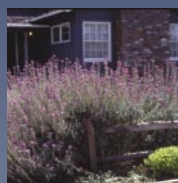




San Jose  
Water  
Company



# Guide to Using Water Wisely



*San Jose Water Company  
has long been a leader  
in promoting  
the efficient use of water.*

*Now, more than ever,  
it is important to conserve  
our precious water resources.*

*Please accept the San Jose Water  
Company challenge to become  
as water efficient as possible.*

*We hope this booklet,  
A Guide to Using Water Wisely,  
will assist you in meeting  
that challenge.*

# LETTER TO CUSTOMERS

*Dear Customer,*

*San Jose Water Company (SJWC) has been actively promoting water conservation since the early 1990s and encourages our customers to conserve and use water wisely. The Company has several programs that can assist you in conserving, including our complimentary water audits. SJWC has also implemented tiered rates that are designed to encourage residential customers to use water more efficiently.*

*Now more than ever it is important that we all use water wisely. California is experiencing a severe water shortage. On March 24, 2009, the Santa Clara Valley Water District's (District) Board of Directors voted to enact 15 percent mandatory water conservation for the remainder of 2009 in response to reduced water deliveries from the Sacramento-San Joaquin Delta and the dry years experienced in 2007 and 2008. In an effort to achieve the 15 percent reduction in water use, SJWC has adopted a plan that consists of outdoor watering restrictions and prohibitions on wasteful water use.*

*Please visit our website at [www.sjwater.com](http://www.sjwater.com) for updated information on water conservation. SJWC thanks you for your continued conservation efforts!*

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# WATER AUDIT PROGRAM

San Jose Water Company provides a full range of water conservation services, the cornerstone of which is our free Water Audit Program. Following the drought that began in 1989, we were the first local utility to create a Water Audit Program for residential and commercial customers. In 2008 we performed 1,440 single family water audits, 100 multi-family audits, and 59 commercial audits.



The purpose of a water audit is to educate customers about the wise use of water and to make their homes and businesses as water efficient as possible. Our water audits usually start with our inspector demonstrating to the customer how to read their water meter for current usage and signs of leaks. This can help customers become better aware of their water usage and be proactive when a leak is detected.

Additionally, during each audit, our trained inspectors do the following:

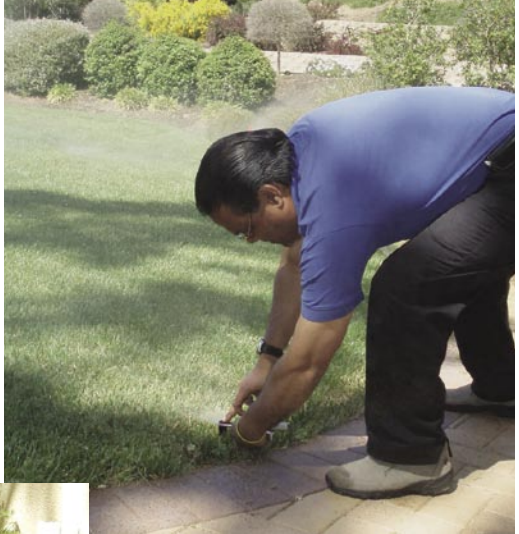
## **Indoors:**

- Check for inefficient plumbing fixtures and appliances and make recommendations for fixture replacement where appropriate.

- Check for leaking toilets and faucets and inform customer of any leaks found as well as advice on leak repair.
- Give customer free low-flow showerheads and faucet aerators and install them if requested.

**Outdoors:**

- Thoroughly check the irrigation system including inspecting sprinkler heads for breaks or malfunctions. Note and describe any excessive runoff, broken sprinkler heads, or any other leaks in the irrigation system.



- Review the irrigation schedule with the customer and make recommendations for improving the schedule, if necessary. Upon request, our inspector will implement the new schedule by changing the customer's irrigation controller.

- Check all outdoor hose bibs for leaks.

## Conservation Devices

As part of the water audit, our inspectors will provide complimentary low-flow showerheads and faucet aerators as necessary. San Jose Water Company has been distributing these conservation devices for more than a decade. These devices are available during the water audit appointment or by visiting our main office at 110 W. Taylor Street. E-mail requests can also be made for devices by contacting [conservation@sjwater.com](mailto:conservation@sjwater.com).

Devices include:

- Low-flow showerheads (2.0 gallons per minute or less)
- Kitchen faucet aerators (2.2 gallons per minute)
- Bathroom faucet aerators (1.5 gallons per minute)

To schedule your complimentary water audit appointment, please call (408) 279-7900 between 8:00 am and 5:30 pm Monday through Friday. Please call at least 24 hours in advance to schedule your audit appointment. Appointments are available during the week each hour on the half hour.

## Rebates

During the water audit appointment, our inspectors will also refer customers to water conservation rebate programs where appropriate. San Jose Water Company works closely with the Santa Clara Valley Water District to promote various rebates and incentives. A full list of available rebate programs is located on page 21 of this booklet.

# HOW TO READ YOUR METER

By understanding how to read your meter you will be able to monitor your usage and determine if you have a leak.

The first step is to locate your meter. Most residential meters are located in a concrete box near the front curb. Larger meters may be located in a vault or other area. If you take part in our Water Audit Program, our inspectors will show you the location of your meter and how to read it.

We bill in units of 100 cubic feet of water used (one unit equals 100 cubic feet which also equals 748 gallons). The sweep hand on the meter

represents water being used. One revolution of the sweep hand represents 7.48 gallons of water. All meters within the San Jose Water Company system are straight read meters; the digits are read from left to right. The two digits in black represent measurement of less than one billing unit.



By reading your meter, you can determine how much water you have used over a period of time. The photo above shows a meter reading of 2147 which is the total number of units of water recorded since the meter was installed. If the meter were to



show a reading of 2197 one month later, that indicates you used 50 billing units (50 ccf) during that one-month period. To convert the number of units to gallons, simply multiply the number of units by 748 gallons to get the number of gallons used. For example: 50 units x 748 gallons = 37,400 gallons.

By reading your water meter you can also determine how much water a certain activity consumes. For example, read the meter before you begin to water your garden and then record it again when watering is complete. The difference between the two readings is how much water was used for that activity.

## How to Use the Water Meter to Check for Leaks

Do you suspect a leak at your home or business? If so, try this simple procedure to detect leaks:

- Turn off all water inside and outside; make sure no water is being used during the test period.
- Read the meter (left to right). Mark where the sweep hand is located on the meter. Wait 15 minutes and see if the hand has moved.
- If the hand has moved, this is an indication that water is being lost somewhere (a leak).
- You can also look at the small red triangle on your water meter. If all the water is turned off at your property and you notice that the red triangle is moving, this indicates water being used and that you may have a leak.

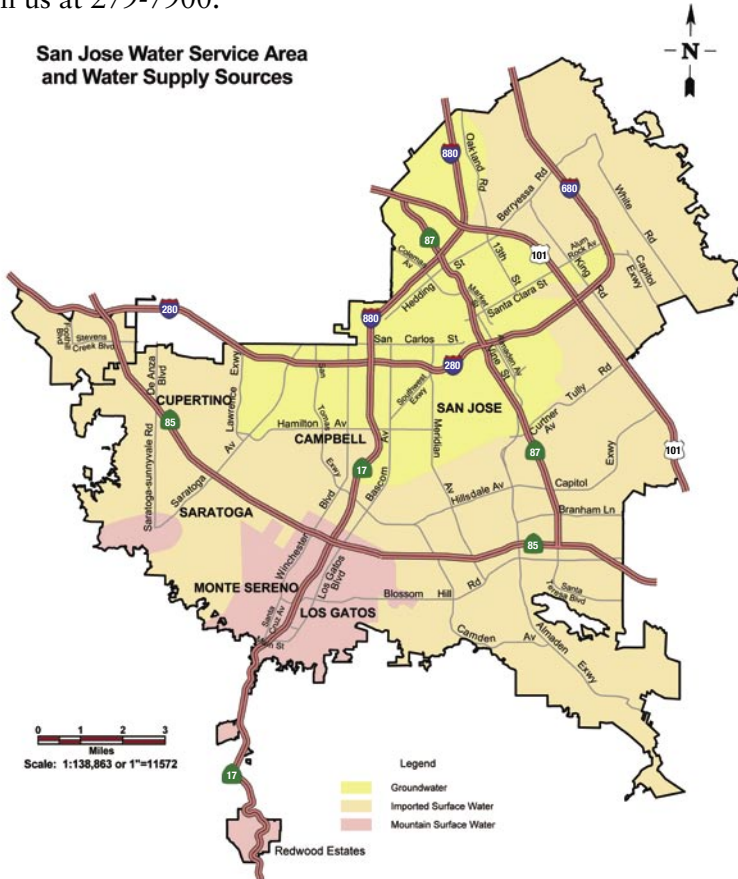
Be advised that leaks that go unattended could account for expensive water bills and could potentially cause property damage.

*Note: San Jose Water Company can assist in attempting to locate a leak during one of our water audits. However, San Jose Water Company does not perform leak repair services. Contact us at (408) 279-7900 to schedule a free water audit appointment.*

# OUR WATER SUPPLY SOURCES

San Jose Water Company obtains water from three major sources: groundwater, which is pumped from over 100 wells; imported surface water provided by the Santa Clara Valley Water District, our wholesale supplier; and local mountain surface water collected on our watershed in the Santa Cruz Mountains.

There are seasonal changes in this distribution pattern and the sources are often blended together. This map shows only the predominant source for any particular service area. If you need more specific information about your source of supply, please call us at 279-7900.



# INDOOR CONSERVATION TIPS

**T**here are many ways of conserving water indoors. Here are a few guidelines to follow in making your home more water efficient:

## **In the Kitchen/Laundry Room**

- Replace your old clothes washing machine, the second largest water user indoors. Consider an upgrade to a new high-efficiency clothes washer; you can reduce water and energy use by 40%. Rebates for new clothes washers are available. Please see page 21 for rebate information.
- Equip faucets with aerators. Save water and energy by installing aerators on kitchen and bathroom sinks. San Jose Water Company offers free faucet aerators that are available from our main office at 110 W. Taylor St., San Jose.
- Operate your clothes washer and dish washer with full loads only. By waiting until you have a full load of laundry or dishes, you'll save on water and energy costs.
- Don't leave the water running if you hand wash dishes. Fill the sink or a pail to wash and rinse dishes. Compost or throw away food scraps rather than running water in the garbage disposal.

## **In the Bathroom**

- Fix toilet leaks. Toilet leaks can be easy to identify and fix. To test for a toilet leak, place a few drops of food coloring or a toilet dye tablet in your tank. Wait a few minutes. If the coloring appears in the bowl, you likely have a leak. Please refer to the toilet repair guide on page 12 of this brochure for more information.
- Replace your old toilet, the largest water user indoors. If

your toilet is from 1992 or earlier, you probably have an inefficient model that uses 3.5 gallons per flush or more. Consider replacing it with a new and improved high-efficiency toilet. These new models use 1.3 gallons per flush or less and they perform great! Rebates are available for high efficiency toilets. Please refer to page 21 for rebate information.

- Install low-flow showerheads. Replace older showerheads with new efficient models that use two (2) gallons per minute or less. Older models can flow up to seven (7) gallons per minute and can waste thousands of gallons



per month. San Jose Water Company offers free low flow showerheads that are available from our main office at 110 W. Taylor St., San Jose. Low flow showerheads are also available from our water audit inspectors during one of our free home water audits.

- Turn off the tap while brushing your teeth or shaving.

If you are a renter, be a water wise tenant. Help save water by reporting leaking toilets, faucets and irrigation systems to your property manager or landlord.

# THE LEAKY TOILET

If you suspect your toilet is leaking, there are some simple plumbing techniques that will stop your toilet from running and wasting water and money. A good indicator of a toilet leak is when you can hear the sound of running water or a faint hissing or trickling.

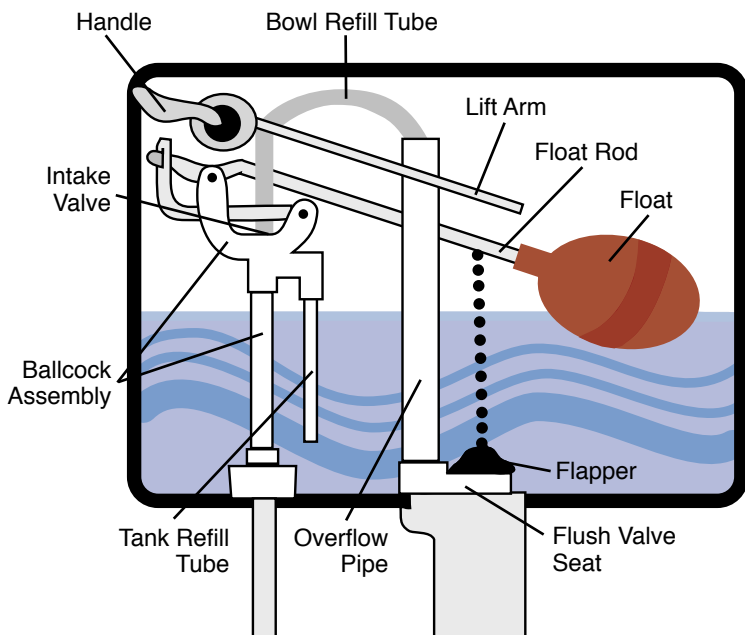
Before attempting any plumbing repairs, make sure to turn the water off. Start by removing the top of your toilet tank and checking the flushing mechanism inside. Make sure the guide rods are not bent or out of alignment; this prevents other parts from working smoothly. Bent, rusted or corroded parts may need to be replaced.

Check the surface level of the water in the tank to see if water is being wasted through the overflow tube. If it is, you'll have to adjust the water level of the tank. The water level should remain at least 1/2 inch below the top of the overflow tube. Many toilets have a waterline mark to help you set the proper level. The water level is controlled by the level of the float ball. Gently bend the connecting rod attached to the float ball down, or change the float position if this is adjustable. If the float ball is leaky or waterlogged, unscrew and replace it with a new one. Make sure to take it with you to the hardware store so you get the exact duplicate.

Some toilets have fluid meter-type float/ballcock assemblies. These can be adjusted by gently pinching the clip on the metal rod assembly and sliding the clip down to lower the water level in the tank.

## **Flapper Valve and Handle Problems**

It's a good idea to test your flapper for smoothness and proper seating, the same as you would for a plunger ball, and replace it if necessary. Test-flush the toilet to make sure the connector chain from the handle to the flapper cannot get caught



underneath the flapper, thus holding it open and wasting water. If the handle gets “hung up” after flushing and you have to jiggle the handle or push it back up to make the flow into the tank shut off, it’s time to repair the flapper valve.

### Plunger Ball Leaks

To determine if this is a problem, drop some food coloring or dye tablets into the tank, and check about 15 minutes later to see if the coloring has leaked into the bowl. If water is leaking through the outlet under the plunger ball, check the ball itself. If it is worn or rough around the edges, unscrew it from the connector wire and get an exact replacement. Make sure that the chain connecting the handle to the flapper is the correct length.

If the plunger ball is not worn, it still may not be seating properly due to a scaly or corroded valve seat. In this case, turn off the water supply valve to the tank and flush the toilet to empty the tank. Sponge out the remaining water. Dry the

flush valve seat and sand it smooth with fine emery cloth or plastic scouring pad. If it cannot be smoothed, replace it. Now make sure the plunger ball falls into place, covering the valve seat securely, and turn the water back on.

### **Ballcock Valves**

If you hear whistling or whining noises, your toilet may need a new ballcock assembly, especially if adjusting the float ball doesn't help the problem. Kits containing replaceable parts of the anti-siphon ballcock assembly are available at hardware and plumbing stores. Remove the water from the tank and detach the float ball and connecting float rod. Using an adjustable wrench, disconnect the supply pipe located beneath the toilet tank. Remove the locknut and washer and lift out the ballcock assembly. Screw the new unit into place, adjust the refill tube on the new unit into the overflow pipe, and reattach and adjust the float ball. Refill the tank and check to make sure the water level is below the level of the overflow tube, and that all parts are working smoothly.

# OUTDOOR CONSERVATION TIPS

Did you know that outdoor water consumption typically accounts for at least 50% of residential water use? Try following these simple steps to conserve water outdoors:

## Tips for Lawns

- Water your lawn only when it needs it. Over watering the lawn is a common wasteful practice. Step on your lawn; if the grass springs back up when you remove pressure, it doesn't need watering. Generally lawns will be healthy with a watering once every three days.
- Consider planting water-conserving turf varieties. For example, hybrid fescue grasses use less water than traditional bluegrass. Contact your local water-wise nursery for more information.
- Avoid planting turf on a slope to avoid runoff.
- Plant a setback between the edge of planted turf and any hardscape such as sidewalks. A planted setback of approximately 18 inches between turf and hardscape will help prevent runoff.
- Set your irrigation schedule for the season. Watering times will vary by season, climate, soil type, and plant types. See detailed watering information below.
- Plant drought tolerant species. Reduce





outdoor watering needs by planting species appropriate for the Bay Area's dry climate. Plants native to the area are already adapted to the soil and weather conditions and will generally require less water and work to thrive.

- Hydrozone: When planting, group plants together according to their water needs.
- Water during the cool part of the day. Reduce evaporation by watering lawns and plants only at night or early morning before dawn.
- Use mulch. Place several inches of mulch around trees and plants; a layer of mulch will slow the evaporation of moisture from your landscape and inhibit the growth of weeds.
- Install shut-off nozzles on all garden hoses. Make sure your garden hose has an automatic shut-off.
- Don't water the pavement. When your irrigation system



is on, check for overspray. Adjust sprinkler heads to water lawns and gardens, not the pavement surrounding your landscape. Tune sprinkler heads so that the radius of spray is appropriate for the application.

- Sweep sidewalks and driveways. Hosing down pavement around your home can waste hundreds of gallons. A broom is the proper tool to clean these areas.
- Avoid runoff on slopes. Try to avoid planting on slopes (especially lawns); if your lawn or garden is already on a slope you can reduce your watering times so that excess water does not run off. Create basins around plants to catch water and prevent runoff.
- Check your irrigation system often for broken sprinkler heads and irrigation tubing. Broken sprinkler heads waste water and can potentially damage your landscape. Check sprinkler heads, drip system emitters, and drip lines for breaks and cracks.
- Don't let water run while washing the car. Clean the car with a bucket of soapy water. Use the hose only to rinse it off.

- Replace sprinklers with drip irrigation when possible. Use drip irrigation for trees, shrubs, and flowerbeds. Drip systems use less water and direct water where it is required by the plant. Drip systems can consist of drip line with emitters placed at various spacing. Alternatively, soaker hoses (drip line pre-drilled with holes at even spacing) are another good option. Santa Clara County residents may be eligible for rebates replacing inefficient irrigation hardware with new efficient equipment. See page 21 for rebate information.



- Use a pool cover. Pool covers will prevent evaporation and decrease heat loss, saving water and energy.

## Suggestions for Watering Schedules

By ensuring that you set the correct watering schedule you can simultaneously achieve significant water savings and avoid over-watering your lawn and plants. There are many variables that contribute to the exact amount of water that should be applied to your landscape. Rather than providing a sample generic watering schedule here, we have instead included a brief discussion of several of the key factors that should be considered when determining your watering schedule:

- 1. Plant type(s):** When possible, set up your irrigation zones according to water needs based on plant type. This concept, called hydrozoning, allows you to separate high water use plants from low water use plants into different zones on your irrigation controller. You can divide your garden into four



photo: Gerry Kiffe, GardenSoft.com

hydrozones: high use, moderate use, low use, and no use. Plants that are high water use include turf grass and annuals (plants that survive for just one growing season). Plants that are moderate use or low water use

include established shrubs and trees, groundcover, and perennials (plants that grow and bloom over the spring and summer and then die back every autumn and winter, then

return in the spring). You can also have a no water use zone for areas of hardscape such as pathways or concrete decks or patios. The type of plant(s) that each irrigation zone contain will be the basis for determining your watering schedule.

**2. Season and weather conditions:** When setting the watering times on your irrigation controller,



photo: Gerry Kliffé, GardenSoft.com

one of the primary factors to consider is the season and the weather. Generally speaking, in the spring and late fall there will be moderate water needs. In the summer and early fall, there will be high water needs. In the winter there will be low water needs. Note that these are general rules of thumb and actual watering needs will vary with the weather. By adjusting your schedule for the season and weather conditions, you will generally save water and maintain plant health. Sophisticated irrigation controllers are also available that incorporate site specific weather data into determining watering times. These so-called “smart controllers” automatically adjust for the weather conditions. Rebates may be available for these devices. See page 21 for details of rebate programs.

**3. Soil type:** Your soil type is also an important consideration in determining watering times, as well as for determining other considerations such as how much fertilization may be required for your plants. Soils can be described by their relative content of sand, clay, rocks, and organic matter. Generally, sandy soils will allow water to drain quickly. Clay

soils, on the other hand, tend to impede the flow of water and often cause irrigation water to runoff. By knowing your soil characteristics, you can set a watering schedule that is best suited for your particular location. For example, if you know you have clay soil, you would be advised to set your watering schedule using multiple start times with a shorter duration rather than using a single start time with a longer duration. This type of schedule will improve the chances that the applied water will actually soak into the soil and will help to prevent runoff.

**4. Irrigation hardware type:** Your specific irrigation equipment will also determine the watering times you should set. There are many types of irrigation devices such as sprinklers (spray heads, rotors, etc.) and various forms of drip irrigation. Each device will have an associated flow rate. For example, a pop-up rotor sprinkler may emit water at two to four gallons per minute. A drip emitter may emit at one gallon per minute. By knowing the make-up of your existing irrigation hardware and the associated flow rate of each device, you can better set your watering schedule.

If you need assistance with your watering schedule, consider one of our free home or commercial water audits. See page 4 for details.

# REBATE PROGRAMS

San Jose Water Company has partnered with the Santa Clara Valley Water District (SCVWD) to offer the following rebate programs. For more information on these programs please visit <http://www.sjwater.com/conservation>.

## Residential Indoor Rebate Programs

- **High Efficiency Clothes Washer Rebate Program:** The SCVWD is partnering with PG&E to offer a combined water and energy rebate of up to \$200 for qualifying high-efficiency clothes washers. Machines using Silver Ion Technology will not qualify for the water portion of the rebate.
- **High Efficiency Toilet (HET) Rebate Program:** San Jose Water Company customers are eligible for a rebate of up to \$125 per toilet for replacing old, high water-use toilets that use 3.5 gallons per flush or more, with a new HET from the approved list of qualifying models.
- **Water Softener Rebate Program:** The SCVWD and the Water Resources Association of San Benito County offer a limited-time rebate of \$150 on your purchase of a new water softener. The water softener must be a demand initiated regeneration type in order to qualify for the rebate.

## Residential Outdoor Rebate Programs

- **Water Efficient Landscape Rebate Program:** San Jose Water Company customers can receive up to \$1,000 for the replacement of high water using plants such as turf grass, with low water using plants from the Approved Plant List or by installing permeable hardscape. A water audit of the property is required before the turf and/or high water use plants are removed.

- **Residential Irrigation System Hardware Rebate Program:** San Jose Water Company customers who have a water audit performed at their home may be eligible for rebates for the purchase of new efficient irrigation hardware of up to \$1,000 per home.

## Rebate Programs for Commercial Customers

- **Commercial Clothes Washer Rebate Program:** The SCVWD offers rebates of \$400 per unit on approved purchased and leased high-efficiency washing machines for common-area laundry rooms and laundromats.
- **WET Program:** The SCVWD is offering rebates of up to \$50,000 per water conservation project to commercial, industrial, and institutional water customers for the implementation of process and equipment changes which reduce water usage.
- **Commercial Water Softener Rebate Program:** The SCVWD offers \$400 per rebate to business owners for replacing their old timer based water softener (owned or leased) with a new efficient demand initiated regeneration water softener.
- **Irrigation Technical Assistance Program (ITAP):** Commercial customers with one (1) or more acres of irrigated landscape can participate in SCVWD's free ITAP landscape survey program. The survey includes site specific recommendations to increase system efficiency, potential water and cost savings estimates, and an annual irrigation budget.
- **Irrigation System Hardware Rebate Program:** Commercial customers who participate in the SCVWD ITAP may qualify for a rebate of up to \$4,000 per site for implementing water efficient hardware upgrades recommended in the ITAP site evaluation.

- **Weather-Based Irrigation Controller Rebate Program:** Business owners who would like to replace their existing irrigation controllers with new weather based irrigation controllers may be eligible for a rebate of up to \$1,100 per controller.
- **Commercial High Efficiency Toilet Program:** Offers free high-efficiency toilets (HETs) and installation to businesses, apartments (4-plex or greater), and schools that currently have old inefficient toilets. Older toilets will be replaced with new HETs that use 1.28 gallons per flush or less.



# WEBSITES AND PUBLICATIONS

## General

**San Jose Water Company Conservation Website:**

<http://www.sjwater.com/conservation/index.jsp>

**Santa Clara Valley Water District Conservation Website:**

<http://www.valleywater.org/conservation/>

**California Urban Water Conservation Council:**

<http://www.cuwcc.org/>

**Virtual Home Water Conservation Tour**

<http://www.h2ouse.org/>

## Plumbing and Toilets

**Plumbing Care and Handbook:**

<http://www.theplumber.com/handbook.html>

**Toilet Performance Testing Website:**

<http://www.cuwcc.org/MapTesting.lasso>

**Toiletology 101:**

<http://www.toiletology.com/index.shtml>

## Garden Information

**Bay Friendly Landscaping and Gardening:**

<http://www.stopwaste.org/home/index.asp?page=8>

**A Bay-Friendly Landscaping Guide to Mulch:**

<http://www.stopwaste.org/docs/mulchguide-2006.pdf>

**Better Homes & Gardens Magazine:**

<http://www.bhg.com/gardening/>

**Ruth Bancroft Garden Website:**  
<http://www.ruthbancroftgarden.org/>

**California Native Plant Society:**  
<http://www.cnps.org/>

**Guide to landscaping in a water-saving manner:**  
<http://www.h2ouse.org/tour/landscaping.cfm>

**Guide to Estimating Irrigation Water Needs, including a complete guide to California plants:**  
<http://www.owue.water.ca.gov/docs/wucols00.pdf>

**Sunset Magazine Earth-Friendly Tips:**  
<http://www.sunset.com/garden/earth-friendly/>

## **Irrigation Information**

**Irrigation Association:**  
<http://www.irrigation.org/>

**Irrigation and Green Industry Network:**  
<http://www.wateright.org/>



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408.279.7900 • Se Habla Español

[www.sjwater.com](http://www.sjwater.com)