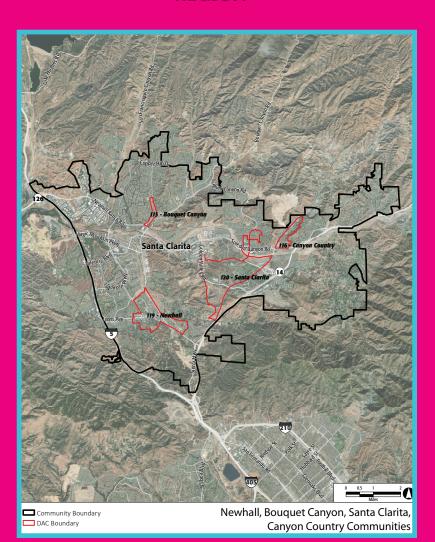


Newhall, Bouquet Canyon, Santa Clarita, Canyon Country Communities

02.01.2020 UPPER SANTA CLARA RIVER INTEGRATED REGIONAL WATER MANAGEMENT



Funded by California Department of Water Resources and Prop 1





It's our water.

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GLOSSARY OF TERMS & ACRONYMS

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Additional resources available online at watertalks.csusb.edu

Prepared by: Water Resources & Policy Initatives, California State University & PlaceWorks in collaboration with: TreePeople and the Council for Watershed Health





WHAT IS WATERTALKS?

WaterTalks is a public program designed to generate and increase community involvement in planning a sustainable water future for California. Its goal is to explore the strengths and opportunities of 128 communities in Los Angeles and Ventura counties facing ongoing economic and environmental distress, and to gather input to prioritize and recommend water-related projects based on issues of greatest concern.

WaterTalks will be implemented in three phases. The first phase of WaterTalks outreach events are designed to educate and engage communities in the Los Angeles and Ventura counties facing ongoing economic and environmental distress, empowering them to engage in water planning including subsequent phases of WaterTalks. WaterTalks aims to ensure that regional water resource management considers the health, safety, welfare, and resiliency of lower-income community members. To do so, WaterTalks is providing a series of community events for the benefit of local residents to do the following: (1) raise questions and concerns about their water-related issues, (2) provide crucial input regarding their community's water needs, possible solutions, and (3) to learn about the State's most current water related topics. These include drinking water, water conservation, flood management, drainage, vector control, access to parks and recreation, and the overall health of our watersheds.

Participation in a WaterTalks Community events will help ensure communities' needs, concerns, questions, and insights become part of the State's future water projects. A schedule of meeting dates and locations is available on the WaterTalks website: https://watertalks.csusb.edu

Flood Protection Clean Water Clean water is essential to our Flood protection strategies are vital to hydration, food production and preventing flooding catastrophes in our sanitation needs counties, cities and neighborhoods. Health & Well-Being Drainage & Vector Concerns NATER Educate people about their water Management of drainage water is quality to ensure healthy living. important to reduce water related vector-borne diseases. Green Walkable Multi-Objective Parks, Neighborhoods & Safe Recreation, & Habitats **Routes to School** Access to natural resources (i.e. creeks, streams, Water is an essential ingredient for rivers etc.) and open space directly contributes to shaded, walkable, and healthy streets. public and environmental health.

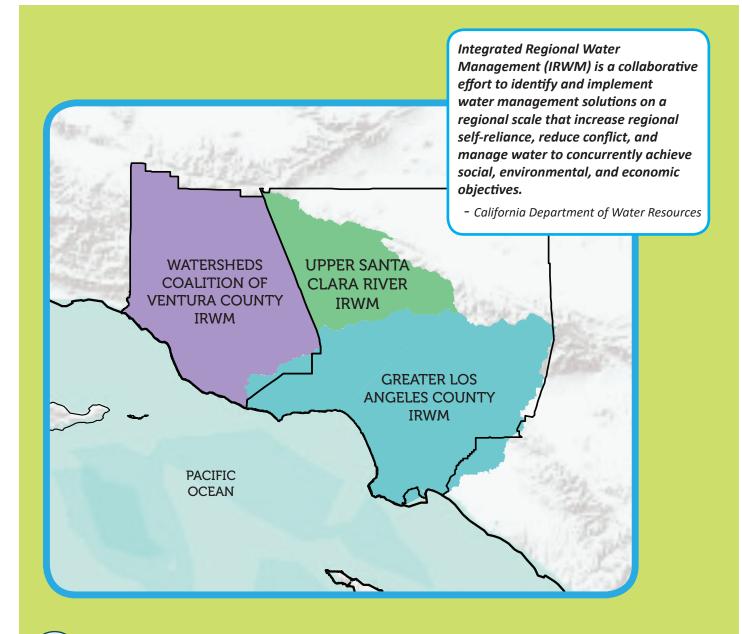
Project Background | WaterTalks Toolkit

IRWM REGIONS

HOW DO WE PLAN FOR WATER IN CALIFORNIA?

The Integrated Regional Water Management Planning Act (SB 1672, 2002) has provided over \$1.5 billion in State funding dedicated to support and advance integrated, multi-benefit regional projects. WaterTalks supports California's collaborative effort, Integrated Regional Water Management (IRWM), in three of Southern California's planning areas.

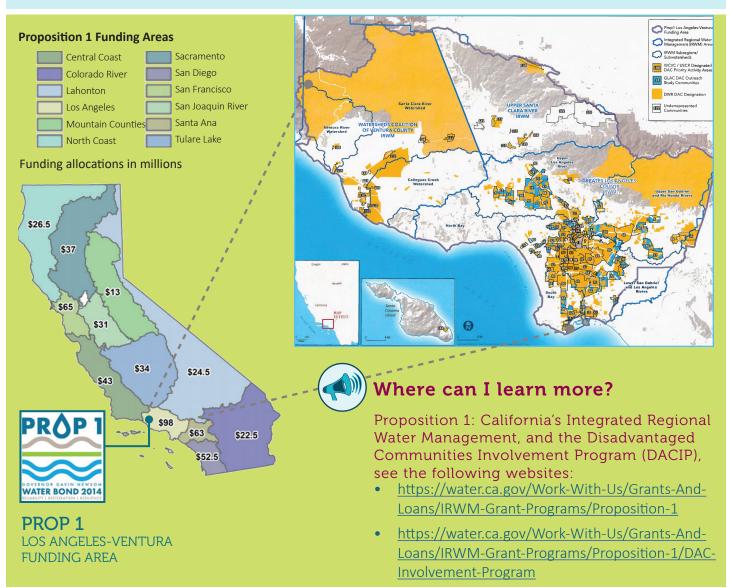
- Greater Los Angeles County (GLAC)
- Upper Santa Clara River (USCR)
- Watersheds Coalition of Ventura County (WCVC)



IRWM meetings for USCR and its subregions are open to the public! To learn more visit: <u>https://dpw.lacounty.gov/wmd/irwmp/</u>

PROJECT OVERVIEW

WaterTalks is funded through the California Department of Water Resources. In 2014, voters approved "The Water Quality, Supply, and Infrastructure Improvement Act" – Proposition 1 – to meet the State's long-term water needs. Proposition 1 funds an array of sustainable waterrelated projects, including drinking water protection, public water system improvements, water recycling, wastewater treatment, drought relief, emergency water supply management, and watershed protection. The Los Angeles-Ventura Funding Area received \$98 million in Proposition 1 funding, tenpercent (\$9.8M) of which is dedicated to planning and outreach in underserved communities. WaterTalks is being implemented in three regions in the Los Angeles-Ventura Funding Area. The California State University's Water Resources and Policies Initiative (WRPI) is involving communities for the Watersheds Coalition of Ventura County (WCVC) and Upper Santa Clara River (USCR) regions. TreePeople, along with the Council for Watershed Health, is engaging communities in activities for the Greater Los Angeles County (GLAC) Region. The two teams collaborate with numerous community based organizations to host local WaterTalks community events.



FUNDING

WHAT SOURCES OF FUNDING ARE **AVAILABLE FOR** WATER-RELATED **PROJECTS?**

In addition to funding from the Regional Water Management Planning Act, Prop 1 and Measure W are potential funding sources to support water-related multi-benefit projects throughout our community. Multi-benefit projects address two or more of the following:

•

- water quality •
- •
- flood management
- restored and enhanced ecosystems
- stormwater management reliable surface and groundwater supplies

Proposition 1

Water Quality, Supply & Infrastructure Improvement Act

Year: 2014

Year: 2018

Funding Available: \$7.545 billion in bonds in California, including \$98 million in the LA-Ventura Funding Area

What can be funded: water-related projects including surface and groundwater storage, water recycling, and stormwater projects

Measure W

Safe Clean Water Parcel Tax

Funding Available: approx. \$300 million per year will be generated by a parcel tax (2.5 cents per square foot of impermeable space on private property in the County of LA)

What can be funded: stormwater capture projects focusing on nature-based solutions



For additional funding resources, please visit: https://www.fundingresource.org/

JOBS RELATED TO WATER

WHAT SECTORS FOCUS ON WATER? Jobs related to water can be found at public agencies, nonprofit organizations, or private companies in three general areas: providing water services, restoring and protecting natural resources, and managing the flow of surface waters.

AREAS OF FOCUS

Water Service Provider	Tap WaterWastewater		
Natural Resources	ConservationRestorationYouth Conservation Corps		
Hydrology/Public Works	Flood ControlStormwater		

WHAT KINDS OF JOBS FOCUS ON WATER?

Water-related jobs require a variety of skill, experience, and education levels. Many of these jobs are needed across all sectors. The table and list below describes these various sectors and career paths that focus on water.

JOBS RELATED TO WATER:

- Wastewater Treatment Operator
- System/Plant Operator
- Stormwater Management
- Certified Erosion, Sediment /Stormwater Inspector
- Hydroelectric Plant Technician
- Chemist
- Research Analyst
- Accountant
- Attorney
- Secretary

- IT Technician
- Engineer
- Surveyor
- Geologist
- Dispatcher
- Heavy Equipment Mechanic
- Graphic Designer
- Photographer
- Office Assistant



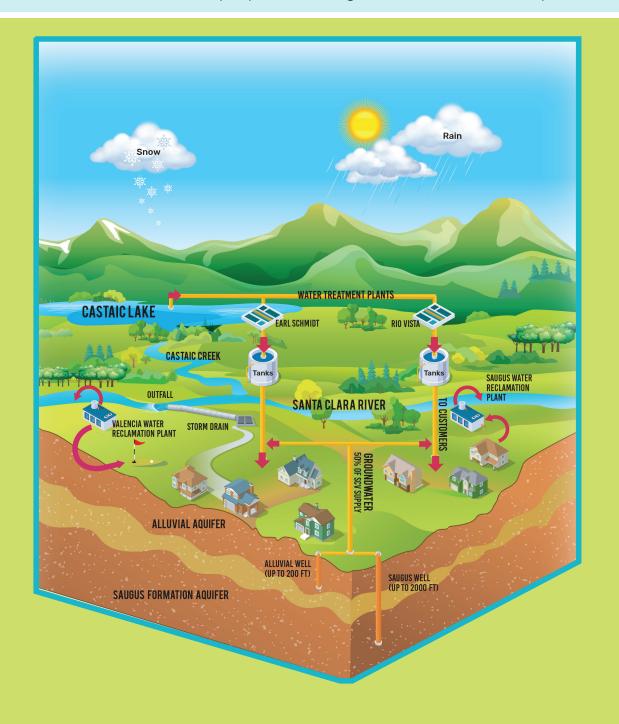
For more information about jobs related to water, please visit: https://water.ca.gov/About/Careers or watertalks.csusb.edu

SURFACE WATER AND GROUNDWATER

Rainwater, surface water and groundwater systems are integrally connected.

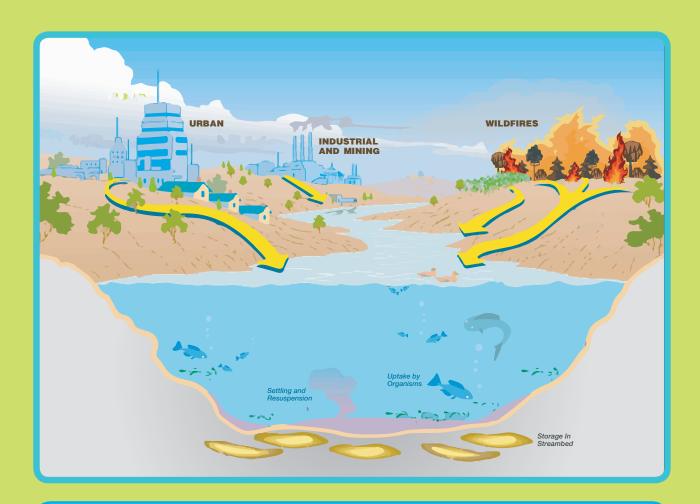
WHERE DOES RAINWATER GO?

- Rain falls to the earth and collects on the surface or underground.
- Surface water flows into rivers, streams and reservoirs.
- Groundwater is precipitation that seeps into the earth's soils and rock formations and is stored in aquifers. Groundwater can be pumped from underground reservoirs known as "aquifers".



WATER CONTAMINATION

HOW CAN CONTAMINANTS GET INTO OUR WATER? Trash, fecal bacteria, litter, pesticides and herbicides, brake pad dust, and many other pollutants impact our local streams, rivers, beaches, and groundwater aquifers. These contaminants flow through the built environment during storm events, ultimately settling in our streams, oceans and groundwater. An estimated 10 billion gallons of polluted water is flushed into the ocean during a typical storm in LA County.



Stormwater pollution can be prevented by correctly disposing chemical and material waste or by using green infrastructure practices that treat and clean our waters.

WATERSHED

WHAT IS A WATERSHED?

A watershed is a land area that channels rainfall and snowmelt into creeks, streams, and rivers that flow into a common outlet such as a reservoir, bay, or the ocean. Our community is located in the Upper Santa Clara River Watershed.



Source: California Natural Resource Agency, 2019; LA County, 2005

GROUNDWATER

WHERE DOES MY GROUNDWATER COME FROM? A groundwater basin is an aquifer or system of aquifers that stores water beneath the surface. Impermeable surfaces, such as asphalt, concrete, and clay or heavily compacted soils, prevent surface water from infiltrating and reaching groundwater aquifers.

In the north and east areas of our region, groundwater is extracted from the southwestern portion of the extensive Antelope Valley Basin, and the smaller Acton Groundwater Basin. In the southern part of our region, groundwater is extracted from the Santa Clara River Valley East Groundwater Basin's alluvial aquifer and Saugus Formation.



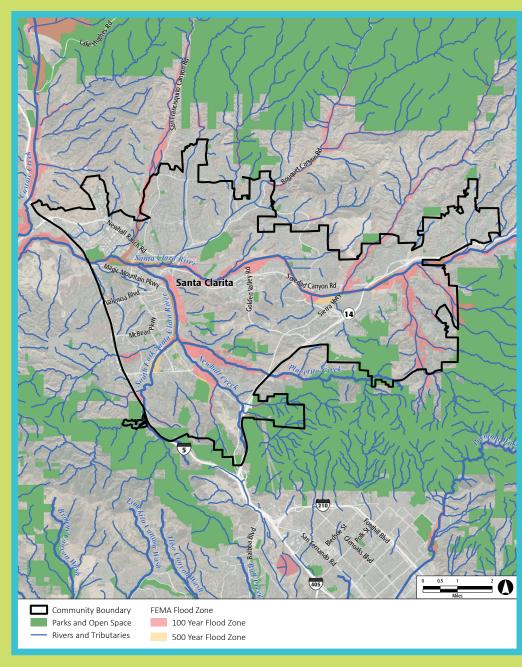
Source: California Natural Resource Agency, 2019; USGS, 2013

FLOODING

AM I AT RISK OF FLOODING ?

The Federal Emergency Management Agency (FEMA) defines flood zones as areas with a 1% annual chance of flooding, also known as the 100year flood zone. Areas moderately at risk for flooding have a 0.2% annual chance of flooding, also known as the 500-year flood zone.

More localized flooding may occur within and beyond FEMA flood zones, and can negatively impact communities.

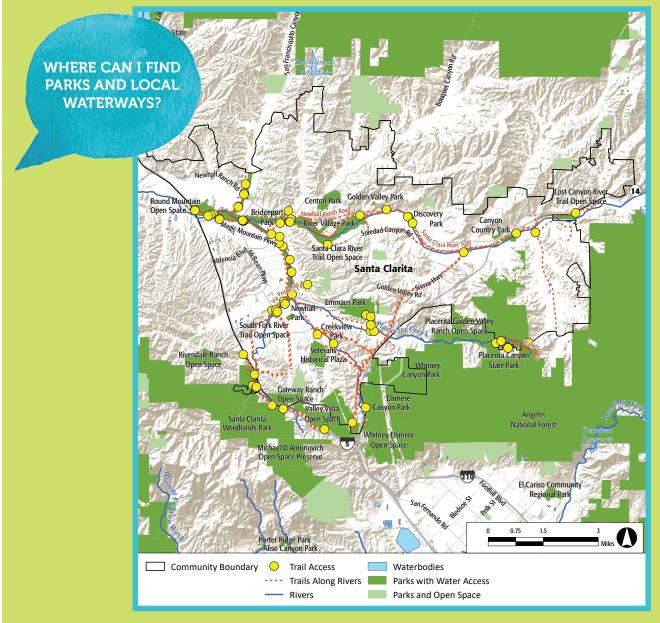


Source: GreenInfo Network 2019; USGS, 2018; FEMA, 2018

ACCESS TO PARKS AND LOCAL WATERWAYS

HOW CLEAN ARE OUR LAKES, STREAMS, RIVERS, AND BEACHES? Water bodies and the habitats and open space they support can provide places for recreation and respite, contributing to quality of life in our communities. Thousands of visitors swim, wade, kayak, and fish at dozens of freshwater sites located across our region. However, certain contaminants can pose a health risk to those that recreate in and eat fish from our local streams and rivers. Before you recreate, check the most recent water quality reports available through these resources:

- Santa Clara River Water Quality: <u>http://parkway.scrwatershed.org</u>
- Green, Santa Clarita: www.greensantaclarita.com



Source: PlaceWorks, 2017; USGS, 2018; LA County 2017

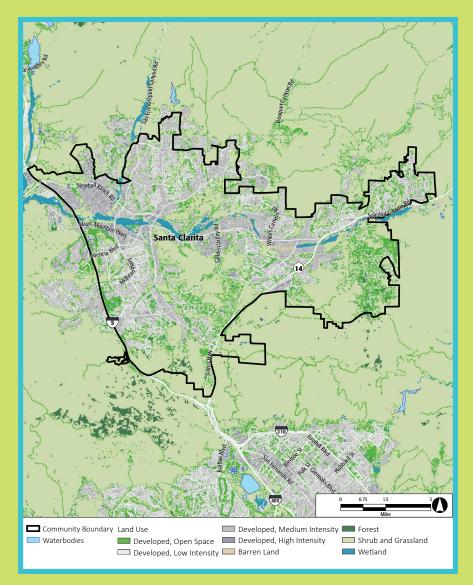
Water in our Environment | WaterTalks Toolkit

EXISTING LAND USE

HOW DOES LAND USE AFFECT OUR WATER? Land use directly affects how water moves through communities. Land use in urban communities ranges from open space and agriculture to varying levels of development.

Developed land often consists of impervious surfaces, such as asphalt and concrete. When land is paved, water is not able to soak into the ground. Water that flows over the hardened landscape is channeled into the storm drain system and directed into rivers and oceans.

Too much water flowing across the hardened landscape can result in flooding and/or erosion. This untreated water is called urban runoff. Urban runoff, carrying pollutants such as automotive fluids, trash and pesticides, is the biggest source of pollution in our rivers and ocean.



Source: NLCD, 2016; USGS, 2018; LA County 2017

CAPTURING AND STORING WATER

HOW CAN WE CATCH AND STORE RAINWATER? It is crucial to our water supply that we treat and clean contaminated runoff, or urban runoff, by incorporating green infrastructure practices into our built environment. Potential green infrastructure strategies that catch, store, and treat urban runoff include constructing rain gardens, bioswales, and biorention ponds; protecting open space; removing hardscape; and redirecting rainwater that falls on rooftops and parking lots into large tanks (cisterns) where it can be stored for later use.

These various methods function to keep our waterways and ocean clean, and help replenish our groundwater supply and reduce our dependence on imported water. Additionally, sustainable landscaping and irrigation practices can reduce and treat urban runoff while also conserving water.



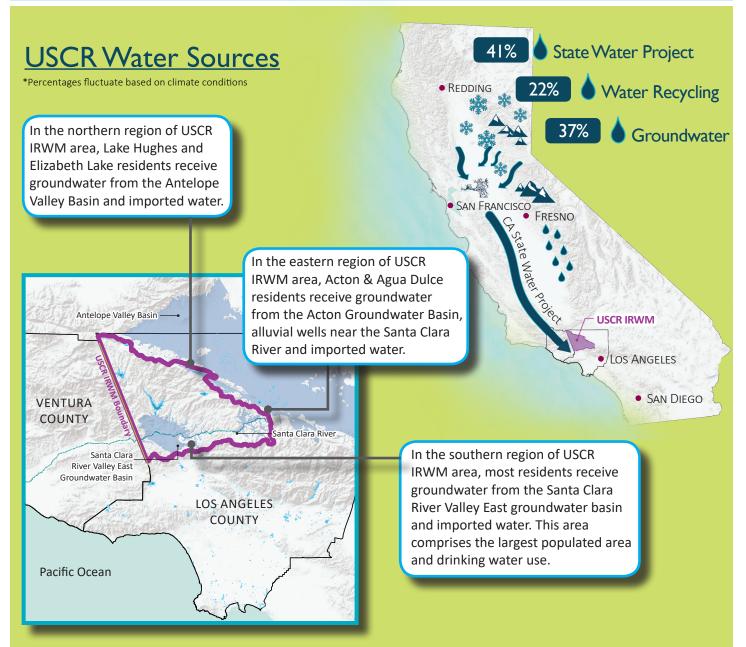
Water in our Environment | WaterTalks Toolkit

WATER SOURCES

WHERE DOES MY TAP WATER COME FROM?

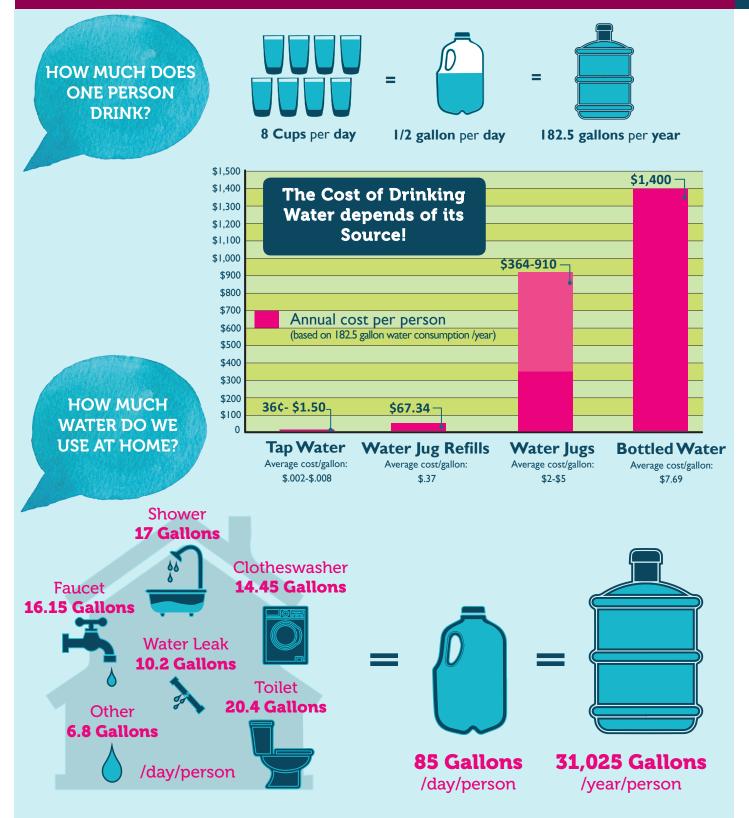
The water supply for the USCR IRWM comes from three main sources: (1) California State Water Project, (2) water recycling, and (3) groundwater.

The State Water Project is sourced from snow pack and rain from the Sierra Nevada range, flows to the Sacramento-San Joaquin Delta, then through the State Water Project Aqueduct to supply water to Los Angeles County. Water recycling allows for municipal wastewater to be treated and re-utilized. Groundwater is the water stored beneath the Earth's surface. Wells are used to pump the groundwater into our water supply system.



Source: Greater Los Angeles County Integrated Regional Water Management Plan, 2014

WATER CONSUMPTION



Residential water uses based on the following resources:

1. "How We Use Water." *EPA*, Environmental Protection Agency, 5 Feb. 2018, www.epa.gov/watersense/how-we-use-water.

2. "Residential Water Use Trends and Implications for Conservation Policy." Legislative Analyst's Office, 8 Mar. 2017, https://lao.ca.gov/Publications/Report/3611.

TAP WATER QUALITY

HOW CLEAN IS MY DRINKING WATER? Water quality testing ensures that our drinking water is safe and meets federal and state drinking water standards. The US Environmental Protection Agency establishes federal standards that determine the maximum concentration allowable for specific contaminants in tap water. In California, the State Water Resources Control Board (SWRCB) Divison of Drinking Water is responsible for regulating drinking water. While tests are important for identifying potential health issues, the presence of some contaminants does not necessarily indicate the water is unsafe to drink for all populations.

How can contaminants get into my tap water?

Contaminants can wash into rivers and streams, or seep into groundwater. Common sources of contamination include: naturally occurring chemicals and minerals, agriculture and land use practices, industry, and urban runoff. Water service providers are responsible for ensuring that the water they provide meets State and federal requirements for maximum contaminant levels.

How often is my water tested and reported?

The State Water Resources Control Board Division of Drinking Water (DDW) requires community water systems to publish and make available an annual Consumer Confidence Report. Water agencies collect water samples from designated sampling points or wells quarterly, and report results in the annual report.

What is my water tested for?

The EPA has set maximum contaminant levels (MCLs) for more than 90 contaminants, and maintains a list of unregulated contaminants that may require thresholds in the future. Regulated contaminants include:

- Microorganisms such as viruses, bacteria.
- Inorganic chemicals such as lead, arsenic, nitrate, copper, and chromium.
- Radiological contaminants from natural radioactivity or human activity such as uranium and radon.
- Pesticides such as 1,2-Dibromo-3-chloropropane (DBCP), 1,2-Dibromoethane (EDB), and 1,2-dicholoropropae.

What is an exceedance? What happens when there is an exceedance?

An exceedance occurs when the concentration of a contaminant is above the established safe threshold and could potentially cause a threat to human health. When this occurs, agencies are responsible for sending an unsafe water notice to all customers and instructions on how to proceed when using tap water.



Are property owners responsible for water quality?

Water service providers are responsible for providing safe water to water meters, and property owners/landlords are responsible for maintaining water infrastructure from the meter to tap. In some cases, domestic water quality issues result from infrastructure that is the responsibility of the owner/landlord to maintain.

Do you receive your drinking water from private wells?

Private well owners are not required to test their drinking water for any contaminants. If you recieve your drinking water from a private well, it is strongly recommended that you contact your local public health agency for guidance on testing your drinking water supply.



To learn more about water quality in your community,

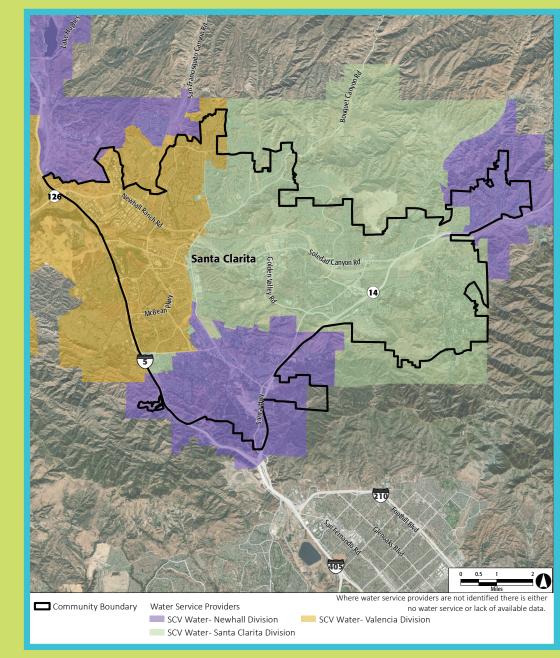
please visit: https://yourscvwater.com/water-quality/.

WATER SERVICE PROVIDERS

The water service providers that serve our community are listed below:

WHO IS MY WATER SERVICE PROVIDER?

- Santa Clarita Valley Water Agency (SCV Water) Santa Clarita Division
- SCV Water- Valencia Water Division (VWD)
- SCV Water- Newhall Water Division (NWD)



Source: Tracking California, 2018; State Water Resources Control Board, 2018; SCVWater, 2019

WATER SERVICE PROVIDERS

HOW MUCH DOES MY WATER COST? The table below identifies the primary water source that the Water Service Providers in your community provide to their customers, as well as the total average monthly water cost for all households that they serve. In many cases, Water Service Providers serve customers including households outside of your community.

\sim					
	WATER SERVICE PROVIDERS				
	Primary Water Source	Total Households Served By Provider	Avg. Cost per Month per household (\$)	Median House Income (MHI) For Customers	
SCV Water- Santa Clarita Division	Castaic Lake/ SWP and Wells	30,193	\$65	\$99,202	
SCV Water - Valencia Division	Castaic Lake/ SWP and Wells	24,333	\$52	\$104,516	
SCV Water - Newhall Division	Castaic Lake/ SWP and Wells	5,533	\$72	\$81,087	

Source: Luskin Center Water Atlas, 2015; Tracking California, 2018; American Community Survey 2013-2017, 2018, State Water Resources Control Board, 2019

Water fees reflect the cost of daily system operation and maintenance and compliance with water quality regulations, as well as the cost of infrastructure construction, maintenance, repairs, rehabilitation, and replacement, or water purchases from third party suppliers. Each Water Service Provider sets fees that reflect their infrastructure and operations costs, and thus fees vary from one operator to another.



To learn more visit:

https://www.epa.gov/sustainable-water-infrastructure/pricing-and-affordabilitywater-services_or_https://watertalks.csusb.edu/ WHO IS MY WATER SERVICE PROVIDER?

Have Questions?

Contact your local service provider or use the following link(s) to download a water quality report.

Santa Clarita Valley Water Agency (SCV Water)

27234 Bouquet Canyon Road Santa Clarita, CA 91350 T. (661) 297-1600

SCV Water-

Santa Clarita Division

26521 Summit Circle Santa Clarita, CA 91350 T. (661) 297-1600 E. ccare_scwd@scvwa.org https://yourscvwater.com/connect/#contactyourdivision

SCV Water -

Newhall Division 24631 Avenue Rockefeller Valencia, CA 91355 T. (661) 294-0828 E. ccare_nwd@scvwa.org https://yourscvwater.com/connect/#contactyourdivision

SCV Water -

Valencia Division 24631 Avenue Rockefeller Valencia, CA 91355 T. (661) 294-0828 E. ccare_vwd@scvwa.org https://yourscvwater.com/connect/#contactyourdivision

GLOSSARY OF TERMS & ACRONYMS

DEFINITIONS

Aquifer: formation of porous rock, gravel or sand that holds an underground supply of water. Wells can be used to pump water from aquifers.

Aqueduct: channel or other constructed watercourse that is used to carry water from one place to another.

Bay: a waterbody that is surrounded by land on three sides, and is connected to an ocean, or lake.

Bioretention: a chemical and biological process that treats and removes contaminants from stormwater and urban runoff. Stormwater is collected into the bioretention areas, which are depressed landscaped areas that slow and treat on-site stormwater runoff through various physical, chemical and biological processes.

Clean Water Act: U.S. federal law, passed in 1972, that regulates water quality standards and pollutant discharges.

Contaminants: a harmful or damaging substance.

Constituent: mineral or chemical present in water.

Drainage: the relative process by which water flows and moves through a soil's profile.

Drought: a period of low rainfall.

Dry Weather Run-Off: the process by which human activities such as car washing, landscape irrigation or street washing indirectly cause contaminants to enter our stormwater system.

Estuary: a water body where fresh water from rivers mixes with tidal saltwater.

Exceedance: a measurement that determines if a concentration of a contaminant is above the established safe threshold and/or a threat to human health.

Infiltration: the process through which water drains and leaches into the earth.

Inlet: an indentation along the coastline, such as a bay, cove, or estuary.

Impervious: not allowing water to flow through or within the surfaces.

Greywater: domestic wastewater generated by households or office buildings, which can be reused for nonpotable uses. Sources of greywater include sinks, showers, baths, dishwashers or washing machines.

Groundwater: surface water that has drained into the ground. This water is stored in underground spaces called aquifers.

Green Infrastructure: a sustainable water management approach that uses biological processes to provide flood protection, clean air, clean water, and diverse habitats.

Flood Management: methods and practices developed to reduce flood risk to the built environment, provide emergency preparedness and response, forecast river levels based on weather conditions, improve water quality and supply reliability, and enhance public safety.

Non-Point Source Pollution: pollution caused indirectly by rainfall or snowmelt that collects various contaminants as it flows through the built environment.

Outlet: an area where water flows into a larger water body.

Pervious: areas or materials which water can pass through.

Point Source Pollution: pollution caused directly by a specific and very localized source, such as a leaking fuel tank or pipe.

Potable: water that is safe to drink.

Watershed: land area that channels rainfall and snowmelt into creeks, streams, and rivers that flow into a common outlet such as a reservoir, bay or the ocean.

Water Conservation: the protection and preservation of water resources.

Water Meter: a device that measures the amount of water used.

Water Recycling: process that reuses treated wastewater as a water resource.

Wastewater treatment: a process that removes contaminants from wastewater or sewage and transforms it into an effluent that can be returned to our water cycle.

Water Quality: the condition and measure of water relative to human health based on biological, chemical and physical parameters.

Rainwater: water that is collected from rain.

Reservoir: a large body of water that stores and holds water. Often created by dams.

Urban Runoff: water that flows through and within the urban environment and collects various contaminants such as motor oil, grease, pesticides, toxins and more.

Stormwater Management: strategies to reduce pollution and improve water quality.

Surface Water: water that flows within and over the surfaces of the built environment.

ACRONYMS

EPA – US Environmental Protection Agency
FEMA – Federal Emergency Management Agency
GLAC – Greater Los Angeles County
IRWM – Integrated Regional Water Management Planning Act
Measure W – Safe Clean Water Parcel Tax (LA County)
MHI - Median Household Income
Prop 1 – Proposition 1, Water Quality, Supply & Infrastructure Improvement Act
SWP – State Water Project
SWRCB – State Water Resources Control Board
USCR – Upper Santa Clara River
VCWPD- Ventura County Watershed Protection District
WCVC – Watershed Coalition of Ventura County
WRPI – California State University's Water Resources and Policies Initiative