplies.





# In The Community

## Children's Water Education Festival

### Empowering Our Youth to Protect Our Water Supply



The City of Santa Ana's Water Resources Division proudly participated in the 26th annual Children's Water Education Festival, hosted by the Orange County Water District. This two-day event brought together over 4,500 third, fourth and fifth-grade students from

Orange County to learn about water conservation, pollution and the environment.

Santa Ana's Water Resources Division hosted one of the 50 interactive activity booths and lectures facilitated by local and state water agency experts. Our outreach staff taught brief water cycle lessons to student groups throughout the two-day event. To reinforce the knowledge gained, we divided each group of students in half and played several rounds of an exciting game of Tic Tac Toe. The game involved asking water cycle and water conservation related questions, encouraging active participation and learning.

Santa Ana's Water Resources Division looks forward to continuing its participation in the Children's Water Education Festival, as we recognize the importance of empowering our youth with knowledge and fostering a deep appreciation for the value of water. By instilling a sense of responsibility and inspiring their curiosity, we are nurturing a future generation that will protect and conserve our water supplies and the environment.



## Dia de los Ninos, Dia de los Libros

### Water Themed Activity Books for Kids

Santa Ana's Main Library hosted its 15th annual celebration of Día de los Niños, Día de los Libros, a special event that brought together the community to highlight the importance of children, literacy, and families.

This free event offered a wide array of engaging activities for everyone to enjoy. Children climbed aboard the trackless train, explored the FestiBubble area and inflatable maze, and were captivated by a magic show. The event also featured interactive science and educational booths, including a special Water Resources exhibit where kids learned about water conservation and received free Kids Activity Books along with other water-themed goodies.

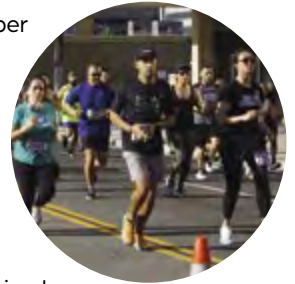


## Santa Ana Fun Run & Fit Fest

### Keeping Participants Hydrated

The City of Santa Ana hosted an exciting two-day event last April to promote community health and wellbeing. The Santa Ana Fun Run & Fit Fest offered a diverse range of activities, including a 5K race, 10K race, Kids Dash, and Fit Fest—an expo dedicated to all things wellness.

An impressive number of approximately 2,500 runners laced up their shoes and participated in the exhilarating 5K/10K Fun Run.



To ensure that everyone stayed hydrated and energized, the Water Resources Division was on hand, offering Santa Ana's renowned high-quality drinking water at their booth.

Once the Fun Run concluded, the excitement continued with the Fit Fest, where attendees viewed workout demonstrations, enjoyed healthy food and explored the many resources offered by local health and wellness organizations. Plus, for those aged 21 or older, the event's beer garden offered a delightful post-race treat to celebrate their accomplishments.





# In The Community

## Blooming Together:

### Girl Scout Troop and Santa Ana Cultivate Water-Wise Garden

An exciting collaboration has taken shape between Girl Scout Troop 6326 and Santa Ana's Water Resources Division. Together, they have been working diligently to establish a water-wise, California-friendly demonstration garden

at the Center Street entrance of the City Yard. This joint effort aims to promote water conservation practices and environmental stewardship within the local community.

To ensure the success of this project, the City staff and their landscaping contractor have closely collaborated with the Girl Scout Troop throughout the five-month process. They cleared the site by removing trees and turf, coordinating educational workshops for the girls, provided all project materials and resources, and assisted with planting.



The 10-year-old Girl Scouts actively participated in a series of workshops as part of the project. They engaged in an introductory design webinar where they voted on their preferred California-friendly plants for the demonstration garden. Subsequent Hands-On Workshops (HOWs) focused on essential project aspects such as establishing a healthy soil foundation, selecting suitable plants for Santa Ana's ecosystem, efficient irrigation techniques, and proper plant care.

This project holds great significance for Girl Scout Troop as it plays a pivotal role in their pursuit of earning the Bronze award this year. Meeting the award criteria involves demonstrating measurable water savings and incorporating water and environmental stewardship throughout the project. To support the girls in this pursuit, a special consultant provided guidance on documenting their accomplishments and telling their story.

Girl Scouts, with the help of the Water Resources Division, are producing a video that will showcase their Troop's journey from the project's inception to the final demonstration garden. The video will serve as a powerful tool to raise awareness, inspire the community, and encourage Santa Ana residents to adopt water-wise practices.

In recognition of the Troop's commitment to environmental stewardship and community engagement, the Water Resources Division will present each Girl Scout with a certificate of participation at a special ceremony.

Through this collaboration, Santa Ana's Water Resources Division and the talented Girl Scout Troop are fostering a sense of environmental responsibility and inspiring a community-wide commitment to water conservation. The new water-wise demonstration garden stands as a testament to the power of partnerships and the potential for positive change in our local ecosystem.



## Open Garden Day

### Promoting Sustainable Gardens

On May 13, Santa Ana's Water Resources Division demonstrated its commitment to water conservation at the 16th Annual Open Garden Day in West Floral Park and Fisher Park.

The event was free to the public, inviting people of all ages to wander through the exquisite gardens. Each garden featured unique designs, providing inspiration for gardening enthusiasts and nature lovers alike. Along the



event's Promenade, twenty-five local vendors showcased their products and services, offering a diverse range of garden-related items and crafts. Information booths also lined the Promenade, including one from our Water Resources Division, where guests learned about water conservation and other sustainable practices as well as valuable gardening tips.

The Birdhouse Project Art Display and Silent Auction presented twenty-five uniquely painted birdhouses, crafted by local artists, while raising funds for the garden program at Santiago Elementary School.

By actively engaging in community events like the Open Garden Day, our aim is to empower individuals within our community to conserve water and embrace their role as responsible stewards of the environment.

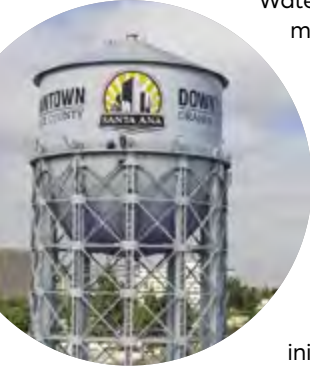






# In The Community

## Rethink Your Drink



Water is essential for maintaining good health and is the optimal choice to stay properly hydrated. Highlighting this important message was the central objective of Rethink Your Drink, a statewide initiative aimed at

educating families about the health hazards associated with consuming sugar-sweetened beverages and advocating for healthier drink alternatives.

In line with this mission, the dedicated outreach team from Santa Ana's Water Resources Division joined other community partners to participate in "Rethink Your Drink" at Madison Park. At this community event, our team took pride in offering Santa Ana's award-winning water to attendees along with activity books, coloring pencils, reusable water bottles, stainless steel reusable straws, and sunglasses!

In addition to providing informative materials, the event also featured interactive activities and showcased refreshing infused water recipes, ensuring an engaging and enjoyable experience for all visitors.



## Line-Up of Events

Our Water Resources outreach team is committed to educating the community about the quality of their potable water, fostering water-wise practices, and sharing valuable information about rebate programs and other water-related initiatives. Throughout the year, we actively participate in a diverse range of events. Join us at the following upcoming events and visit our exhibit booth, where our knowledgeable staff members will be available to answer your questions. Take advantage of this opportunity to gather valuable information, receive free giveaways, and quench your thirst with a refreshing glass of Santa Ana's award-winning water. We look forward to meeting you soon!

<b>June 2 – July 14</b> (Every Friday Evening) <b>Summer Movies in the Park</b> Multiple parks	<b>June 17</b> <b>Juneteenth Festival</b> Centennial Park	<b>July 4</b> <b>Fourth of July</b> Centennial Park	<b>July 22</b> <b>Shakespeare in the Park</b> Birch Park
<b>July 20 – Aug 10</b> (Every Thursday Evening) <b>Concerts in the Park</b> Multiple parks	<b>Aug 26</b> <b>Chicano Heritage Festival</b> Located on Flower Street	<b>Sept 16–17</b> <b>Fiestas Patrias</b> Located on Flower Street between Civic Center Drive and Santa Ana Boulevard	

Visit online schedule at [www.santa-ana.org/concerts-in-the-park](http://www.santa-ana.org/concerts-in-the-park).

Visit [www.santa-ana.org/summer-movie-series](http://www.santa-ana.org/summer-movie-series) for details.

For more details about all these events, please visit [www.santa-ana.org/city-events](http://www.santa-ana.org/city-events).





# Useful Numbers

## General Services

**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** (general line)  
714-245-8665  
(call 911 for emergencies)

**Public Library**  
714-647-5250

## Public Works

**General Maintenance and Repairs**  
**Sanitation**  
**Street Sweeping**  
**Trees**  
**Weed Abatement**  
714-647-3380

**Public Works Emergency Repairs**  
(after hours) 714-834-4211

**Public Works Information**  
714-647-5690

**Shopping Cart Removal**  
714-667-2780

**Street Lights**  
714-647-5074

## Maintenance Services

**Curb & Sidewalks**  
**Pothole Repairs**  
714-647-3380

**Graffiti Removal**  
877-786-7824

## Water Resources

**Water and Sewer**  
714-647-3380

**Water Administration**  
**Water Engineering**  
**Water Service & Main Location**  
714-647-3320

**Water & Sewer Permits**  
714-647-5020

**Water Customer Service and Billing**  
714-647-5454

**Water Maintenance & Construction**  
714-647-3320

**Water Production**  
714-647-3320

**Water Quality & Conservation**  
714-647-3320

## Traffic and Transportation

**Signal Repairs**  
(Weekdays 8 a.m.-5 p.m.)  
714-647-5620

**Signal Repairs – Police Department**  
(Evenings/Weekends)  
714-834-4211

**Street Work Permits**  
714-647-5039

**Traffic Operations**  
714-647-5619

## Refuse Collection

**Trash Cart Replacement/  
Dumpster Orders**  
714-558-7761

**Recycle Used Motor Oil & Filters**  
714-558-7761 (residents with  
curbside trash collection)  
714-834-6752 (residents  
with bin service)

## Other Helpful Numbers

**Bus Information**  
714-636-7433

**Noise Complaints**  
714-834-4211

**Overcrowding**  
714-667-2780

**Poison Control Center**  
800-876-4766



You can request a copy of the most recent summary of the Watershed Sanitary Surveys and the Source Water Assessment by calling MWD at 213-217-6000.

For a copy of the complete assessments for Santa Ana's distribution system and groundwater, call the Santa Ana Water Resources Division at 714-647-3320. If you have questions about your water quality, contact:

**City of Santa Ana, Water Resources Division**

**Cesar E. Barrera PE**, Deputy Public Works Director/Water Resources Manager

**Armando Fernandez PE**, Principal Civil Engineer

**Robert Hernandez**, Water Services Quality Coordinator

220 South Daisy Avenue, Bldg A

Santa Ana, California 92703

phone: 714-647-3320 | fax: 714-647-3345

web: [www.santaanaccr.org](http://www.santaanaccr.org)



## Get Involved

If you would like to be involved in issues and decisions that affect the quality and cost of your drinking water, attend a City Council meeting, which 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

## Follow Us

 [www.facebook.com/CityofSantaAna](https://www.facebook.com/CityofSantaAna)

 [www.instagram.com/cityofsantaana](https://www.instagram.com/cityofsantaana)

 [www.santa-ana.org](http://www.santa-ana.org)

 [www.santaanaccr.org](http://www.santaanaccr.org)

**Este informe contiene información importante sobre su agua potable.**

Favor de comunicarse con la División de Recursos Hídricos de la ciudad de Santa Ana al 714-647-3320 para obtener asistencia en español.

Báo cáo này chứa thông tin quan trọng về nước uống của bạn. Xin vui lòng liên lạc Santa Ana tại 714-647-3320 để được trợ giúp bằng tiếng Việt.

这份报告含有关于您的饮用水的重要讯息。请用以下地址和电话联系 Santa Ana Water Resources Division 以获得中文的帮助: 714-647-3320.