

## Do-It-Yourself Residential Customer Water Audit

This guide will assist you in understanding your water meter, checking for leaks, estimating your household's current water use, and making adjustments to your water use. Call Customer Service at (619) 258-4600 if you have any questions.

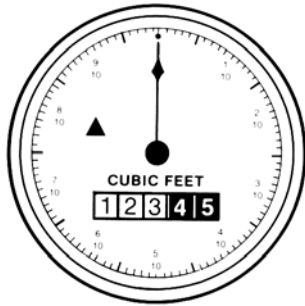
### What Your Water Meter Can Tell You

Your meter can tell you how much water you are using per day, week, month and year. You can monitor your meter yourself and check your figures to verify the accuracy of your water bill. Your meter can also show leaks in your water system.

### How To Find Your Water Meter

Your water meter is inside a rectangular concrete box, flush with the ground, and is usually located near the roadway or sidewalk. Watch for spiders, snakes, and bugs when opening the box.

### Reading Your Water Meter



#### Cubic Feet Meter

*1 cubic foot = 7.48 gallons*

Each full rotation of the sweep hand indicates one cubic foot, or 7.48 gallons of water. The markings around the outside of the dial indicate tenths and hundredths of one cubic foot. The meter shown reads 123 units or 12,345 cubic feet.

### Think you have a leak?

Here are a few steps to help determine if you have a leak and where it may be.

#### How To Detect Leaks

To test for leaks in your plumbing system, stop all indoor and outdoor water use activity. Check and record the numbers and the position of the sweep hand on your water meter. Wait two to four hours (overnight if possible), then recheck your water meter. If the sweep hand has moved, or the numbers have changed, water is leaking somewhere in your plumbing system. Be sure water softeners or filters are not operating.

#### Slow Leaks

Some leaks are too slow to move the dial. Turn off the water at the meter and wait a few hours. When you slowly turn the water back on, if water rushed to fill the pipes, you may have a leak.

#### If a leak is detected at the meter

Turn off the house valve to determine if the leak is inside the house. This is usually located at a hose bib on an outside wall in a direct line from the water meter. If the meter dial still moves, you should investigate the possibility of a leak in the line between the meter and the house.

### Irrigation System Leaks

Leaks in your irrigation system won't always show on your meter due to their separate shut-off valves. To find leaks, walk your irrigation lines. Check for unusual wet spots, leaky or broken sprinkler heads, and use your meter to measure total irrigation use. Locate all hose bibs and check for leaks or drips. Replace the washers if there are any leaks.

### Toilet Leaks

Check toilets for leaks. Put dye tablets or a few drops of food coloring in the tank. Don't flush. Wait 10 minutes. If color appears in the bowl, there is a leak in the toilet mechanism. Repair any leaks.

### Water Use Outside the House

This section will help you determine how much water you are using and show you ways to cut back on your water use.



#### Garden Hoses and Bibs

Measure garden hose output by writing down the time needed to fill a 1 or 2 gallon bucket. Calculate the amount of water used in one minute.

**\*A typical 5/8 inch hose at 50 psi uses 14 gallons per minute.**

#### Perform a timed consumption test for your Irrigation System

- > Turn off all water use in the house.
- > Record the reading on the water meter.
- > Turn on the sprinklers for the usual watering schedule.
- > When the sprinklers shut off, read the meter again.
- > Determine how much water is used each time you irrigate.
- > Enter this number in the Calculate Weekly Water Use section on page 4



#### Perform a catch-can test

- > Set three 12-ounce coffee mugs at various places on the lawn where they will be adequately reached by the sprinklers.
- > Turn the system on for 15 minutes.
- > Measure the depth of the water in each mug with a ruler and take the average depth.
- > The lawn should receive about 1 inch at a time applied once a week, unless weather is very warm. Set your system so that it applies 1 inch of water to your lawn once a week. This can vary based on your soil and slope, use the Landscape Watering Calculator at: <http://www.sandiego.gov/water/conservation/> for more details.



### Sprinkler Efficiency

Check the accuracy of the irrigation system timers by comparing the watering time of each irrigation system to actual time by a clock. Look at all sprinkler heads and check for operating efficiency. Consider replacing old sprinkler heads with water efficient models. Over-spray can increase your necessary watering time. Reposition sprinkler heads to make sure any overspray is avoided.

### Pools and Spas

Check operation of swimming pool filtering equipment. Contact your pool dealer if you have any concerns. Here are some things to consider:

- > How often is pool back-flushed?
- > Are fill valve and automatic float operating properly?
- > Do you cover your pool or spa? A covered pool minimizes evaporation.
- > Operation of spa filtering equipment.

### Landscape Conservation Programs

Visit [www.padredam.org/conservationres.htm](http://www.padredam.org/conservationres.htm) for information on landscape classes, incentive programs and to use the landscape watering calculator.

There's a very good chance you can reduce your water use.

## Water Use Inside the House

### Garage and/or Laundry Area

> Does the clothes washer have a small load cycle or is it a high-efficiency front loading machine? Determine the number of gallons used per washing cycle by reading the meter before starting and after finishing a load in the washing machine - make sure that is the only water you are using when measuring at the meter. **(use this number to help on page 4)**



Consider replacing an old machine with a high-efficiency machine.

- > Is there a water softener installed? What brand and type?
  - Is it a self-regenerative type (salt is routinely added)?
  - How often does the softener back-flush?
  - Is the discharge setting set to minimum?

### Kitchen

- > Is a reverse osmosis water filtration system installed?
  - Is a shut-off valve present?
  - Check with manufacturer to determine gallons used in flushing cycle and verify this number at your meter the next time the system is flushed.
- > Does the dishwasher have a water-saving cycle?



### Kitchen and Bathroom Sinks

Aerators can reduce water flow by one-half. Do you have aerators installed on your faucets? Aerators can be purchased at your local hardware store. You can also reduce water flow and pressure by turning down the valves under the sinks.

Check output of faucets at kitchen sink:

Turn on the faucet to the normal flow used for general purposes. Write down the time needed to fill a 1-gallon jug. Calculate the number of gallons used in one minute.

### Showerheads

Put a 1 or 2 gallon bucket under showerhead, turn on showerhead full blast. Check number of seconds needed to fill bucket. Calculate how many gallons flow out in one minute (gpm). If showerhead output is more than 3 gpm per minute replace the showerhead with a low-flow model of 3 gpm or less. You may also check your meter before and after using the shower to determine water volume used. Contact Customer Service for a free low-flow showerhead.

### Toilets

Check toilet tank size. Look to see if the size is stamped on the inside walls on the tank or on the lid. If the size is not marked on the toilet, turn off handle to shut off water to the toilet. Flush. The tank should be empty. Use a 1-gallon jug to fill tank to water line to determine tank size. Consider replacing any toilet with a 3-7 gallon tank with a low-flow model using only 1.6 gallons per flush or a high-efficiency model using 1.3 or less. If you can't replace your toilet at this time consider installing a displacement bag in tanks that are 3-7 gallons.

## Calculating Weekly Water Use

### **Irrigation System**

Take the water use calculation from your timed consumption test on page 2. Multiply this by the number of times your sprinkler system is operating during a seven day period to determine you total weekly irrigation use.

\_\_\_\_\_ amount of water used during one sprinkler cycle x \_\_\_\_\_ number of times  
sprinklers run per week = \_\_\_\_\_ my total weekly irrigation use

### **Indoor and Misc. Water Use**

Use the worksheet on page 5 to determine your total weekly indoor and other water use calculation. After completing the worksheet on page 4 enter your daily total below.

\_\_\_\_\_ my total daily water use indoors x 7 days = \_\_\_\_\_ my weekly indoor water use

### **Total Use**

Add the weekly irrigation use total and the weekly indoor totals together.

\_\_\_\_\_ weekly irrigation use + \_\_\_\_\_ weekly indoor water use = \_\_\_\_\_ total weekly  
use

After calculating your total weekly use you may call our Customer Service staff at 619-258-4600 and they will help you calculator your weekly water use into a two month billing amount. You may also call and request our "All About Rates" sheet and calculate your own two-month billing amount.

By calculating your total weekly use based on what you are using you may be able to figure out where you need or can cut back to help reduce your water bill.