

BAWSCA Water Conservation 101



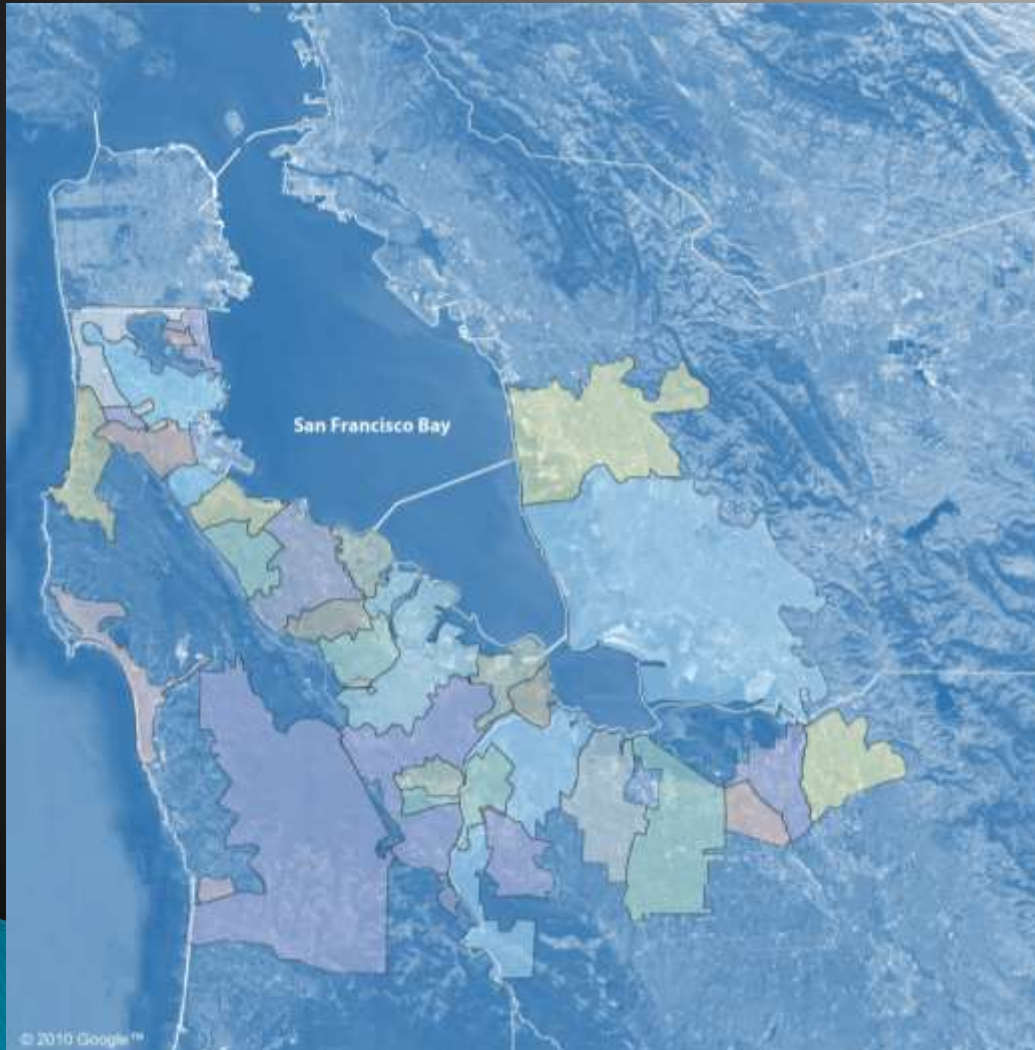
Topics

- ▶ Introductions
- ▶ Water system overview
- ▶ Drought Update
 - Governor's order
 - Local actions
- ▶ Ways to Conserve
 - Current water use
 - Simple steps to save
 - Leak detection & Reading Your Meter
- ▶ Rebate and Incentive Programs



BAWSCA

Bay Area Water Supply & Conservation Agency



Special District
representing the
interests of

- ▶ 26 water suppliers in San Mateo, Santa Clara, and Alameda Counties
- ▶ 1.7 million residents and over 39,000 businesses
- ▶ All rely on the San Francisco Regional Water System

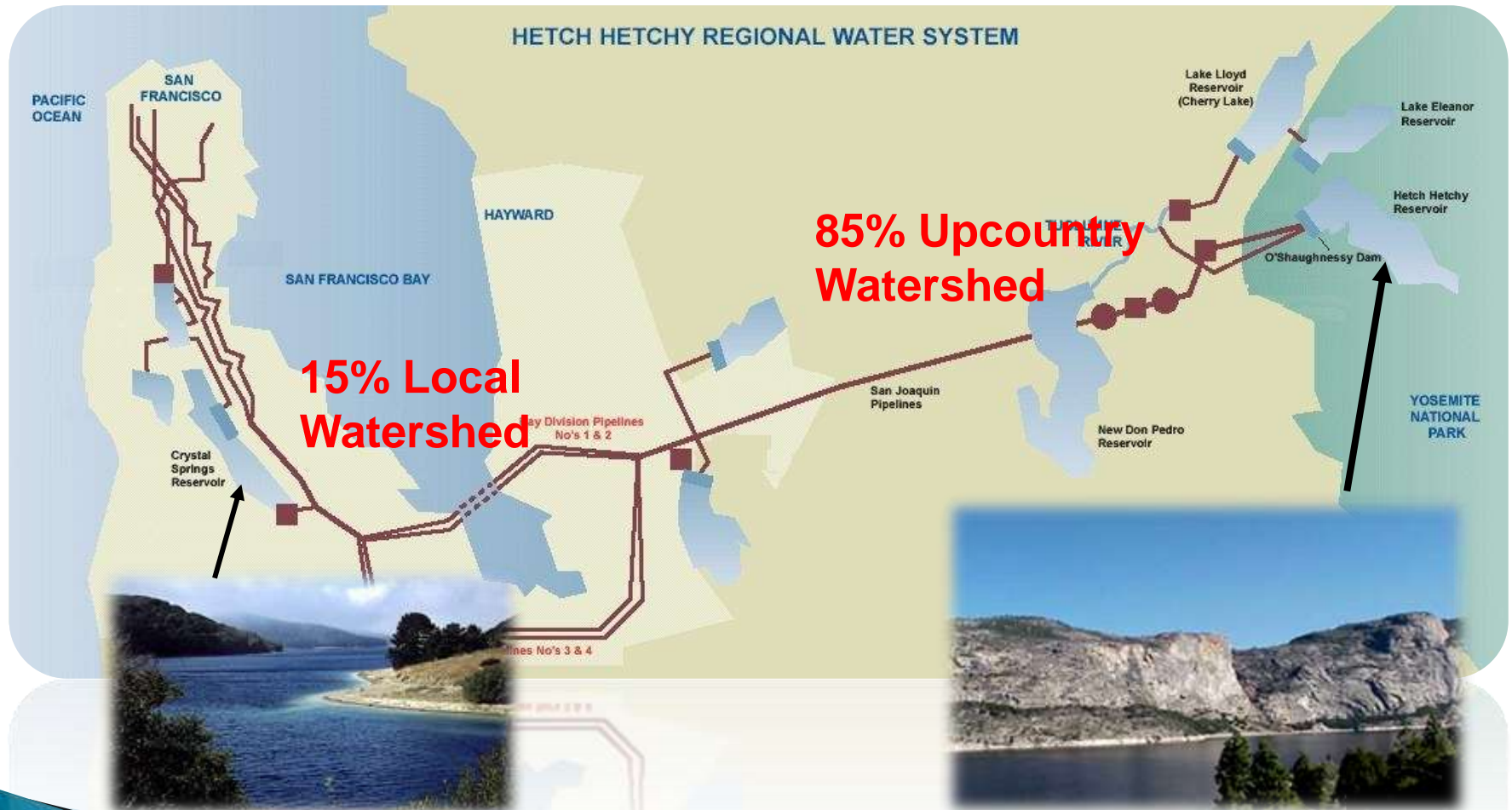
Member Agencies



Legend

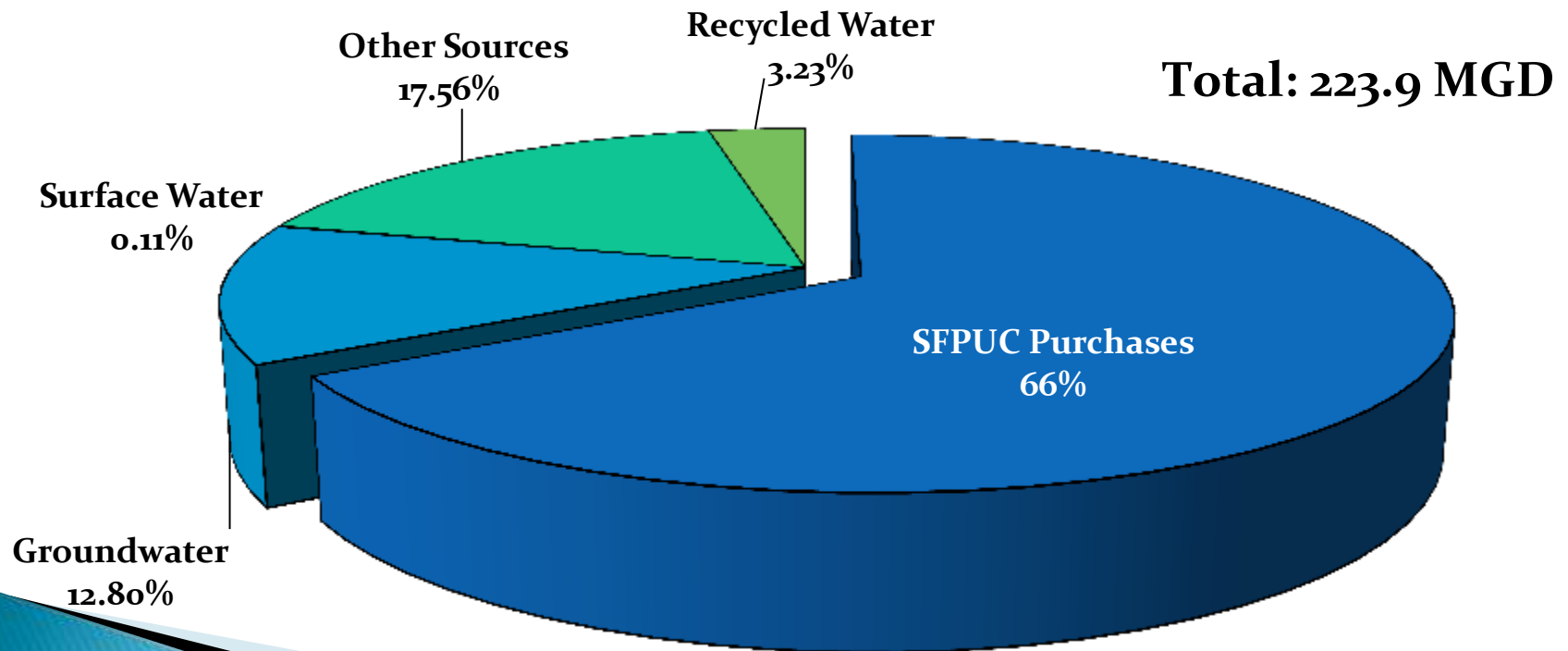
- 1 Alameda County Water District
- 2 City of Brisbane
- 3 City of Burlingame
- 4a CWS – Bear Gulch
- 4b CWS – Mid-Peninsula
- 4c CWS – South San Francisco
- 5 Coastside County Water District
- 6 City of Daly City
- 7 City of East Palo Alto
- 8 Estero Municipal Improvement District
- 9 Guadalupe Valley MID
- 10 City of Hayward
- 11 Town of Hillsborough
- 12 City of Menlo Park
- 13 Mid-Peninsula Water District
- 14 City of Millbrae
- 15 City of Milpitas
- 16 City of Mountain View
- 17 North Coast County Water District
- 18 City of Palo Alto
- 19 Purissima Hills Water District
- 20 City of Redwood City
- 21 City of San Bruno
- 22 San Jose Municipal Water System
- 23 City of Santa Clara
- 24 Stanford University
- 25 City of Sunnyvale
- 26 Westborough Water District

BAWSCA Agencies Served by the SF Regional Water System

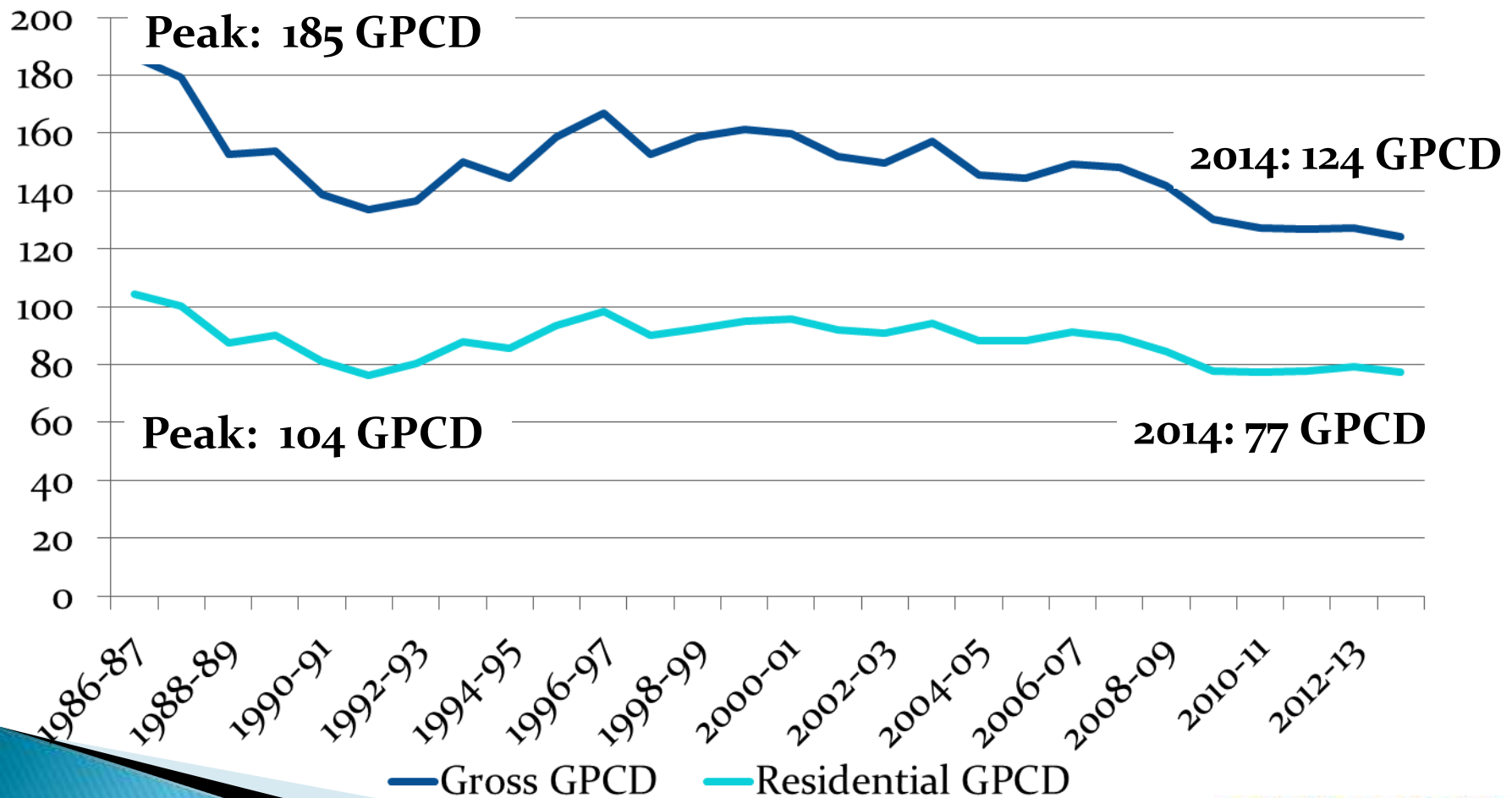


The Communities Outside SF Rely on the System

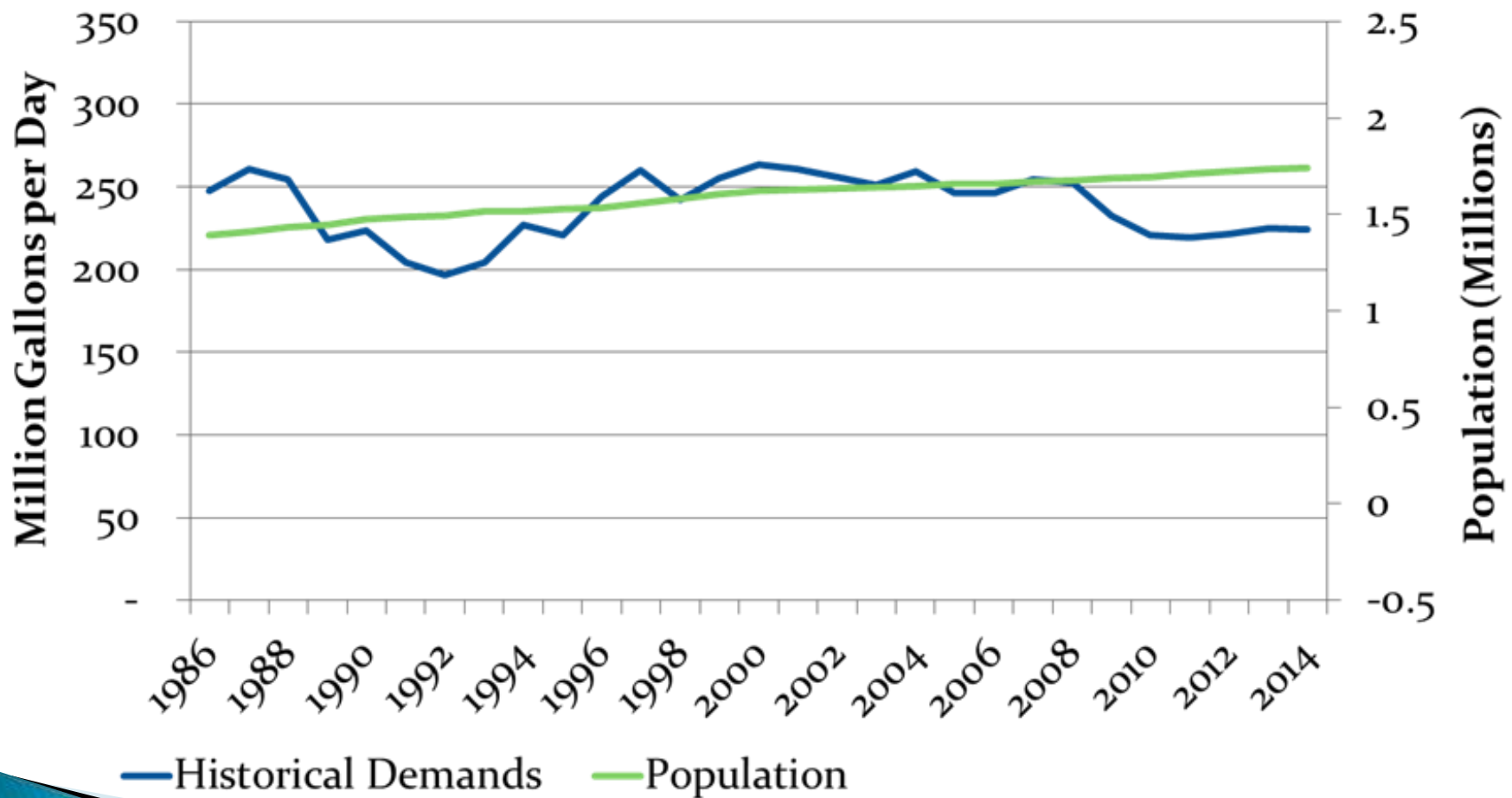
BAWSCA agencies rely on the SF Regional Water System for two-thirds of their total water supplies



Per Person Water Use in BAWSCA Service Area Decreasing



10% Less Water Used Today in Service Area Despite 25% More People



Drought Update

U.S. Drought Monitor California

June 30, 2015

(Released Thursday, Jul. 2, 2015)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.14	99.86	98.71	94.59	71.08	46.73
Last Week 6/23/2015	0.14	99.86	98.71	94.59	71.08	46.73
3 Months Ago 3/31/2015	0.15	99.85	98.11	93.44	66.60	41.41
Start of Calendar Year 12/30/2014	0.00	100.00	98.12	94.34	77.94	32.21
Start of Water Year 9/30/2014	0.00	100.00	100.00	95.04	81.92	58.41
One Year Ago 7/1/2014	0.00	100.00	100.00	100.00	78.97	36.46

Intensity:

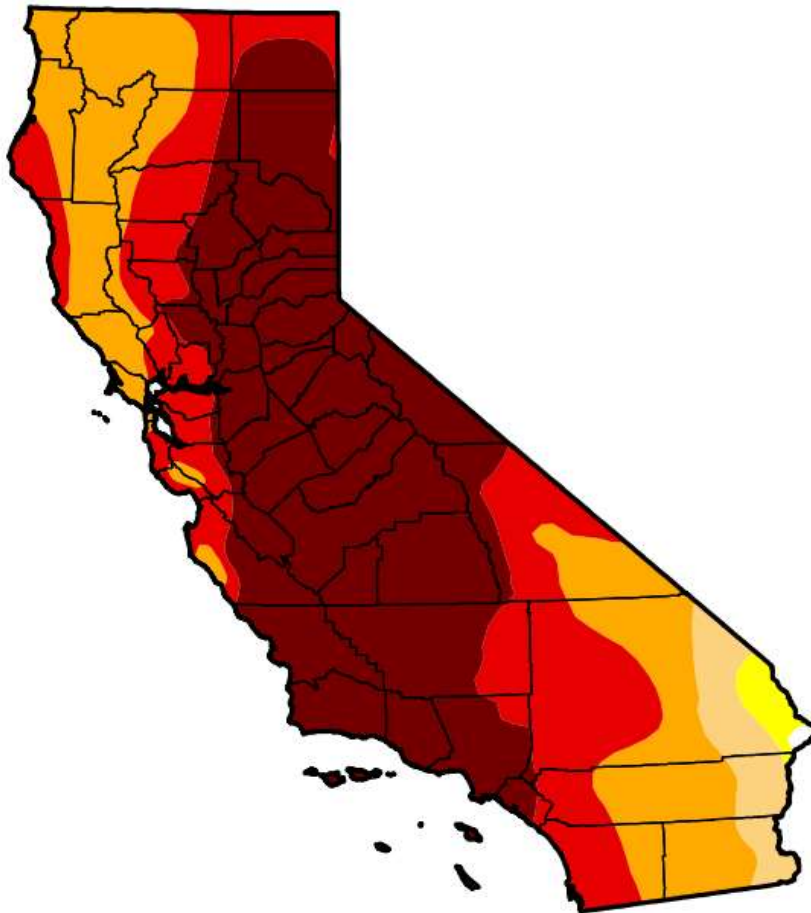
 D0 Abnormally Dry	 D3 Extreme Drought
 D1 Moderate Drought	 D4 Exceptional Drought
 D2 Severe Drought	

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:

Brian Fuchs

National Drought Mitigation Center



<http://droughtmonitor.unl.edu/>

California drought: State water board passes first mandatory urban water limits in state history

By Paul Rogers | progers@mercurynews.com

POSTED: 05/05/2015 10:29:52 AM PDT | UPDATED: ABOUT 15 HOURS AGO

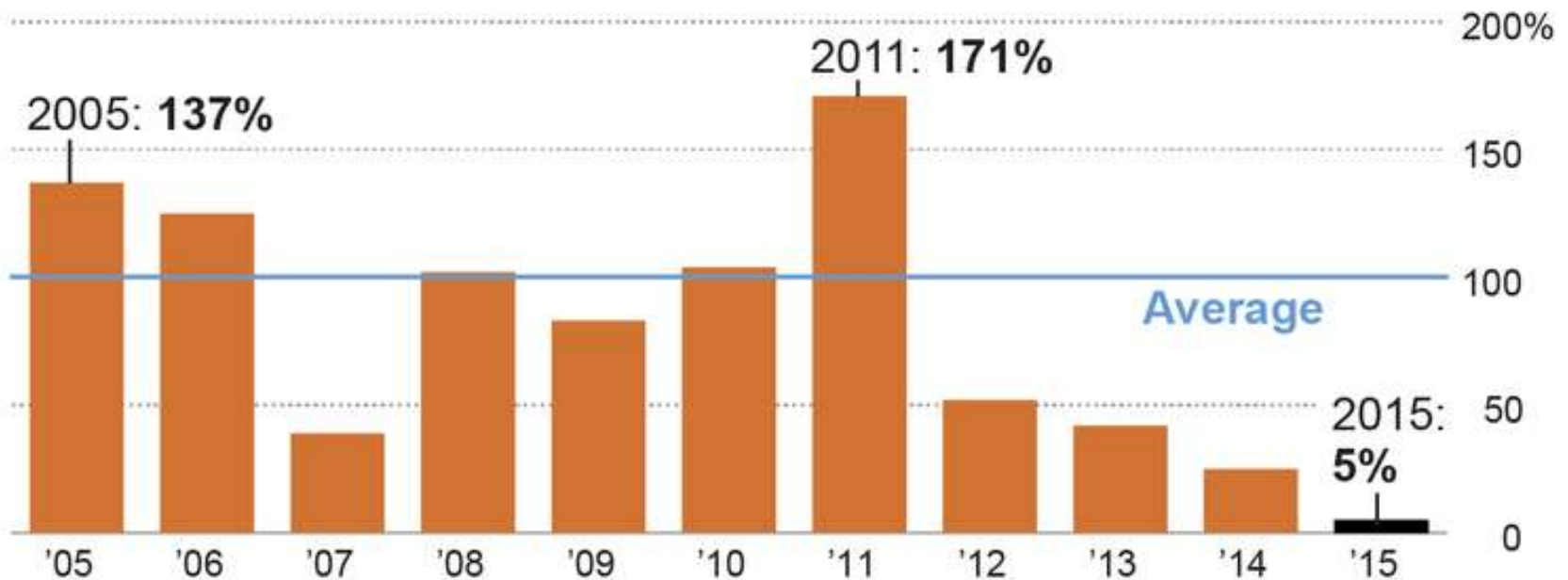
28 COMMENTS



A Primary Driver for Governor's Action

California's thin snowpack

Readings taken at about 100 stations Wednesday showed the water content of the Sierra Nevada snowpack was only about 5% of the average for April 1.



Source: California Department of Water Resources

@latimesgraphics

Reductions Targets Vary Significantly by Water Agency

BAWSCA's Member Agencies		Conservation Standard
<ul style="list-style-type: none"> Westborough Water District CalWater – So. San Francisco City of East Palo Alto City of San Bruno City of Daly City 	<ul style="list-style-type: none"> North Coast County WD Coastside County WD Redwood City City of Hayward 	8%
<ul style="list-style-type: none"> Estero Municipal Improvement District (Foster City) City of Milpitas 		12%
<ul style="list-style-type: none"> City of Burlingame City of Mountain View City of Santa Clara City of Sunnyvale 	<ul style="list-style-type: none"> City of Menlo Park CalWater – Mid-Peninsula City of Millbrae Alameda County Water District 	16%
<ul style="list-style-type: none"> Mid-Peninsula Water District City of San Jose 		20%
<ul style="list-style-type: none"> City of Palo Alto 		24%
<ul style="list-style-type: none"> Town of Hillsborough CalWater - Bear Gulch 		36%

Prohibited Uses of Water



Emergency
Conservation
Regulation

Prohibited for Everyone

- Using potable water to wash sidewalks & driveways
- Runoff when irrigating with potable water
- Using hoses with no shutoff nozzles to wash cars
- Using potable water in decorative water features that do not recirculate the water
- Using outdoor irrigation during & 48 hours following measurable precipitation
- Using potable water to irrigate ornamental turf on public street medians
- Using potable water to irrigate landscapes of new homes & buildings inconsistent with CBSC & DHCD requirements

Required for Water Suppliers

- Achieve designated conservation standard (4%-36%)
- Notify customers about leaks that are within the customer's control
- Report on water use, compliance & enforcement

Required for Business

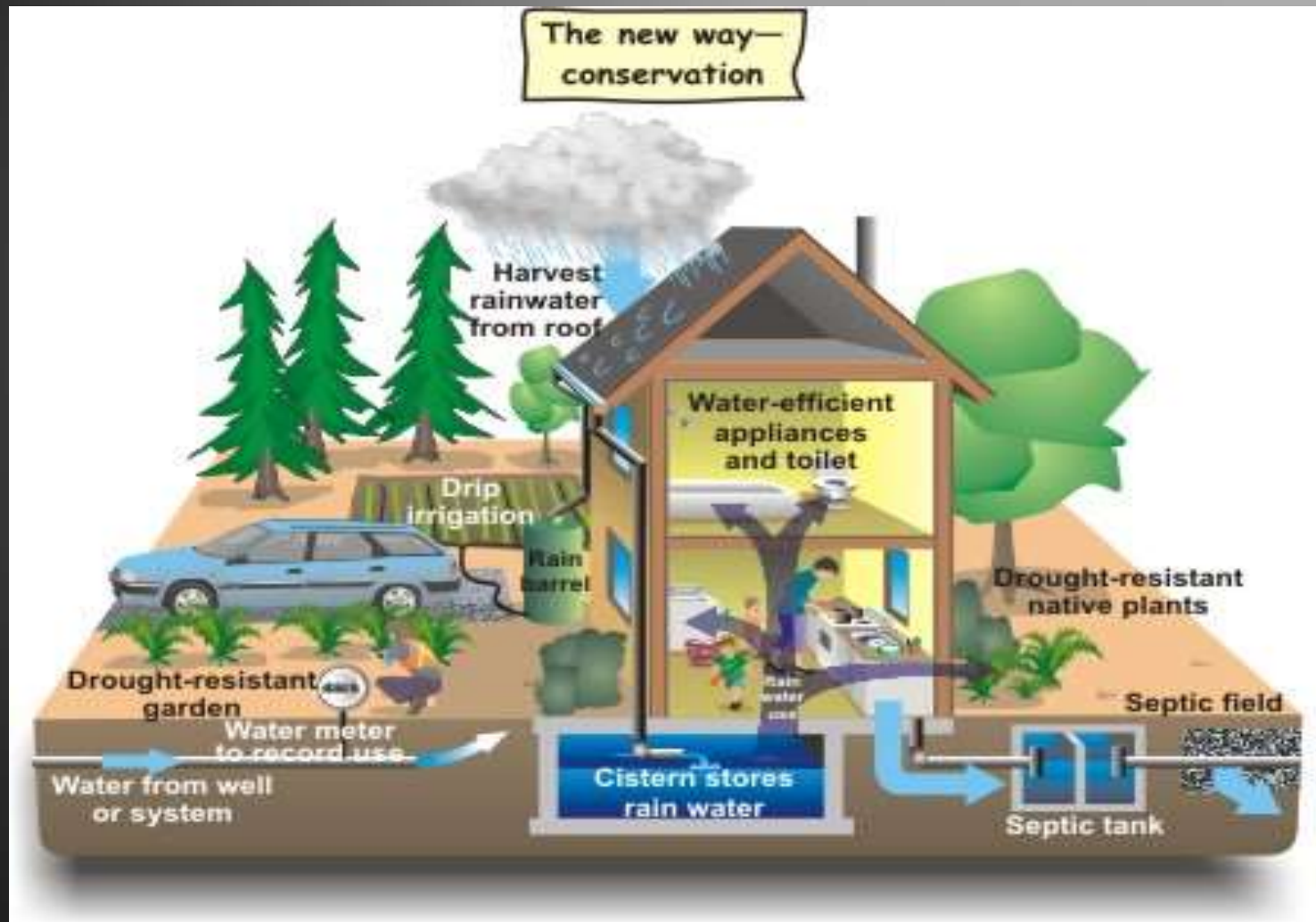
- Restaurants & other food service establishments can only serve water to customers on request
- Hotels & motels must provide guests with the option of not having towels & linens laundered daily

What Can Be Done to Conserve?

- ▶ BAWSCA offers a variety of programs and information to assist customers in conserving
 - Rebates
 - Education
 - Free stuff

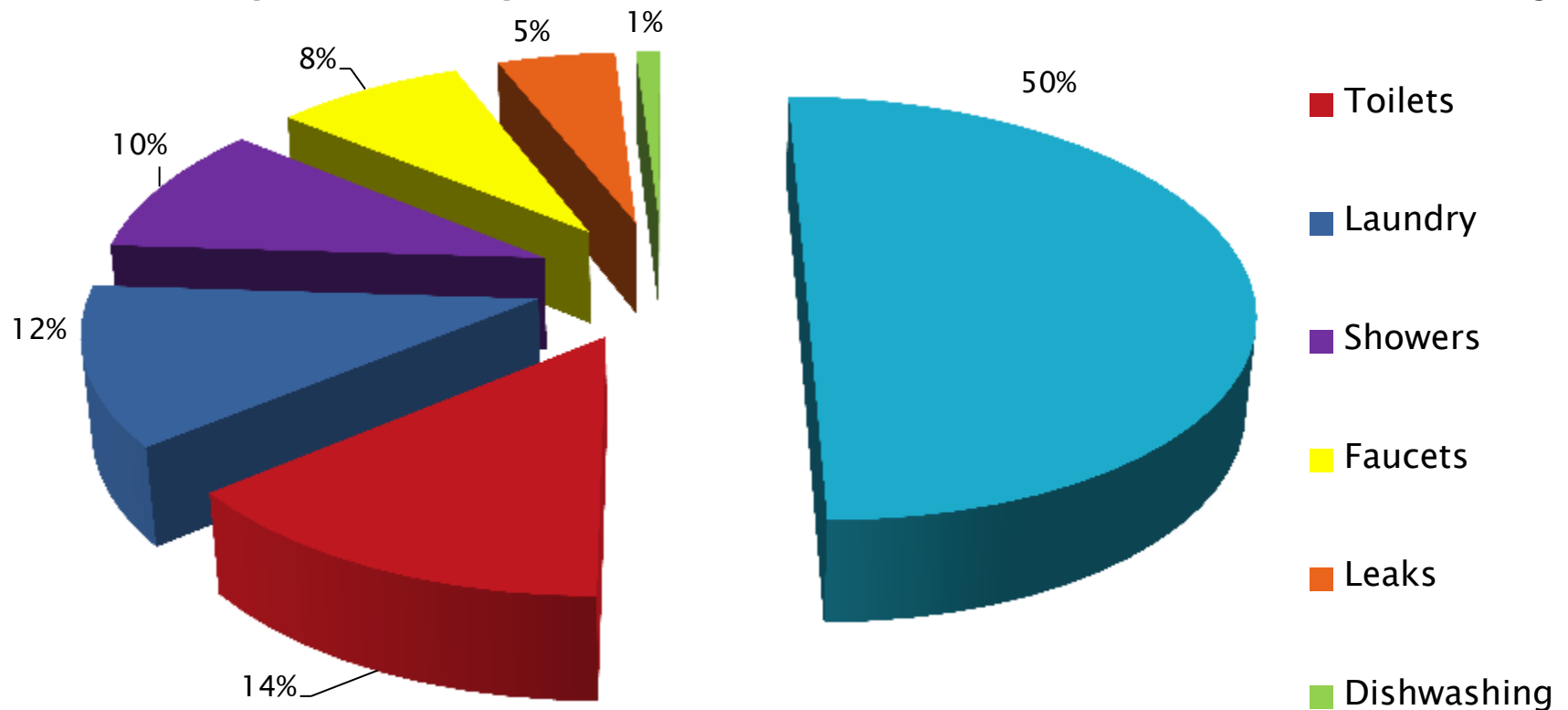


Ways To Conserve



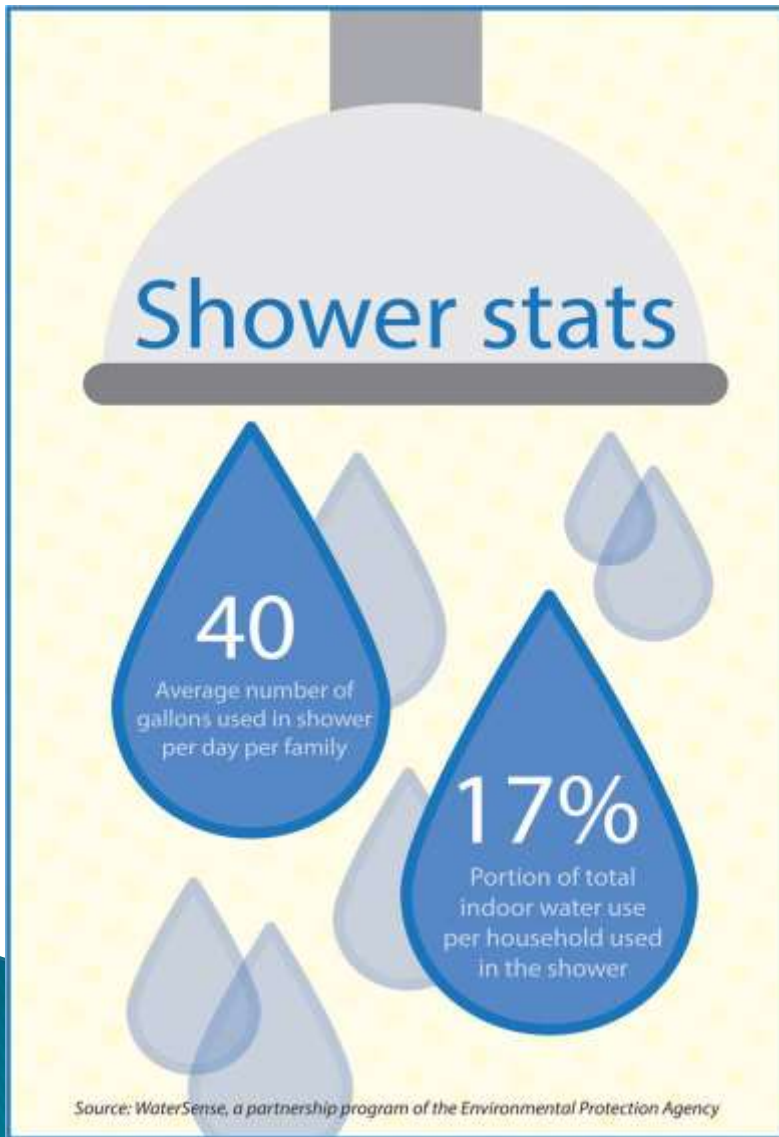
Biggest Water Users In the Home

Average U.S. Single Family Residential Water Use



Source: 2012, Mammoth County Water District

Opportunities Indoors at Home



Other ways to conserve

- Install low flow showerheads
- Install faucet aerators
- Toilet tank bags
- Don't leave water running in sinks
- Take shorter showers and fewer baths
- Place bucket in the shower

Low Flow Shower Heads

Standard: 80 PSI, 5–8 gpm

Low Flow: 20 PSI, 1.5–2.0 gpm

Other Flow Options:

- 1) Flow Control Inserts
- 2) Shower Shut-Off Control Valves



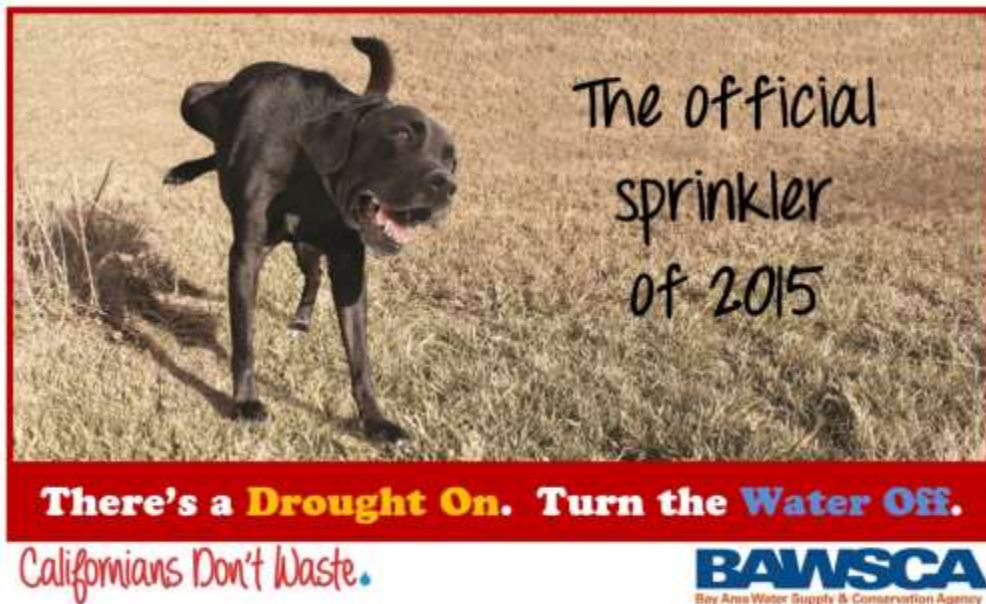
How to Check the flow:

- ▶ Hold a gallon container under shower head.
- ▶ Clock the time it takes to fill
- ▶ If it fills in 15 seconds, the flow rate is 4 gpm



Simple Steps to Save Water Outdoors

- ▶ Use a broom to clean sidewalks and pavement instead of a hose.
- ▶ Hose nozzle with automatic shut-off
- ▶ Target your water use in your garden by hand watering exactly in the spots that need it.



More Simple Steps to Save Water Outdoors

- ▶ Water lawns and plants only at night or early morning before dawn to reduce evaporation
 - No more than twice a week during drought
- ▶ Test soil moisture before watering- if the top 2 inches feel damp, you do not need to water.
- ▶ Follow drought lawn care suggestions



How To Check for Leaks

- ▶ https://www.youtube.com/watch?v=xj2rW0_titE



How to Check for Leaks

Leak Tests

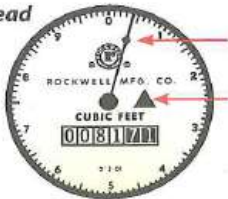
Test 1: the "Pin" Test

You will use the meter to check for leaks in your pipes and appliances. Allow at least 30 minutes for the test.

Step 1 Turn off all water-using fixtures and appliances, both indoors and outdoors.

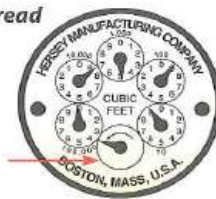
Step 2 Determine your meter type. There are two types: straight-read and round-read meters.

Straight-read meter



The large hand on the dial or a small triangle is used to test for leaks.

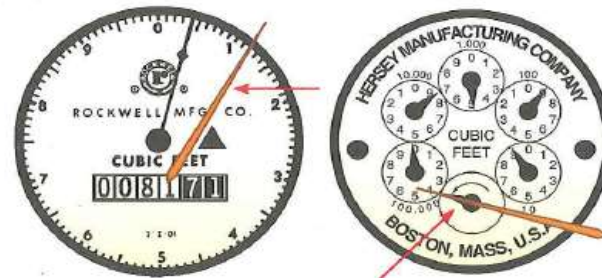
Round-read meter



The "one foot" hand, or blank hand, is used to test for leaks.



Step 3 Place a toothpick or pin on the face of the dial so that it lines up exactly with the hand or the edge of the triangle.

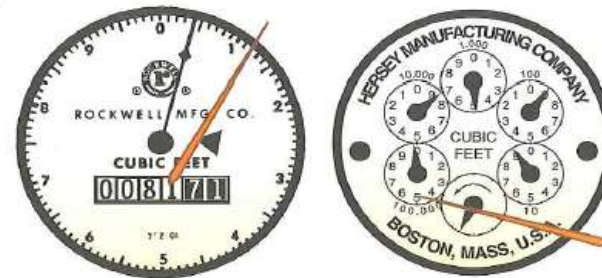


Step 4 Wait for 30 minutes. Then, before turning on any faucets or hoses, check the dial of the meter to see if the hand has moved.

If the hand moved:

There is most likely a leak somewhere on the "house" side of the meter, either in a toilet, a faucet, or a pipe.

Write the results on the worksheet and go to Test 2, where you will try to locate the leak.



If the hand did not move:

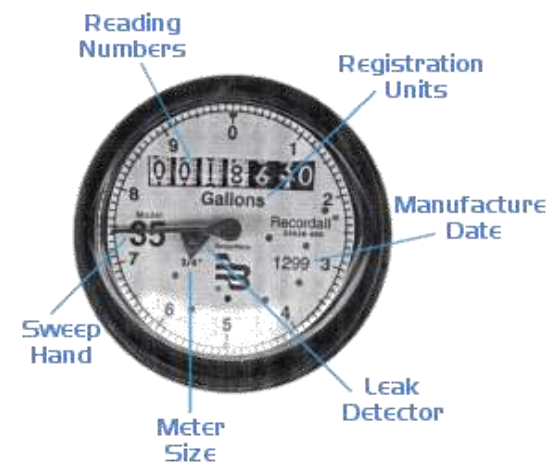
There is no leak. Write the result on the worksheet and go to Test 3.



How to Read Your Meter

► Straight-Reading Meter:

1. Read the numbers shown under the words “cubic feet”
 - This meter reads 008171 (total in cubic feet) or 81 units
2. If you used 1,200 cubic feet of water during the next billing period, the next reading would be:
 - $008171 + 1200 = 009371$ cubic feet or 93 units
3. Your bill would be based on the difference between the two readings:
 - $93 - 81 = 12$ units at 748 gallons per unit (8,976)



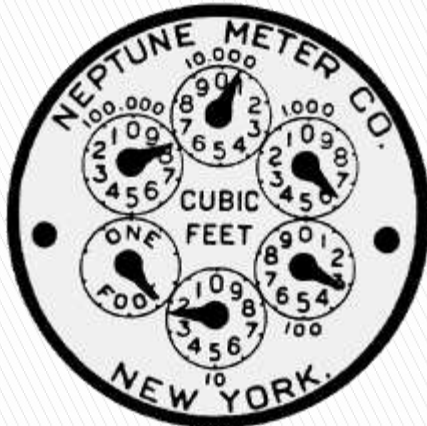
Most water agencies charge in units of 100 cubic feet, so the meter disregards the last two numbers

How to Read Your Meter Cont.

Round-Reading Meter: Two Styles

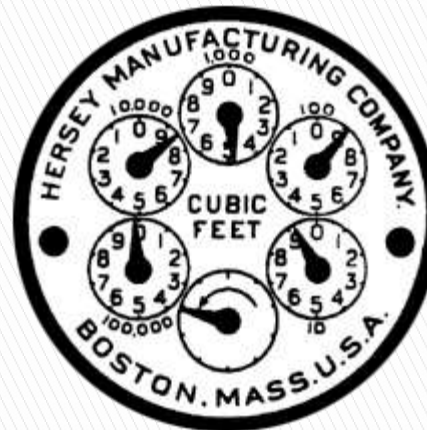
▶ Left

1. The “one foot” dial is used for testing
2. Read each dial (starting with the “100,000” meter) in a clockwise direction, recording each number.
 - If the hand is between numbers, use the lower
3. Here, the numbers read 8, 0, 6, 3, 2 (80,632 cubic feet)
 - Number of units = 806

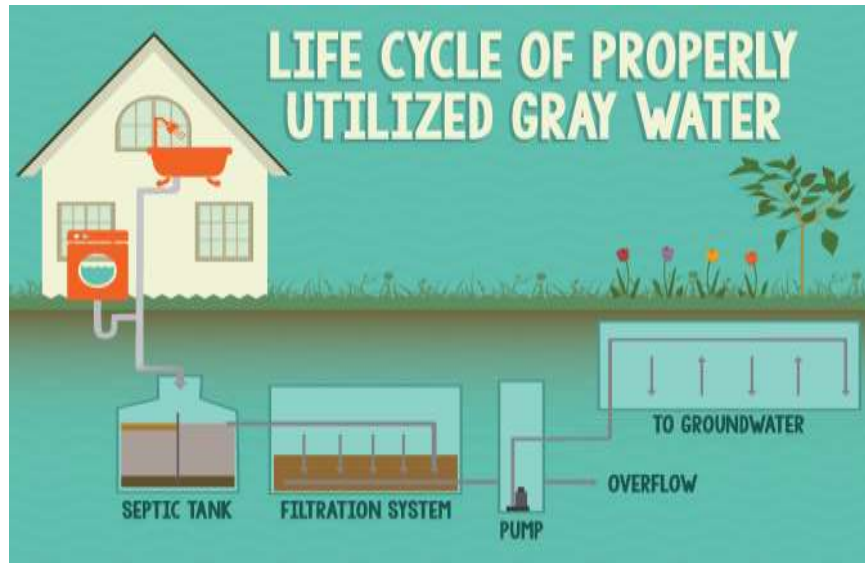


▶ Right

1. The “unmarked” dial is used for testing
2. Read each dial left to right in clockwise direction
 - If the hand is between numbers, use the lower
3. Here, the numbers read 9, 8, 4, 8, 9 (98,489 cubic feet)
 - Number of units = 984

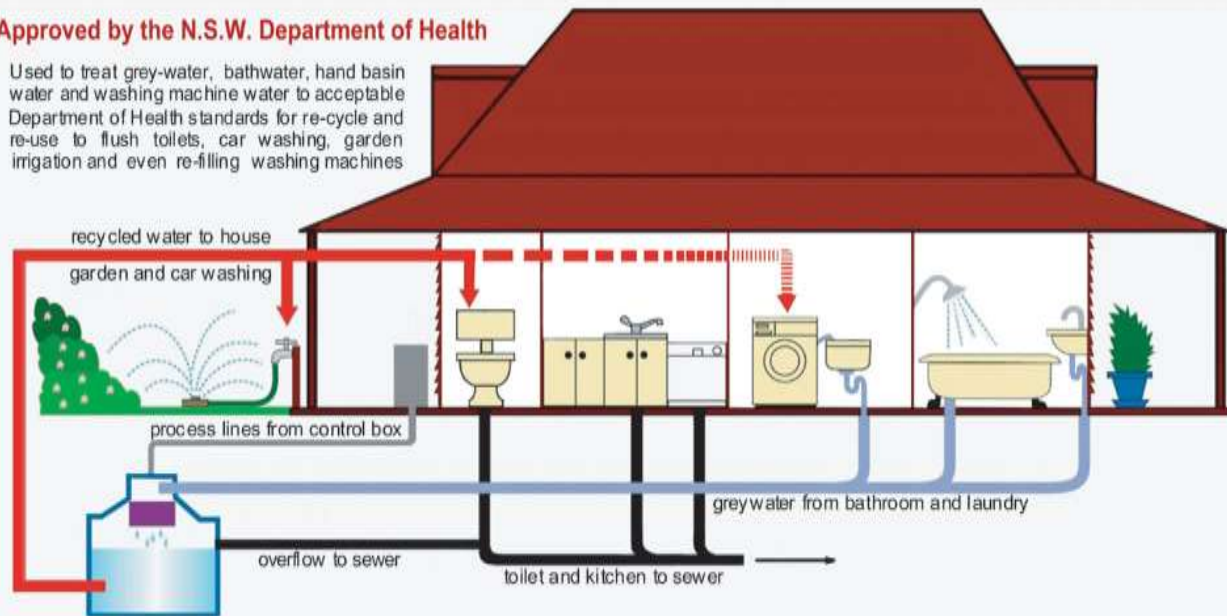


Graywater



Approved by the N.S.W. Department of Health

Used to treat grey-water, bathwater, hand basin water and washing machine water to acceptable Department of Health standards for re-cycle and re-use to flush toilets, car washing, garden irrigation and even re-filling washing machines

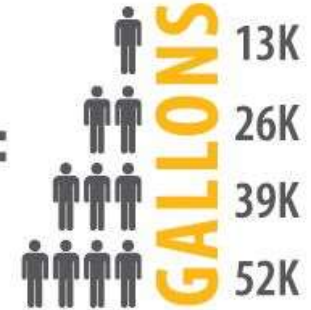


GRAYWATER

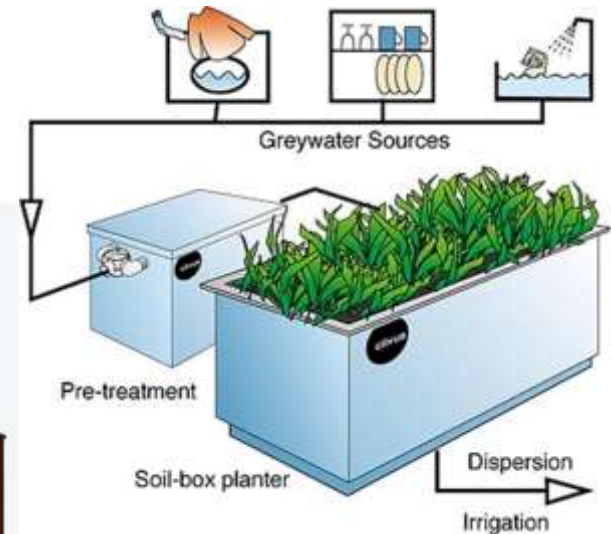


OF INDOOR WATER CAN BE RECYCLED AS GRAYWATER

=



Source: City of Tucson



Graywater: Laundry to Landscape

▶ System Requirements:

◦ Graywater must:

- Be distributed from washing machine to landscape area that is large enough to absorb the water.
- Not runoff into streets and waterways
- Be contained on the site where it is generated
- Be distributed to the subsurface
- Not be used in overhead (spray) irrigation
- Not be used to irrigate root crops
- Not contain any hazardous chemicals
- Not include a potable water connection



Graywater: Laundry to Landscape Cont.

- ▶ The graywater landscape area must be located:
 1. Eighteen inches from any property line
 2. Two feet from buildings
 3. One hundred feet from wells, waterways, or any water sources
 4. Five feet from any septic tank
- ▶ No surface ponding of graywater
- ▶ Valved zone must be of adequate size to receive the graywater anticipated
- ▶ Must be designed to prevent clogging of any emitters
- ▶ Diversion valve must allow flow to irrigation system
- ▶ Designed to prevent contact with humans and pets



Home Water Use Calculator

How much water do I use? How do I compare? How can I Conserve?

How much
water do you use?

Let's Get Started!

Click an area on the home to input data to learn how much water you use and how you can conserve water there. Answer for yourself only and assume you are in your home for a 24-hour cycle.

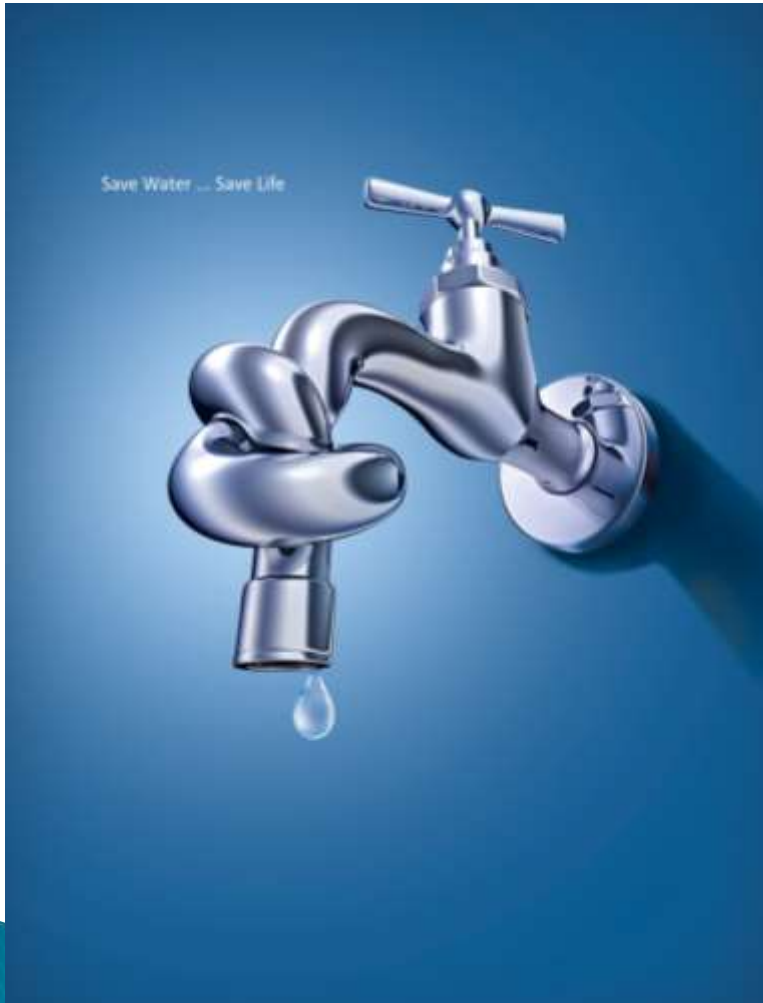
Home Water Use Calculator



<http://www.home-water-works.org/calculator>

What Else?

How do you conserve at home?



How to Report Water Waste

- ▶ Customers can report violation Monday–Friday during normal business hours (8AM–4:30PM)
 - Call: 650–591–8941
 - Email: mpwd@midpeninsulawater.org
- ▶ Our new website launches next month
 - We will provide a report form under our conservation page.



Recommendations & Rebate Opportunities



- » High Efficiency Toilet Rebate
- High Efficiency Clothes Washer Rebate
- Lawn Be Gone!
- Rain Barrel Rebate

High Efficiency Toilet Rebate

BAWSCA and its participating member agencies are offering rebates up to \$125 per toilet if you replace a toilet that uses 1.6 GPF or more with an EPA WaterSense Labeled MaP Premium HET or \$75 per standard HET.



**Shop for the EPA
WaterSense Logo:**

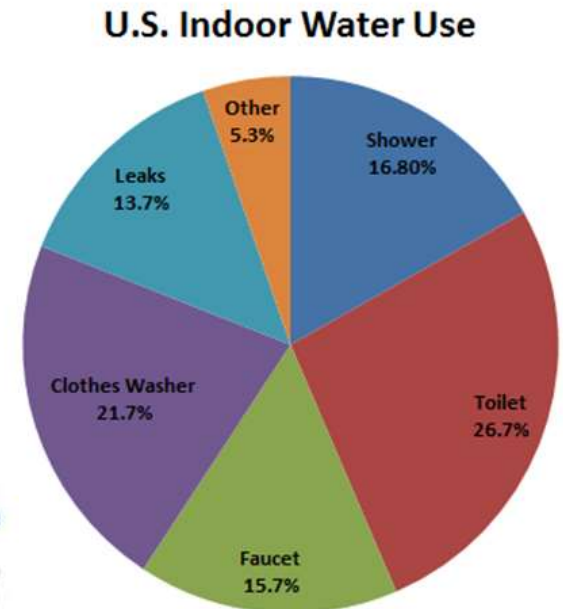


What Is An HET?



- ▶ HET's are modern water-efficient toilets that are designed to use 1.28 GPF or less:
 - Use less water
 - Perform well
 - Remove waste efficiently
- Save up to 13,000 gallons (~ \$110) per year if you replace a toilet that uses 3.5 GPF

For Additional Info:
<http://www.highefficiencytoilets.org/>



Source: 1999, WaterSense: American Water Works Association Research Foundation

What is a MaP Premium HET?



- ▶ MaP Premium Residential Models Must:
 - Flush with no more than 4.0 liters (1.1 gallons)
 - Saves almost 20% more water compared to the current WaterSense requirement
 - Demonstrate a MaP rating of at least 600 grams of solid waste removed in a single flush
 - Be certified to U.S. EPA WaterSense specifications
- ▶ 164 qualified toilet fixtures from 30 different brands

<http://www.map-testing.com/>



Who Participates?

Participating Agency	City/Cities They Serve
City of Brisbane	Brisbane
City of Burlingame	Burlingame
Coastside County Water District	Half Moon Bay, El Granada
City of Daly City	Daly City
Estero Municipal Improvement District	Foster City
City of Hayward	Hayward
City of Menlo Park	Menlo Park
Mid-Peninsula Water District	Belmont, some areas of San Carlos, Redwood City, and San Mateo
City of Millbrae	Millbrae
City of Redwood City	Redwood City
City of San Bruno	San Bruno
Westborough Water District	South San Francisco
Alameda County Water District	Fremont, Newark, Union City
Town of Hillsborough	Hillsborough



HET Eligibility

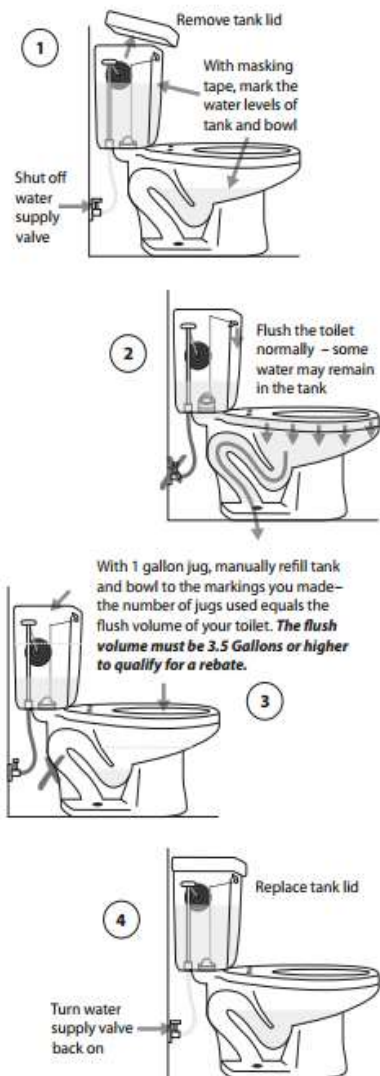
- ▶ HET installation and rebate application must be completed within 90 days of purchase date.
- ▶ Original receipts must be included.
- ▶ HET must be installed within the service area of the water agency that is paying the rebate.
- ▶ Applicant must contact local water agency to pre-qualify if applicant is not listed on water service account

Requirements

- ▶ Must replace a toilet that uses 1.6 GPF or more
- ▶ Rebates:
 - \$125 per MaP Premium HET (or up to the cost of HET)
 - \$75 per standard HET
- ▶ Rebates may take 8 weeks to process (issued as checks or credits on water service account)
- ▶ Limit to *three* rebates per living unit / *ten* rebates per commercial account
- ▶ All sites are subject to post-installation inspections
- ▶ If applicant is not property owner, applicant must submit property owner consent.

Determining Your Existing Toilet's Flush Volume

You must replace a working toilet flushing 3.5 gallons per flush or higher to qualify for a rebate.



Selecting a Model

We recommend that you consult with a licensed plumber to select and install your toilets.

It is the responsibility of the applicant to determine the suitability of the site for installation of High-Efficiency Toilets.

VERY IMPORTANT:

Manufacturers' toilet model numbers can be confusing. In order to qualify for a rebate, the HET you purchase must match EXACTLY to the model numbers on the List of Qualifying Toilets.

EXAMPLES:

TOTO CST744E

KOHLER K-3496-HE

TOTO CST744S

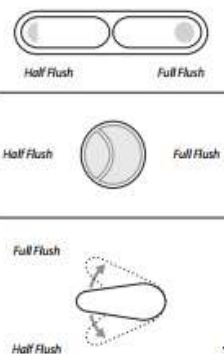
KOHLER K-3496

Basic Types Of HETs

A pressure-assist toilet has a sealed vessel inside the tank that contains air, which becomes pressurized when water from the supply line fills the vessel. When the flush button is pressed, the pressurized air exerts force on the water in the vessel and the water shoots into the bowl, creating a very fast flush that has a "whooshing" sound.

The noise level of a pressure-assist toilet is slightly greater than standard gravity-flush toilets. However, the result is a reliable flush.

Some HETs are also dual-flush, which allows you to select the amount of water that is used to flush the toilet. There are different style buttons and levers that control the toilet flush volume, as seen in the examples to the right.



How to Check Flush Volume

For more information regarding HET application please visit www.bawsca.org

Save Water Save Money

High-Efficiency Toilet Rebate Application



Up to \$100 Rebates for High-Efficiency Toilets

BAWSCA
Bay Area Water Supply & Conservation Agency
650-349-3000
www.bawsca.org

EPA **WaterSense**
PARTNER

BAWSCA
Bay Area Water Supply & Conservation Agency
650-349-3000
www.bawsca.org

EPA **WaterSense**
PARTNER

Up to
\$100
Rebates for
High-Efficiency Toilets

Effective July 1, 2013
Through June 30, 2014

BAWSCA
Bay Area Water Supply & Conservation Agency

How To Check Your Toilet Flush Volume



- ▶ <https://www.youtube.com/watch?v=s2CKJwfeDI0>

Rebate Checklist

HET Rebate Application Checklist

- ☐ My old toilet meets the program eligibility rules.
- ☐ I called my local water agency to pre-qualify, if required.
- ☐ The toilet I purchased is an EPA WaterSense Labeled HET.
- ☐ I included my water service account number on the application.
- ☐ I completely filled out and signed the application.
- ☐ I enclosed the original HET receipt with my rebate application.
- ☐ I installed my HET and mailed in the application within 90 days of purchase.



<http://bawsca.org/conservation/high-efficiency-toilet-rebate-program/>

Clothes Washer Rebate

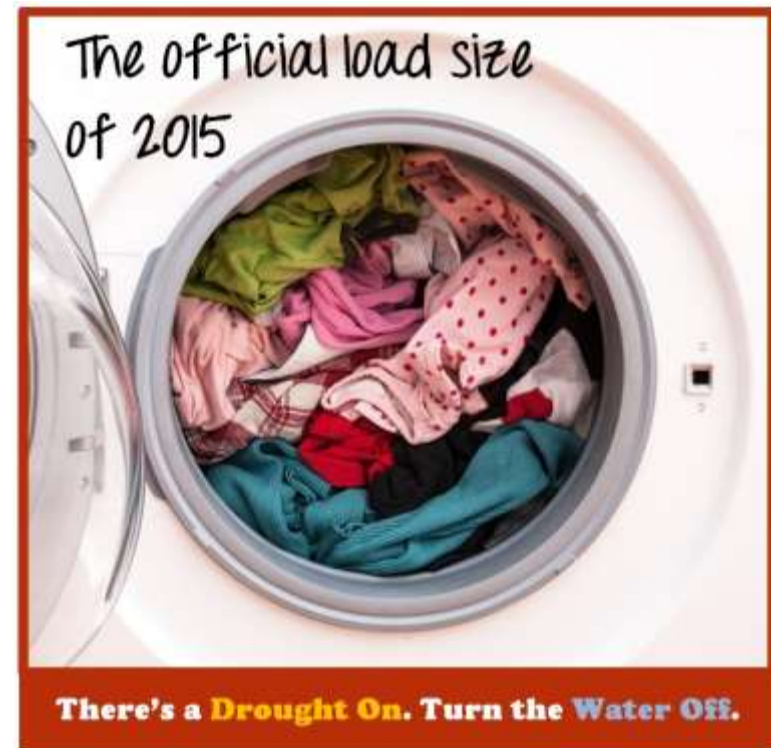
Through a partnership with PG&E, BAWSCA and participating member agencies are offering combined water and energy rebates if you purchase a qualifying efficient clothes washer.



High-Efficiency Clothes Washer Rebate

Who Participates?

Participating Agency	City/Cities They Serve
City of Brisbane	Brisbane
City of Burlingame	Burlingame
Coastside County Water District	Half Moon Bay, El Granada
City of Daly City	Daly City
City of East Palo Alto	East Palo Alto
Estero Municipal Improvement District	Foster City
City of Hayward	Hayward
Town of Hillsborough	Hillsborough
City of Menlo Park	Menlo Park
Mid-Peninsula Water District	Belmont
City of Millbrae	Millbrae
North Coast County Water District	Pacifica
City of Redwood City	Redwood City
City of San Bruno	San Bruno
Westborough Water District	South San Francisco



Californians Don't Waste.

BAWSCA
Bay Area Water Supply & Conservation Agency

BAWSCA
Bay Area Water Supply & Conservation Agency

How To Apply

- ▶ Read the Terms and Conditions
 - PG&E's rebate of \$50 is added to your participating water agency's rebate of \$100
- ▶ Verify that the clothes washer you are going to install qualifies for the rebate
 - **\$150 Rebate:** Clothes washer must be on Energy Star Most Efficient 2015 Models

1 Consider
what features are
important to you.


Look for the
ENERGY STAR® when
you are shopping.



Choose the right size to
suit your home's needs.


2 Compare
the energy efficiency
of models you like.

Use the yellow
EnergyGuide label
to determine each
model's energy
use, and estimate
annual operating
costs.



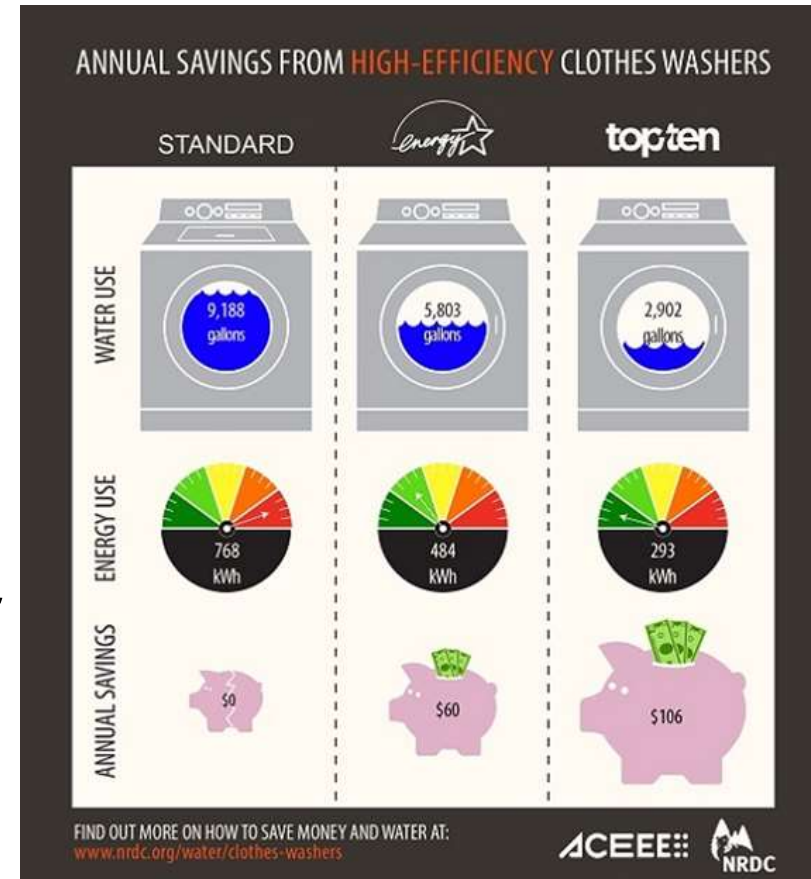
3 Check out
TopTenUSA.org

TopTen USA provides an
independent ranking of
the top ten most efficient
products available.



How To Apply

- ▶ Purchase and install
 - Ensure product(s) are installed and operational before submitting your application.
- ▶ Complete application
 - Apply by mail or online at waterenergysavings.com
 - *You will need to refer to your PG&E bill and proof of purchase*
 - Include copy of proof of purchase, keep originals



How To Apply

- ▶ Mail your completed application as soon as possible.
 - Rebates are limited and awarded on a first-come, first-serve basis
- ▶ All rebate applications must be postmarked or received online NO LATER than 60 days after purchase date.
 - Limit one water agency rebate per five-year period
- ▶ Rebate checks may take 6 to 8 weeks to process



Examples of Qualifying Washing Machines

Qualifies for \$150 Rebate

Make: LG

Model: WM4270H*A



Qualifies for \$150 Rebate

Make: GE

Model: GFWR4805F



Qualifies for \$150 Rebate

Make: Samsung

Model: WF56H91*C



For complete list of qualifying washers, visit:
Waterenergysavings.com

Lawn Be Gone!

Get paid to transform your landscaping!

BAWSCA and participating member agencies are offering rebates to approved customers that convert water-thirsty lawns to water efficient landscaping.



Imagine...

Create...

Enjoy...



Who Participates?

Participating Agency	City/Cities They Serve
City of Daly City	Daly City
Coastside County Water District	El Granada, Half Moon Bay
Estero Municipal Improvement District	Foster City
City of Menlo Park	Menlo Park
Mid-Peninsula Water District	Belmont, portions of San Carlos, Redwood City, San Mateo
North Coast County Water District	Pacifica
City of Redwood City	Redwood City
City of San Bruno	San Bruno



How Do You Qualify?

- ▶ An applicant must be a customer of a participating BAWSCA member agency.
- ▶ A minimum of **200 square feet** of lawn must be converted.
- ▶ The pre-conversion landscape must be irrigated lawn with working irrigation system
 - Must be from potable water source
- ▶ After pre-qualification, the applicant must receive a **Notice to Proceed** from a participating BAWSCA member agency.



How Do You Qualify?



THE
LAWN
GOOD
BYE

- ▶ Pre and Post Conversion inspections are required.
- ▶ If applicant is not the property owner, written permission from property owner is required.
- ▶ A proposed site plan must be submitted prior to the start of the project



PRELIMINARY CONCEPTUAL LANDSCAPE DESIGN

Example Plant List



BAWSCA Lawn Rebate program

Ruth

Redwood City, CA 94062

Proposed Plant List:

Achillea millefolium

Agave Blue Flame

Agave gemnifolia

Aloe Johnson Hybrid

Anigozanthus Red Cross

Arbutus Marina

Arctostaphylos pajaromensis 'Paradise'

Berberis thunbergii

Camelia sasanqua Setsugekka

Ceanothus

Cercis occidentalis

Fremontodendron californicum

Lavendula munstead

Muhlenbergia rigens

Olea europea "little ollie"

Penstemon gloxinoides

Phormium cultivar

Romneya coulteri

Rosa rugosa

Salvia

Sedum

Westringia

Rebate Amounts

- Most agencies offer \$1.00 per square foot of converted lawn
 - MPWD offers \$2.00 per square foot



- There is no maximum rebate amount
- Receipts are required for all landscaping materials (**does not** include labor, rentals, or tools)
- Rebate may take up to 8 weeks to process

Project Requirements



- ▶ The converted area must contain at least 50% low water use plants
 - Choose from BAWSCA's approved plant list
- ▶ Permeable hardscape includes: pavers, bricks, flagstone set in sand, gravel, or decomposed granite

<http://bawsca.org/conservation/lawn-be-gone/>

Project Requirements

- ▶ Existing irrigation system within converted area must be capped in place, converted to drip irrigation, or removed.
 - Must include pressure regulator
- ▶ All exposed soil surfaces must have at least a 3 inch layer of mulch



Note: BAWSCA and their member water agencies reserve the right to deny a rebate to any applicant that does not meet the program requirements

Drought Restrictions

- ▶ Program will not permit plant installations during the dry season
 - July 1st – October 15th
- ▶ Only plants purchased after October 15th will be eligible for the rebate
- ▶ Notice to Proceed will specify the date where plant installation may commence.
- ▶ Customers are encouraged to complete sheet mulching upon receipt of notice to proceed



Non-Qualifying Projects

- ▶ Impermeable surfaces such as concrete, bricks, or flagstone mortared into place
- ▶ Non-biodegradable weed-block material
- ▶ Overhead spray / sprinkler systems
- ▶ Artificial turf installations
- ▶ High water use plants
- ▶ Trees



Artificial Turf Facts

While artificial turf requires less water than a natural turf lawn, there are healthier and more ecologically sound alternatives that we would like to promote.

- Artificial Turf Does Not:
 - Increase biodiversity
 - Provide habitat
 - Foster healthy soils
 - Sequester Carbon or produce oxygen

- ▶ Artificial Turf Environmental Concerns:
 - Runoff contains pollutants like heavy metals and chemicals
 - Short life-span: 10–20 years and eventually end up in landfills
 - Water is needed to clean and cool turf



Steps to Apply

Read Terms
&
Conditions

STEP 1

Submit
Application
& Plant List

STEP 2

Pre-
Conversion
Site
Inspection

STEP 3

Notice to
Proceed

STEP 4

Post-
Conversion
Site
Inspection

STEP 5

Rebate
Processed
within 8
weeks

STEP 6

Rebate Checklist

BAWSCA Water-Efficient Landscape Rebate Program

Applicant Checklist

Follow this checklist to make sure you're on track to get your rebate:

- ☐ Did you review the Terms & Conditions and Frequently Asked Questions?
- ☐ Was a Pre-Conversion Site Inspection performed by BAWSCA Member Agency staff?
- ☐ Did you select your plants from BAWSCA's Approved Plant List, or receive prior approval from a BAWSCA Member Agency for low water use plants not included on the Plant List?
- ☐ Did you submit your Application to BAWSCA?
- ☐ Did you include a copy of your plant list with your Application?
- ☐ Did you receive a Notice To Proceed letter from a BAWSCA Member Agency?
- ☐ Were the sprinklers within the Converted Area removed and capped off?
- ☐ If the Converted Area has an irrigation system, is it a drip system?
- ☐ If the Converted Area has an irrigation system, does it have a pressure regulator and wye filter?
- ☐ Did you confirm that no sprinklers are installed on the drip system valve in the Converted Area?
- ☐ Are the new plants installed in the Converted Area on BAWSCA's Approved Plant List, or previously approved by a BAWSCA Member Agency?
- ☐ Is there at least 50 percent plant cover in the Converted Area?
- ☐ Is a minimum 3-inch mulch layer installed on all bare soil areas within the Converted Area?
- ☐ Was a Post-Conversion Site Inspection performed by BAWSCA Member Agency staff?



Water Efficient Landscape Classes

BAWSCA offers Free Landscape Education Classes in the Spring and Fall of each year.

Classes are designed to introduce homeowners, commercial property managers, landscape service providers, and others to concepts of water efficient and sustainable landscaping.



Registration is Required
Go to www.bawsca.org to register!

BAWSCA's FREE classroom lectures and hands-on workshops focus on:

- Sustainable Landscaping
 - Understanding Water-Use Efficiency in the Landscape
 - Use of CA Native and Drought Tolerant Plants
 - Creating Healthy Soil
- Alternatives to Lawn
- Habitat Gardening
- Edible Landscaping
- Water-Efficient Irrigation Practices
- Parent/Child Gardening Activities

BAWSCA's Hands-on Workshops Provide Lasting Value

Hands-on workshops offer the experience of applying water-efficient techniques and installing Native and drought-tolerant demonstration gardens.



Photo from City of Redwood City Hands-on Workshops 2013

<http://bawsca.org/classes/>



www.BayAreaGardening.org

www.BayAreaGardening.org

Drought Survival: Lawn Care

Here are a few tips to help you reduce your water use while managing your landscaping during the drought.

Watering a Lawn During a Drought:

- Limit watering to two days per week
- Use the “cycle and soak” method
- Check your sprinkler heads regularly
- Install high efficiency rotating nozzles
- Water between midnight & 6am
- Watch your lawn rather than a calendar
- Hand-water small dry spots
- Apply less water to shaded areas



Maintain a Lawn During a Drought:

- Mow lawns to 2.5 - 3 inches high
- Use a lawn aerator
- Reduce fertilization
- Minimize foot traffic
- Leave clippings on the lawn

Additional Resources

- ▶ Permeable Pavement
- ▶ Bay Friendly Landscaping and Gardening
- ▶ Soil & Mulching
- ▶ Planning
- ▶ Sheet Mulching
- ▶ Bay Friendly Guide to Mulch
- ▶ California Invasive Plant Council
- ▶ Lose the lawn: 21 inspiring yards



*Links to these Resources can be found on the
BAWSCA website*

Rain Barrel Rebates

Save Water

Reduce Runoff and Pollution

Collect Pure Rainwater for Your Garden

*In partnership with the **San Mateo Countywide Water Pollution Prevention Program**, BAWSCA and participating member agencies are offering rebates of up to \$100 per rain barrel for the purchase and installation of qualifying rain barrels.*



SAN MATEO COUNTYWIDE
Water Pollution Prevention Program
Clean Water. Healthy Community. www.flowstobay.org



Rainwater catchment rule of thumb:

1,000 square feet of roof surface captures
625 gallons of water for every
1 inch of rain that falls

Who Participates?

Participating Agencies	City/Cities They Serve
City of Brisbane	Brisbane
City of Hayward	Hayward
Mid-Peninsula Water District	Belmont, some areas of San Carlos, Redwood City, and San Mateo
City of Millbrae	Millbrae
City of Redwood City	Redwood City
North Coast County Water District	Pacifica
Alameda County Water District	Fremont, Newark, Union City
City of Sunnyvale	Sunnyvale



To Qualify for Rain Barrel Rebate:

- ▶ Rain barrel must be installed in San Mateo County or within participating BAWSCA agency service area
- ▶ Rain barrel application must be postmarked within 90 days of purchase date
- ▶ Original purchase receipt must be submitted
- ▶ Rain barrels must be purchased between July 1, 2015 and June 30, 2016



To Qualify for Rain Barrel Rebate:

- ▶ Post installation photos must be included with application
 - *At least two clear photos of each barrel, take from at least two directions, must be submitted, showing downspout connections, secured lid and overflow valve*
- ▶ Post installation inspection may be required depending on the participating water agency



Rebate Amounts

- ▶ Up to \$100 per 50 gallons of storage capacity, or up to the total cost of the rain barrel, whichever is less:
 - \$50 from MPWD/local water agency
 - \$50 from San Mateo County
- ▶ Rebates may take up to 8 weeks to process



- Limit of *two* rebates per single-family residential
- Limit of *four* rebates per multi-family resident/commercial

Rain Barrel Requirements

- ▶ Qualifying rain barrels must be:
 - A minimum size of 50 gallons
 - Designed for the intended purpose of rain capture
- ▶ Rain barrel must have:
 - A secure lid for child safety
 - Rust-proof screening or sealed designs for vector control (mosquito, rodent) and debris control
- ▶ Rain barrel must be algae and UV-resistant or specially constructed sun barriers must be used



Installation Requirements

- ▶ Rain barrel must be connected to an effective means of capturing concentrated flow from impervious surfaces:
 - Ex: rain gutter downspout, rain chain



- Rain barrel must not be connected to the potable water system
- Collected rainwater must be utilized via a hose or bucket only



Installation Requirements

- ▶ Rain barrel must be placed on a solid and level foundation
- ▶ Rain barrel must not block or restrict access to walkways or pathways
- ▶ No copper materials – potential leaching concerns
- ▶ Overflow pipe must be directed away from adjacent properties
- ▶ Rain barrel must be maintained for a minimum of 3 years
- ▶ Participants must allow BAWSCA to reference project and use photos



Do It Yourself



Bay Area Stormwater
Management Agencies
Association

How Much Storage is Recommended?

The number of rain barrels recommended to capture runoff from a given roof (or other impervious area) is shown in the following table.



Roof or Impervious Area (sq. ft.)

Suggested Minimum Number of 55 Gallon Rain Barrels*

Up to 750

1-2

750 – 1,250

2-3

1,250 – 1,750

3-4

1,750 – 2,250**

4-5

* Or equivalent capture using larger rain barrels or a cistern.

** To harvest rainwater from an area greater than 2,250 sq. ft. install 1 additional rain barrel per each additional 500 sq. ft.

<http://bawsca.org/conservation/rain-barrel-rebate-program/>

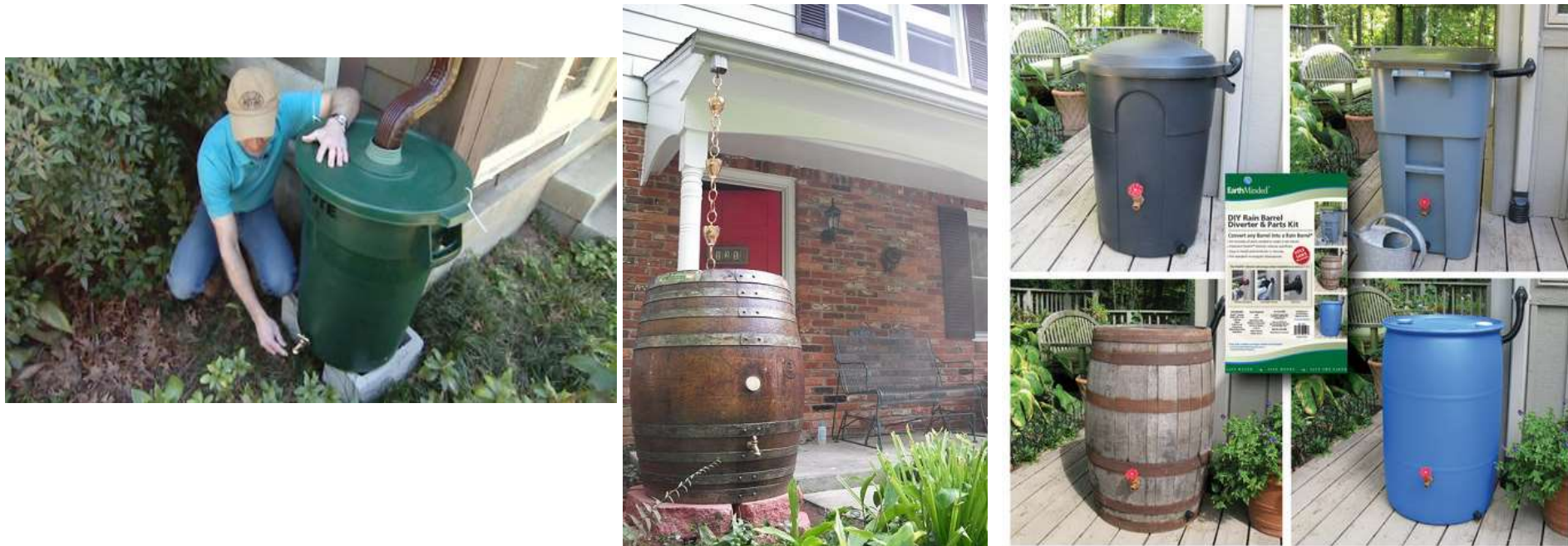
BAWSCA
Bay Area Water Supply & Conservation Agency

Use It Right

- ▶ **USE DIRECTLY ON LANDSCAPE ONLY:**
 - Rain barrels **must not** be connected to supply water system
 - This is to prevent untreated water from mixing with public supply
 - Only hook a garden hose or isolated drip irrigation system to the outlet of your barrel – apply to landscape directly
- ▶ **ONLY DIVERT RAIN WATER INTO BARREL:**
 - Do not divert “grey water” into barrel (risk of bacteria)
- ▶ **DO NOT DRINK WATER FROM YOUR RAIN BARREL:**
 - It is not recommended to use water for vegetable gardens
- ▶ **PREVENT MOSQUITOES:**
 - Ensure your barrel has a secured mesh screen (check regularly)

Do It Yourself

- ▶ <https://www.youtube.com/watch?v=2f-CwmLZYaY>



Do It Yourself

- ▶ Operation and Maintenance
 - Regularly check the gutters and gutter guards to make sure debris is not entering the rainwater harvesting system
 - Inspect screens prior to wet season to ensure there are no holes allowing mosquitoes to enter the barrel.
 - *Inspect more frequently if there are trees that drop debris on the roof*
 - Clean rain barrel once a year, preferably at the end of the dry season

Rebate Checklist

BAWSCA Rain Barrel Rebate Program Applicant Checklist

- ☐ I installed a rain barrel in San Mateo County OR in a participating BAWSCA water agency service area
- ☐ The rain barrel I purchased meets the program requirements
- ☐ The rain barrel is installed consistent with the program requirements
- ☐ I completely filled out and signed my applications
- ☐ I enclosed the original rain barrel receipt with my rebate application
- ☐ I included two post-installation photos with my rebate application
- ☐ I installed my rain barrel and mailed the application within 90 days of purchase



<http://bawasca.org/conservation/rain-barrel-rebate-program/>

Water Conservation Benefits Everyone

- ▶ Increased water system reliability
- ▶ Solution to meet planned needs of community
- ▶ Reduced water and energy costs
- ▶ Promotes efficient use of resources
- ▶ Benefits the environment & community sustainability

If Everyone Saves A Little, We Can All Save A Lot



Visit www.BAWSCA.org for More Ways to Save

Andree Johnson

ajohnson@bawasca.org

650-349-3000

Kyle Ramey

kramey@bawasca.org

650-599-1459

TAKE TURNS

Know when to irrigate. It's a DROUGHT.

Odd # address: Monday & Thursday | Even # address: Tuesday & Friday

BAWSCA
Bay Area Water Supply & Conservation Agency



Hetch Hetchy
Regional Water System
Division of the San Francisco Public Utilities Commission

bawasca.org/DROUGHT

Free Stuff!

- ▶ Conservation Kits
 - Shower head, aerators, water diverters, etc.
- ▶ Toilet Tank Banks
- ▶ Dye Tabs
- ▶ Water Bottles
- ▶ Landscape Water Use Efficiency Brochures
- ▶ Home Water Saving Tips Wheel
- ▶ Shower Timers
- ▶ Other Novelty Items
- ▶ Moisture Meters



All of these items can be found on the table in the back!