Know Your Water Service

Your Guide to the Santa Cruz Water Department



Water Department

Conserve to Preserve – Our Water, Our Future

f cityofsantacruz.com/water

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Dear Customer,

The Water Conservation Office of the Santa Cruz Water Department brings you this new guidebook to encourage your efficient use of water. Water is a precious natural resource that is vital to our health and welfare and to the economy of the Central Coast. The mission of the Water Department is to ensure public health and safety by providing a safe, clean and reliable supply of water.

We are also dedicated to environmental protection and watershed stewardship. Our watershed supports not only 96,000 residents, but also a variety of ecosystems, including streams with endangered Coho salmon and threatened steelhead trout populations. By conserving water, you help to ensure that there will be enough water for fish and wildlife habitats, as well as enough water for use by the community.

A key feature of our water supply is that Santa Cruz is entirely dependent on water that falls in the local watershed. The city does not import water. Our reliance on local supplies makes us susceptible to shortages during droughts. By using water wisely, you are helping to ensure that our local supplies take us through the inevitable dry years that our region experiences.

The Santa Cruz community has always prided itself on the values of resource protection and water conservation. Though severe periods of drought may come and go, climate change necessitates that we make water conservation a way of life. To that end, the City of Santa Cruz offers a variety of programs, informational materials and incentives to help customers become more water-efficient. Efficient water use not only contributes to environmental stewardship, but it also helps you avoid surprises on your water bill. The Water Conservation Office is here to assist you with your water saving efforts. We provide services such as free inhome water audits, free low-flow plumbing fixtures and technical assistance to understand your water bill and usage patterns.

We hope that this guidebook will provide you with tools for your water conservation efforts. Please visit **cityofsantacruz.com/waterconservation** for up-to-date program information. Thank you for your efforts!

WATER SYSTEM PROFILE

Overview

The City of Santa Cruz Water Department service area consists of approximately 20 square miles, which includes the entire City of Santa Cruz, adjoining unincorporated areas of Santa Cruz County, a small part of the City of Capitola and coastal agricultural lands north of the city. The Water Department serves a population of approximately 96,000 people. Water is distributed through 300 miles of underground pipeline to approximately 25,000 service connections. The following illustration shows a map of the City of Santa Cruz water service area boundaries, excluding the north coast.



The City of Santa Cruz is located on the Central Coast of California along the northern shore of Monterey Bay. Santa Cruz enjoys a pleasant Mediterranean climate that is characterized by warm, mostly dry summers and mild, wet winters. Average monthly temperatures range between 51 to 65 degrees, with the warmest weather usually occurring during August and September. Rainfall in Santa Cruz averages 31.35 inches annually, but varies considerably from year to year. The bulk of seasonal rainfall occurs between November and March.

Santa Cruz is isolated from the San Francisco Bay Area and other water infrastructure systems. All of the City's water supplies are local, either surface or groundwater, and there is no connection to outside water systems. Santa Cruz does not import water from outside of our area.

Collection System

Ninety-five percent of Santa Cruz's water supply comes from local surface waters. The main source of our water is the San Lorenzo River. Water for the City is stored primarily in one surface water reservoir, Loch Lomond Reservoir. Loch Lomond stores water from the Newell Creek watershed and the San Lorenzo River. Other surface supplies come from the North Coast streams, including: Majors Creek, Laguna Creek, and Liddell Spring. While most of the City's supplies are from surface water, approximately 5% comes from groundwater. All of the groundwater is extracted from wells in the Purisima Formation in the Santa Cruz Mid-County Groundwater Basin. This basin is shared by other neighboring water agencies.

Treatment System

Through dams and pumps, water is piped from its source to the Graham Hill Water Treatment Plant. At the plant, raw surface water is cleaned, treated, tested and made into the safe, high-quality drinking water that we enjoy. On average, the plant produces 10 million gallons per day (MGD). Daily production fluctuates from 6-12 MGD based on seasonal demands to the system.





Distribution System

The City's water distribution system is almost entirely gravity-fed, meaning that little energy is used to pump water from its source through 300 miles of system pipelines to customers. The gravity-fed system is a result of having a water treatment plant at a higher elevation than the rest of the service area, which also results in high water pressure at most service locations. City water pressure ranges from 40 to more than 100 pounds per square inch (psi), with an average pressure of about 90 psi. *The following illustration depicts how pressure varies with elevation in relation to a water storage tank.*

Environmental Stewardship

The North Coast streams and San Lorenzo River are home to endangered Coho salmon and threatened steelhead trout. To ensure their protection and promote ecosystem restoration, the City has been releasing more water for fish from these sources. Ongoing negotiations between state and federal fisheries agencies and the City of Santa Cruz will likely result in less water being available to the City from sources like Laguna Creek. By sharing more water for fisheries habitat, the City must rely more on non-flowing sources like the Loch Lomond Reservoir.

Photo: NMFS/Southwest Fisheries Science Center

UNDERSTANDING YOUR WATER SERVICE AND BILL

Santa Cruz Municipal Utilities (SCMU) provides water, wastewater, recycling, and refuse services to customers inside Santa Cruz city limits. Only water service is provided to customers outside city limits. Each water service is identified by a unique 11-digit account number.

Most SCMU customers have a water meter associated with their property. Residential meters are usually located in a concrete box in front of the house or apartment. Below (A) is a picture of a typical meter box with the lid open.

The city owns each water meter and the infrastructure leading up to the meter. Everything that connects the water meter to the residence is the property owner's responsibility. For example, the pipe that conveys water from the meter to the house (called the "service line") is the property owner's responsibility. The diagram (B) shows the components in a meter box and where the city's ownership ends.

Meter reads are collected and utility bills are sent monthly. Customers may not realize that they have high water usage or a leak until they receive their bill. The City is currently exploring a new type of metering technology called AMI (Advanced Metering Infrastructure). AMI would allow for the display of near real-time water usage information, and the ability to notify customers of leaks and high usage more efficiently. Until such a system is in place, the most efficient way to determine if you have a leak is for you, the customer, to read your meter. Don't worry; it's easy!

How to Read Your Water Meter

Expose the meter by lifting the lid with a screwdriver. The box may be filled with dirt, so if you do not see the meter, start digging. The meter box contains a meter and a radio box. The meter is used to track the amount of water used, and the radio box gathers and transmits the meter reads for billing.

Here are the basics of reading your meter:

- Water meters are read similarly to a car odometer.
- Our meters measure volume in cubic feet (one cubic foot = 7.48 gallons).
- One billing unit equals 100 cubic feet or 1 CCF (1 CCF = 748 gallons).
- The first four digits represent the billing units. The following digits represent less than one unit and are not used when calculating your bill.
- The red dial registers .01 cubic feet in one revolution.

For billing purposes, read the four numbers on the left. This meter's read is 0252 CCF.

Using Your Meter to Detect Leaks

IF YOU SUSPECT A LEAK AT YOUR PROPERTY, FOLLOW THESE STEPS:

- Turn off all water-using fixtures and appliances both indoors and outdoors.
- **2** Make sure no water is being used anywhere on the property.
- **3** Read your meter and note the read.
- **4** Check again in 15 minutes to see if the read is the same or has changed.

If no water is being used on the property and the meter read has changed after an initial read, a leak is present. You can also check the red dial; if it's moving after all water has been shut off, there's a leak. If you detect a leak, locate and fix it as soon as possible to prevent a high water bill, as well as possible property damage.

Understanding Your Water Bill

Each month, customers receive a bill for services rendered. Basic water service components for a residential account include the following:

- Ready-to-Serve Charge: This charge stays the same every month and covers the costs of reading and maintaining your water meter, billing, and maintaining your account. This charge varies by your meter size. Standard single family homes have a 5/8 inch meter.
- Quantity Charge: The quantity charge for water supports department general operations and maintenance. Water is charged based on the volume consumed in units of hundred cubic feet (CCF). Single-family and multi-family residential (MFR) customers have a four tier quantity rate.
- Infrastructure Reinvestment Fee: This charge provides reinvestment in critical infrastructure projects to maintain a reliable, safe water treatment system and distribution system. Similar to the quantity charge, this fee is based on the amount of water consumed.
- Rate Stabilization Fee: There is a \$1 per CCF fee added to the bill to create a reserve fund for use when revenue to the department declines dramatically due to low usage.

Some customers may receive these additional fees depending on their location in the system or specific requirements:

- Elevation Surcharge: The cost for additional energy required to pump water to specific properties located above water treatment facilities.
- Fire Ready to Serve: This charge is only for customers who have private fire sprinkler service. If you have a private fire service there is a per month charge added to the Ready-to-Serve charge.
- Fire Service Usage: There is no charge for water used to fight a fire, but leaking fire services will be charged at the commercial per unit rate for water, which is intended to incentivize prompt repair of leaks.

Using Your Meter to Track Water Consumption

TO TRACK HOW MUCH WATER YOUR HOUSEHOLD USES IN A WEEK, FOLLOW THESE STEPS:

- Read your meter and note the meter read, date and time in a log.
- **2** Read the meter again one week later and log it again.
- **3** Subtract the first read from the second read to see how much water was used.
- Keep an ongoing log of meter reads in order to track and understand your usage patterns.

SANTA CRUZ MUNICIPAL UTILITIES

212 Locust Street, Suite D, Santa Cruz, CA 95060 Customer Service: (831) 420-5220 | www.cityofsantacruz.com

ACCOUNT NUMBER:	123-45678-910	
SERVICE ADDRESS:	100 WATER STREET	
SERVICE PERIOD:	6/13/2017 - 7/12/2017	
SERVICE DAYS:	30	
ACCOUNT TYPE:	SINGLE FAMILY DWELLING (02)	
# OF UNITS:		
REFUSE PICKUP DAY	TUESDAY	
BILLING ADDRESS:	CITY CUSTOMER 100 WATER STREET SANTA CRUZ CA 95060	
Previous Balance		151.25
Payment - thank you		-151.25
- C	urrent Charges -	0.00
- C Water - Ready-to-Serv	urrent Charges - /e 5/8"	9.08
- C Water - Ready-to-Serv Water - Consumption	urrent Charges - /e 5/8" Charges (10 CCF):	9.08
- C Water - Ready-to-Serv Water - Consumption 5 CCF @ 5.75	urrent Charges - /e 5/8" Charges (10 CCF):	9.08 28.75
- C Water - Ready-to-Sen Water - Consumption 5 CCF @ 5.75 2 CCF @ 6.42	urrent Charges - ve 5/8" Charges (10 CCF):	9.08 28.75 12.84
- C Water - Ready-to-Serv Water - Consumption 5 CCF @ 5.75 2 CCF @ 6.42 2 CCF @ 7.41 1 CCF @ 8 70	urrent Charges - /e 5/8" Charges (10 CCF):	9.08 28.75 12.84 14.82 8 70
- C Water - Ready-to-Serv Water - Consumption 5 CCF @ 5.75 2 CCF @ 6.42 2 CCF @ 7.41 1 CCF @ 8.79 Water - Infrastructure	urrent Charges - /e 5/8" Charges (10 CCF): Reinvestment Fee (10 CCF):	9.08 28.75 12.84 14.82 8.79
- C Water - Ready-to-Serv Water - Consumption 5 CCF @ 5.75 2 CCF @ 6.42 2 CCF @ 7.41 1 CCF @ 8.79 Water - Infrastructure 5 CCF @ 1.55	urrent Charges - /e 5/8" Charges (10 CCF): Reinvestment Fee (10 CCF):	9.08 28.75 12.84 14.82 8.79 7.75
- C Water - Ready-to-Serv Water - Consumption 5 CCF @ 5.75 2 CCF @ 6.42 2 CCF @ 6.42 2 CCF @ 7.41 1 CCF @ 8.79 Water - Infrastructure 5 CCF @ 1.55 2 CCF @ 2.32	urrent Charges - /e 5/8" Charges (10 CCF): Reinvestment Fee (10 CCF):	9.08 28.75 12.84 14.82 8.79 7.75 4.64
- C Water - Ready-to-Serv Water - Consumption 5 CCF @ 5.75 2 CCF @ 6.42 2 CCF @ 6.42 2 CCF @ 7.41 1 CCF @ 8.79 Water - Infrastructure 5 CCF @ 1.55 2 CCF @ 2.32 2 CCF @ 2.86	urrent Charges - /e 5/8" Charges (10 CCF): Reinvestment Fee (10 CCF):	9.08 28.75 12.84 14.82 8.79 7.75 4.64 5.72
- C Water - Ready-to-Serv Water - Consumption 5 CCF @ 5.75 2 CCF @ 6.42 2 CCF @ 7.41 1 CCF @ 8.79 Water - Infrastructure 5 CCF @ 1.55 2 CCF @ 2.32 2 CCF @ 2.86 1 CCF @ 3.85	urrent Charges - /e 5/8" Charges (10 CCF): Reinvestment Fee (10 CCF):	9.08 28.75 12.84 14.82 8.79 7.75 4.64 5.72 3.85
- C Water - Ready-to-Sen Water - Consumption 5 CCF @ 5.75 2 CCF @ 6.42 2 CCF @ 7.41 1 CCF @ 8.79 Water - Infrastructure 5 CCF @ 1.55 2 CCF @ 2.32 2 CCF @ 2.86 1 CCF @ 3.85 Refuse - 32 Gallon Ca	urrent Charges - /e 5/8" Charges (10 CCF): Reinvestment Fee (10 CCF): rrt (1)	9.08 28.75 12.84 14.82 8.79 7.75 4.64 5.72 3.85 33.34
- C Water - Ready-to-Sen Water - Consumption 5 CCF @ 5.75 2 CCF @ 6.42 2 CCF @ 6.42 2 CCF @ 7.41 1 CCF @ 8.79 Water - Infrastructure 5 CCF @ 1.55 2 CCF @ 2.32 2 CCF @ 2.32 1 CCF @ 2.86 1 CCF @ 3.85 Refuse - 32 Gallon Ca Sewer - Single Family	urrent Charges - /e 5/8" Charges (10 CCF): Reinvestment Fee (10 CCF): rrt (1)	9.08 9.08 28.75 12.84 14.82 8.79 7.75 4.64 5.72 3.85 33.34 46.66
- C Water - Ready-to-Serv Water - Consumption 5 CCF @ 5.75 2 CCF @ 6.42 2 CCF @ 6.42 2 CCF @ 7.41 1 CCF @ 8.79 Water - Infrastructure 5 CCF @ 1.55 2 CCF @ 2.32 2 CCF @ 2.36 1 CCF @ 3.85 Refuse - 32 Gallon Ca Sewer - Single Family Utility Tax @8.5%: Franchise Tax - Water	urrent Charges - /e 5/8" Charges (10 CCF): Reinvestment Fee (10 CCF): nrt (1)	9.08 9.08 28.75 12.84 14.82 8.79 7.75 4.64 5.72 3.85 33.34 46.66 14.98 8.29

 CURRENT BILL:
 \$199.51

 Current bill will be late after 3:00 p.m. on:
 8/23/2017

SANTA CRUZ MUNICIPAL UTILITIES PO BOX 682 SANTA CRUZ, CA 95061-0682

Customer Service: (831) 420-5220

CRD0726A AUTO SCH 5-DIGIT 95060 7000001092 00.0004.0073 966/2

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CITY CUSTOMER 100 WATER STREET SANTA CRUZ CA 95060

Please Note The Following:	
Usage Analysis:	
(1 CCF = 100 Cubic Ft or 748 Gal.) Meter No. Read Date Previous Current Cons. 12345678 7/12/2017 478 488 10	
Water consumption this period: 7,480 gallons Average water use this period: 250 gallons/day	
NOTE: Attention Customers: Please take all walk-in payments to 212 Locust St, Ste D.	
Annual water main replacement to occur on River St b/t HWY 1 and Water St, and on Potrero St. For more info, visit www.cityofsantacruz.com/h2oprojects	
Water Quality Consumer Confidence Report: www.cityofsantacruz.com/ccr2016	
2017 Lobby hours 8am - 12pm and 1pm - 5pm 2017 Phone hours 9am - 12pm and 1pm - 5pm	

UTILITY BILL

Total is due upon presentation

Bill Date:	7/26/2017	
Account Number:	123-45678-910	
Customer Name:	CITY CUSTOMER	
Service Address:	100 WATER STREET	
Current Bill:	\$199.51	
Total Due:	\$199.51	
Amount Enclosed:		

Check box to submit an address change.

իսյիներդի հիշտրովի ընդերերու իրկիրությո

SANTA CRUZ MUNICIPAL UTILITIES PO BOX 682 SANTA CRUZ, CA 95061-0682

0123456789105 0000015125 0000019951 00000199516

Use your usage analysis graph to compare water use to prior months.

Viewing your monthly usage on a graph can help you understand how efficiently you are using water. If you see your bill getting incrementally higher but think that your water usage has not changed, this could indicate a leak.

When you pay your water bill, not only are you paying for the water you used that month, you are helping to pay for critical projects to ensure a safe, clean, and reliable water system in the future. The infrastructure reinvestment fee is one mechanism by which you are paying directly into upcoming infrastructure projects. Examples of projects that will be aided by this fee are:

- Rehabilitation of inlet-outlet pipeline in Newell Creek dam, approximate cost: \$42 million
- Rehabilitation of the pipeline between Loch Lomond and Felton, approximate cost: \$18 million
- Replacement and improvements to the pump station at the Felton diversion dam, approximate cost: \$4.5 million
- Replacement of several concrete tanks at Graham Hill Water Treatment Plant, approximate cost: \$9 million

Indoor Conservation Tips

Indoor water use makes up a significant portion of total household water use. On average, indoor usage makes up approximately 50% of total household usage in California. However in Santa Cruz, indoor use makes up approximately 77% of total usage in the single family residential customer category.

The following pie chart shows how water is typically used indoors. This data is based on a national end-use study of urban water agencies throughout the country and is not specific solely to Santa Cruz.

As you can see from the chart, toilets, showers, clothes washers, and faucets make up the majority of indoor usage. Leaks can also significantly contribute to high water usage. Programs and tips are available to help you save water indoors; whether it's providing free low-flow devices such as showerheads and faucet aerators, or providing instructions on fixing a leaking toilet, the Santa Cruz Water Conservation office has got you covered!

There are three basic strategies for saving water indoors:1. Change your habits2. Install water saving devices3. Repair leaks

Change Your Habits

IN THE BATHROOM

Turn off the water while washing hands and brushing teeth
Use a bucket in the shower to catch excess water for plants
Turn off water while lathering
Limit showers to 5 minutes or less
Take a shower instead of a bath, or take a shallow bath

IN THE KITCHEN

- Don't run water while washing dishes
- Use one side of the sink for wash water, and the other for rinse water

IN THE LAUNDRY ROOM

• Wash full loads only

Presoak heavily soiled items

of letting water run

Soak stubborn pots and pans, instead

Run the dishwasher only when it is full

• Use shorter cycles

Install Water-Saving Devices (GPM = Gallons per minute, GPF = Gallons per flush)

IN THE BATHROOM

 Install low-flow (1.5 GPM) aerators Retrofit your existing showerhead with on faucets (free from the Water a control valve to restrict the flow Conservation office) Install high-efficiency (1.28 GPF) Install low-flow (2.0 GPM) showertoilets (rebate available) • Install ultra-high efficiency (1.0 GPF) heads (free from the Water Conservation office) toilets (rebate available) • Use a five-minute shower timer (free Install a recirculating hot water pump from the Water Conservation office) on your water heater IN THE KITCHEN Install an instant hot water heater on Install low-flow (1.5 GPM) kitchen faucet aerator (free from the Water your kitchen sink, so tap won't have Conservation office) to run to heat up (no rebate available) IN THE LAUNDRY ROOM Install low-flow faucet aerators on Install an Energy Star-certified high efficiency clothes washer - you could laundry room sinks save up to 20 gallons of water per load (rebate available)

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Water Department

Repair Leaks

Leaks can represent a significant portion of indoor water use. The Water Conservation Office has a variety of resources available to help you with leaks. We have copies of the Practical Plumbing Handbook available to help guide your repairs; we also have free toilet leak detection tablets.

Toilet leaks are the most common type of household leak, and can cause a very high water bill if not addressed. While toilet leaks can cause serious water waste, fixing the leak is relatively easy.

Is your toilet leaking?

Put a toilet dye tab or a few drops of food coloring into the tank of the toilet. Wait for 15 minutes and then check to see if the dye is in the bowl. If you find dye in the bowl, there is water leaking. In this instance, a flapper leak is typically the problem.

What kind of problem is your toilet experiencing?

By assessing what's going on with your toilet, you can determine the best way to fix the leak. Don't forget to shut off the water from the valve behind the toilet before making any repairs.

COMMON TOILET PROBLEMS

Continuous running water

If water in your toilet is continuously running, check your ballcock (fill valve) and overflow tube. If the water line is at the level of the overflow tube opening, water will flow out of the tank and down the drain. If the water level is set too high, the fill valve will continuously let water into the tank while the excess water will continuously flow down the drain. To lower the water level, adjust the float so that it shuts off the fill valve sooner.

Phantom flushing

If you experience phantom flushing, when water leaking out of the tank causes the refill valve to turn on, check your flapper valve. Flapper valves are made of rubber and tend to deteriorate or build up minerals. When a flapper is corroded it can no longer make a tight seal to stop the toilet from flushing. Replacing a flapper is an inexpensive way to save water.

Whistling toilet

If you hear whistling from your toilet, check your ballcock assembly and adjust the float. If the noise persists, you probably need to replace the ballcock. Ballcock replacement kits are available at hardware and plumbing stores.

Stuck Handle

If your toilet handle is stuck or not working properly, check your flapper. If you have to jiggle or force the handle back up, your flapper is not sealing properly.

Late night running water

Many toilets only run at night when people tend to use less water. When less people use water, the pressure in our water system increases. This rise in pressure may cause the water at your home to "water creep" inside your gravity-fed tank. Toilet manufacturers recommend that users lower the water level to one inch below the overfill tube.

Outdoor Conservation Tips

Water use outdoors can make up a significant portion of total household water use. On average, outdoor use in California makes up 50% of total household usage. However, Santa Cruz has a cool coastal climate and the community generally uses less water per household outdoors than in other nearby locations with hotter climates. In Santa Cruz, outdoor use makes up approximately 23% of total annual usage in the single family residential customer category.

The Water Conservation office has programs and tips available for all customer classes to save water outdoors; whether it's as simple as providing a rain barrel for a homeowner or providing a landscape water budget for a large school or park.

There are four basic strategies for saving water outdoors – the four Rs:

1. Reduce irrigation.

3. **Reuse** water.

- 2. Repair leaks.
- 4. Redesign or replant.

Reduce Irrigation

- Set your irrigation schedule for the season. Adjust your irrigation controller for seasonal conditions and for short-term weather changes.
- Install rain sensors. Installing a rain sensor with your manual irrigation controller can help ensure that the system shuts off automatically during a rain event.
- **Don't water during the heat of the day.** Water early morning or late evening when temperatures are cooler to avoid unnecessary evaporation.
- Use mulch. Placing mulch around trees and plants will help retain soil moisture and reduce evaporation as well as reduce the growth of weeds.
- **Replace overhead spray irrigation with drip or micro-spray irrigation.** Shrubs and trees should not be irrigated with overhead spray irrigation.
- For lawn watering, use a cycle-and-soak schedule. Set irrigation run times into multiple short blocks instead of one long cycle.
- Install a weather-based irrigation controller. Be sure to program your controller correctly for optimal water savings.
- **Regulate pressure:** Many irrigation systems suffer from too much or too little pressure. High pressure can cause misting from spray heads and broken emitters on drip systems. Installing a pressure regulator can minimize these types of issues.

Repair Leaks

- **Physically inspect.** Turn on your irrigation system and watch how it performs. Drip systems are highly prone to leaking and must be regularly inspected for breaks and missing emitters.
- Fix leaks. Systems should be checked regularly for broken or leaky sprinkler heads, missing or broken drip emitters, cracked or broken drip lines, and other problems like clogged emitters and sprinklers that do not pop up correctly.
- Get assistance. If you believe you have a leak or just need help scheduling your irrigation, request a free home water survey. Call the Water Conservation Office at (831) 420-5230.

Reuse Water

Collect water indoors. Use a bucket in the shower and use the water collected to water plants.

Install rain barrels. Rain barrels collect water from your rooftop to be used later to water plants. The City has a subsidized rain barrel program.

Use graywater. Consider installing a simple laundry-tolandscape graywater system. These systems send the used water from the washing machine outdoors where it can be used on certain types of plants and shrubs. (Rebate available)

Redesign/Replant

Plant drought-tolerant species. California native plants and other species that are adapted to drought conditions require less water and are more likely to survive periods of extended drought.

Avoid planting turf on slopes or near hardscape. Always plan a setback between the edge of turf grass and any hardscape such as driveways and sidewalks to avoid runoff.

Hydrozone when planting. Group plants together according to their water characteristics. This allows you to put them in a unique zone on the irrigation system, preventing over and under-watering.

Remove your lawn. Take out your lawn and replace it with climate appropriate plants. The City offers a lawn removal rebate program (call for a pre-site inspection before you start) to encourage the conversion of lawn to drought tolerant plants.

Water Wise Gardening

Did you know that Santa Cruz County has a dedicated plant and gardening website specific to this area? If you are looking to redesign your current landscape or start from scratch, it's an excellent free resource for you. Please visit the Santa Cruz Water-Smart Gardening website at **santacruz.watersavingplants.com**. This website provides a wealth of information about outdoor irrigation and plant water needs, garden tips about soils, mulch and compost, integrated pest management, and water saving tips. In addition, there are many photo galleries of water-wise plants that are suitable for the Santa Cruz area. You can browse plants and take tours of homes that have water-wise landscapes installed.

Another web resource is the site from CalFlora, which lets you choose plant types for your landscape based on location and other criteria, such as water use and sun or shade. Please visit **calflora.org/entry/palette** to explore plant options. You can select from grasses, herbs, shrubs, trees, vines, and other types of plants.

Find a Landscape Contractor

When considering whom to hire for landscape installation and maintenance, consider a Certified Green Gardener. Monterey Bay Certified Green Gardeners have completed a minimum of 20 hours of practical instruction in ecological landscape practices that conserve water, reduce waste, and prevent urban stormwater pollution. You can find a list of local certified green gardeners by visiting the Green Gardener website: **green-gardener.org/hire-a-green-gardener**.

Watering Schedules

One of the most common questions asked regarding outdoor water use is how long to water landscapes. The answer is more complicated than one would expect. How long to water depends on a number of factors including location, soil type, plant type, irrigation device, relative sun or shade, and slope. However, a general reference guide for how frequently to water is as follows:

Spring/Fall	No more than 1-2 times per week
Summer	No more than 3 times per week
Winter	Irrigation usually not needed

Within this general guide, you should adjust frequency and duration of watering given your local conditions. For example, if there is a particularly dry winter, you may need to turn on your system when normally it would be off for the winter.

The above schedule is an only one example. When programming your irrigation, remember to check if there are local restrictions in place on the number of days per week or minutes per cycle allowed.

Other Resources

INDOOR CONSERVATION	
Home Water Calculator	home-water-works.org/calculator
CUWCC Plumbing Handbook	infohouse.p2ric.org/ref/36/35594.pdf
Toilet Performance Testing	map-testing.com
OUTDOOR CONSERVATION	
Monterey Bay Friendly Landscaping	green-gardener.org
Water-Smart Gardening	santacruz.watersavingplants.com
LOCAL WATER AGENCIES	
Santa Cruz Water Department	cityofsantacruz.com/water
San Lorenzo Valley Water District	slvwd.com
Scotts Valley Water District	svwd.org
Soquel Creek Water District	soquelcreekwater.org
Santa Cruz Mid-County Groundwater Agency	midcountygroundwater.org
Santa Margarita Groundwater Agency	smgwa.org
STATEWIDE RESOURCES	
Save Our Water	saveourwater.com
CIMIS	cimis.water.ca.gov
WUCOLS Plant Search	ucanr.edu/sites/wucols/plant_search
NATIONAL RESOURCES	
Drought Monitor	droughtmonitor.unl.edu
U.S. EPA Water Sense	epa.gov/watersense
Alliance for Water Efficiency	allianceforwaterefficiency.org
Get Involved	
Water Conservation Coalition	watersavingtips.org
Cabrillo College Extension Courses	cabrillo.edu/services/extension

Cabrillo College Extension Courses	cabrillo.edu/services/extension
Ecology Action	ecoact.org/our-work/programs/water
Master Gardeners	mbmg.ucanr.edu
UCSC CASFS	casfs.ucsc.edu
UCSC Arboretum	arboretum.ucsc.edu
UCSC Life Lab	lifelab.org

Phone Numbers

Water Conservation	(831) 420-5230
Customer Service	(831) 420-5220
Water Engineering	(831) 420-5210
Report Water Waste	(831) 420-LEAK (5325)
Water Quality	(831) 420-5480
After Hours Emergencies	(831) 420-5220