

0

Water Wednesday Series DROUGHT, WATER YOU GOING TO DO ABOUT IT?

Find out how you can meet the East Bay's drought challenge!

July 21 - 6 pm - Zoom



CHARLES BOHLIG

Water Conservation Supervisor

ALICE TOWEY Water Conservation Manager

WHITNEY RAY Water Conservation Supervisor



- 1. WHY CONSERVE WATER AND WHAT IS EBMUD DOING TO CONSERVE WATER?
- 2. WHAT CAN YOU DO TO SAVE WATER?
- 3. TRIVIA!
- 4. WHAT IS THE FUTURE OF WATER CONSERVATION AT EBMUD?
- 5. GOT A QUESTION: ASK A WATER CONSERVATION EXPERT?

WHY SHOULD WE CONSERVE?



A HIGHLY VARIABLE WATER SUPPLY

Mokelumne River Historic Water Supply Variability Critically Dry Normal and Above Below Normal Dry 2.0 1.5 True Natural Flow (Million Acre-Feet) 1.0 0.5 0.0 2020 1932 1943 1954 965 1976 2009 1987 1998 1921

Water Year

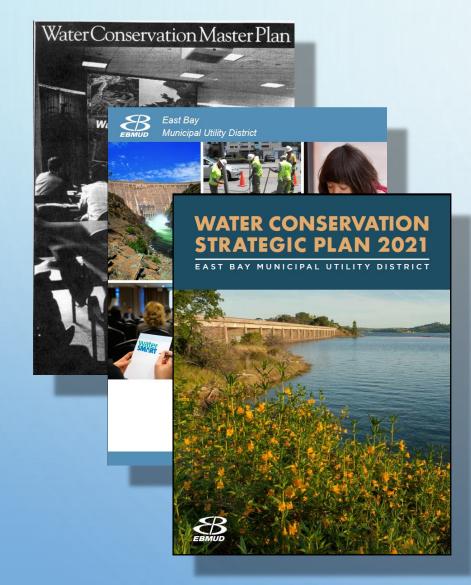
INCREASED THREAT DUE TO CLIMATE CHANGE



IT'S ABOUT MORE THAN JUST WATER SUPPLY

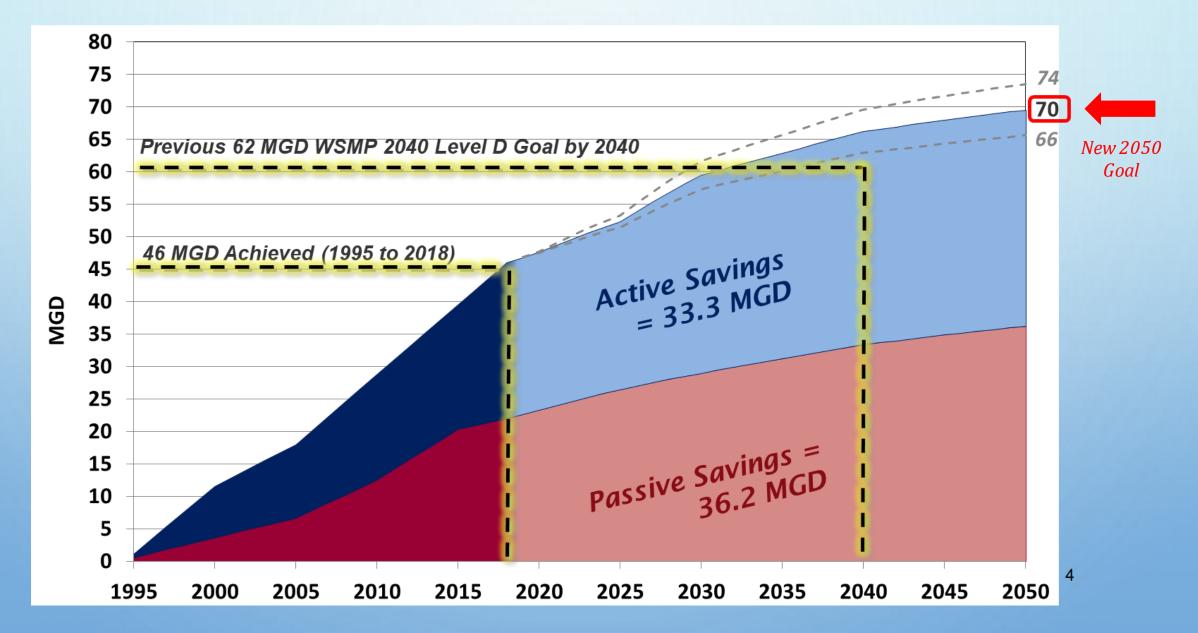


EBMUD WATER CONSERVATION PROGRAM



- Conserving water since the 1970s
- An important component of EBMUD's overall water supply portfolio
- First Water Conservation Plan in 1994
- Plan is updated periodically to reflect new goals, technologies, and water conservation practices
- 2021 Plan is in progress

WHERE WE'VE BEEN AND WHERE WE'RE GOING



EMERGING STATE REGULATIONS





Making Water Conservation a California Way of Life Implementing Executive Order B-37-16

PUBLIC REVIEW DRAFT November 2016





Water Use Objectives:

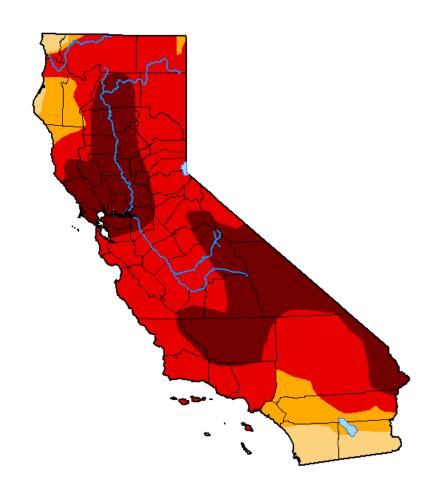
Indoor Residential Use + Outdoor Residential Use + Dedicated Commercial Irrigation Use + <u>Distribution System Water Loss</u>

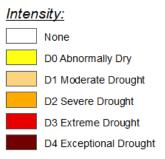
Annual Water Use Objectives

2021: CURRENT STATEWIDE DROUGHT MONITOR

U.S. Drought Monitor California

July 13, 2021 (Released Thursday, Jul. 15, 2021) Valid 8 a.m. EDT





The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

Author:

Adam Hartman NOAA/NWS/NCEP/CPC



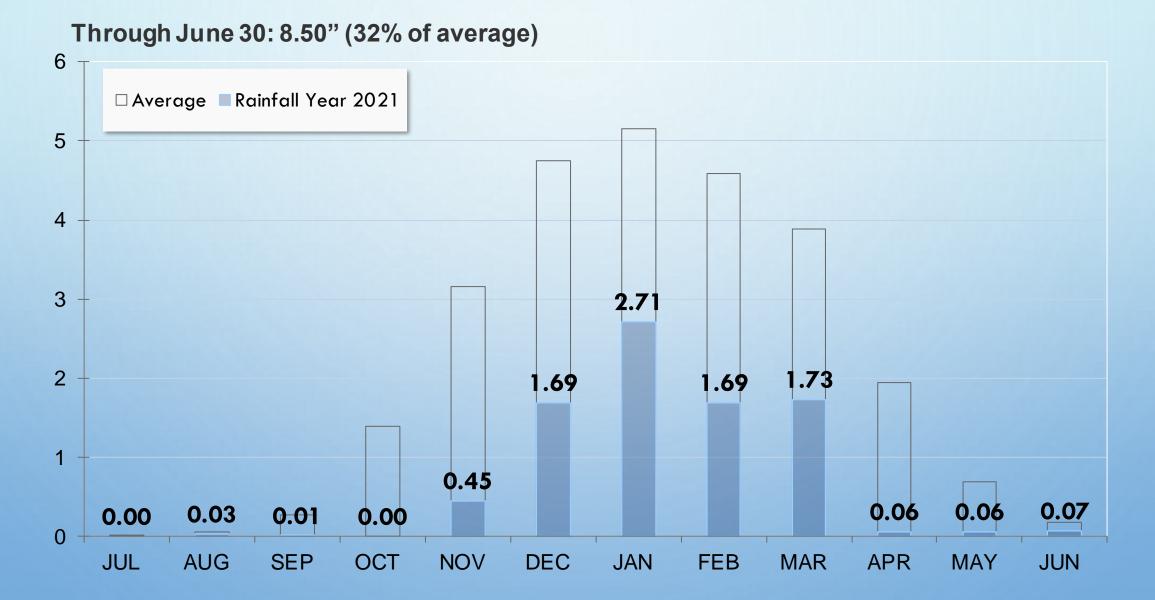
droughtmonitor.unl.edu

EBMUD WATER SUPPLY: MOKELUMNE PRECIPITATION

Through June 30: 24.72" (51% of average)



EBMUD WATER SUPPLY: EAST BAY PRECIPITATION

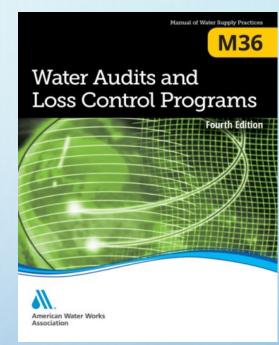


KEY 2021 DROUGHT FACTS

- SECOND DRIEST YEAR ON RECORD IN THE MOKELUMNE WATERSHED, AND DRIEST YEAR ON RECORD IN THE EAST BAY
- APRIL 27, 2021 EBMUD DECLARES A STAGE 1 DROUGHT
 - ASKING FOR 10% VOLUNTARY CONSERVATION DISTRICT-WIDE
 - PURCHASING SUPPLEMENTAL WATER FROM THE SACRAMENTO RIVER
- WE'RE TAKING ACTION NOW SO WE'LL BE IN A BETTER POSITION IF NEXT YEAR IS ALSO DRY

EBMUD IS DOING ITS PART: WATER LOSS CONTROL

- 1. Pressure management
- 2. Active leak detection
- 3. Speed and quality of repairs
- 4. Infrastructure management







WHAT CAN YOU DO TO SAVE WATER





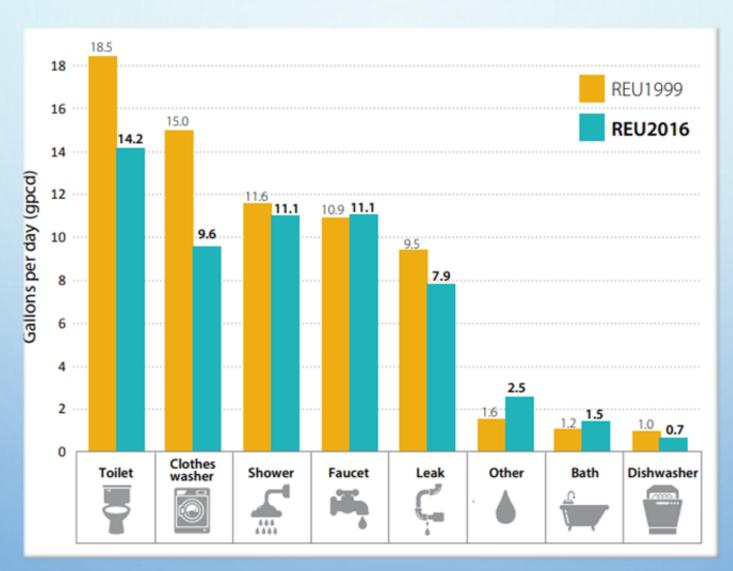






Report water waste

Residential Use – Gallons per Day



Data source: Residential End Uses of Water Version 2, 2016

LEAK SIZES AND COSTS



GPH = Gallons per Hour

2020-21 Rates

Example: 3.75 GPH

Leak



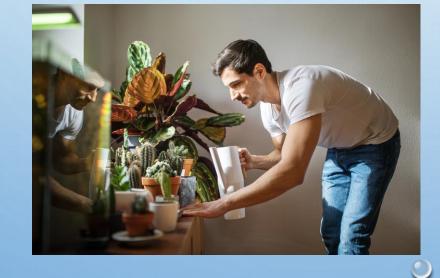


INDOORS











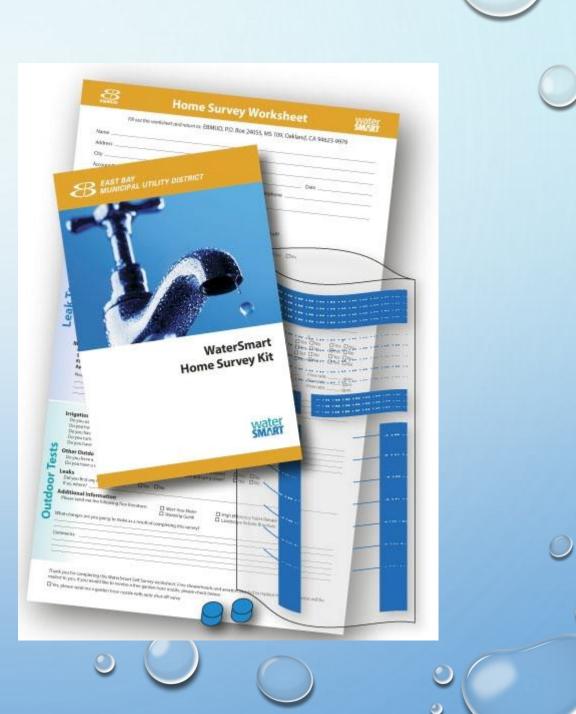




FREE WaterSmart Home Survey Kit

- Illustrated step-by-step instructions
- Dye Tabs for toilet leaks
- Flowbag for measuring volume of faucets and showerheads
- Mail us a worksheet with results
- Receive free efficient showerheads and faucet aerators if need

Order online for free: ebmud.com/store



FREE Efficient Devices From EBMUD

ebmud.com/freedevices





Showerheads

Kitchen Aerators



Bathroom Aerators





OUTDOORS









Courtesy of Contra Costa Water District







TOP REPORTED CUSTOMER LEAKS

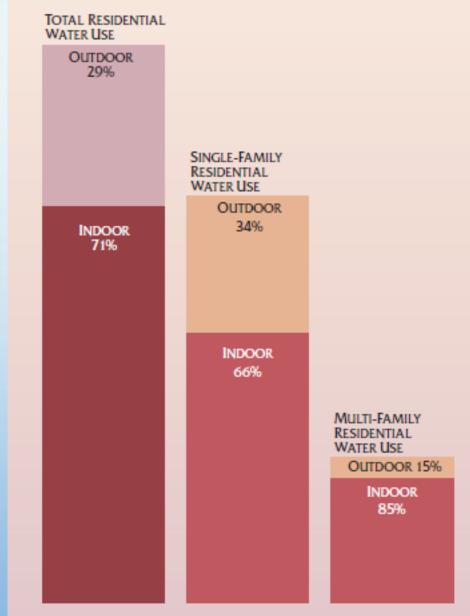
Cause of Leak	Count	%
Outdoor Watering System	219	42%
Toilet	124	24%
Pipes	76	14%
Faucet or Shower	66	13%
Other	26	5%
Pool	8	2%
Hot Water Tank	6	1%
Large Appliance	2	0.4%
Total	527	

Irrigation and toilet leaks are the most common!

AVERAGE EBMUD HOUSEHOLD WATER USE

- Outdoor water use: 34%
- Indoor water use: 66%





NOTE: Based on Calendar Year 2005-2015 metered consumption data.

EBMUD LAWN CONVERSION AND IRRIGATION UPGRADE REBATES

Rebates	Rebate Amount
Lawn Conversion	Standard: \$0.75/square foot Super: \$1.50/square foot
Drip Conversion	\$0.25/ square foot
Smart Controller	\$75 per controller
High Efficiency Nozzles	\$2 per nozzle
Pressure Regulator	\$75 per device
Irrigation Submeter	\$75+ per device

APPLY BEFORE YOU BUY! REBATES ARE NOT RETROACTIVE

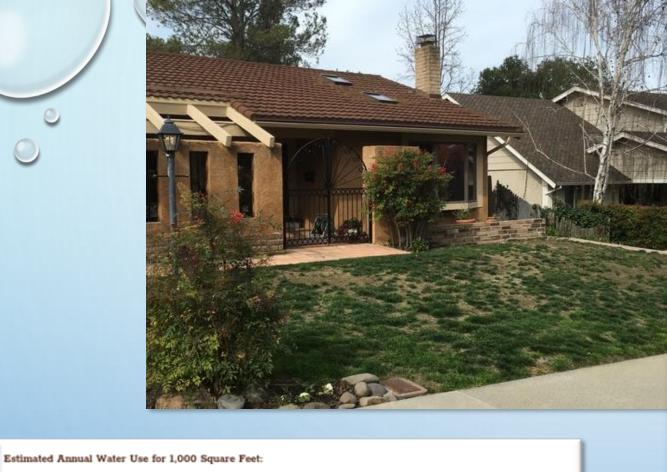
REBATE TOTAL: UP TO \$2,000 FOR RESIDENTIAL OR \$15,000 FOR COMMERCIAL & MULTI-FAMILY (5 OR MORE UNITS) OVER A TWO YEAR PERIOD

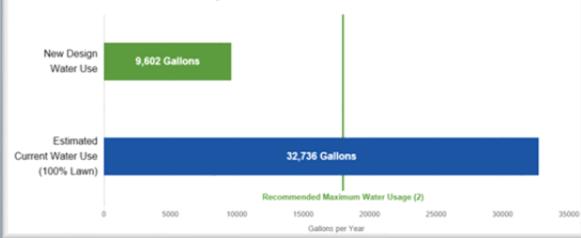
EBMUD.COM/REBATES











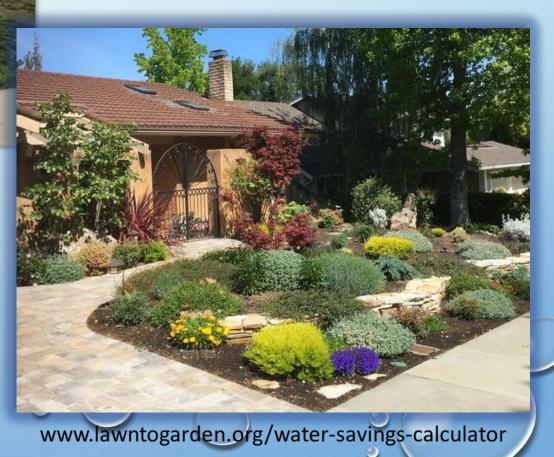




Image courtesy of QWEL

COMMON IRRIGATION PROBLEMS

- Poor coverage and runoff
- High pressure
- Mix-matched irrigation equipment

- Spray irrigation in nonsuitable areas
- Improper controller programming

EFFICIENT IRRIGATION

BASIC TIPS

- DON'T WATER TURF MORE THAN THREE TIMES PER WEEK; WATER SHRUBS AND TREES ONCE PER WEEK
- AVOID RUNOFF AND OVERSPRAY
- WATER AT DUSK OR DAWN TO AVOID EVAPORATION

HELPFUL TOOLS

WATERING SCHEDULES, CALCULATORS, AND TIPS

EBMUD.COM/WATERSMART-GARDENER



Look out for overwatering!





FILL OUT THE WATER WASTE FORM ONLINE

WWW.EBMUD.COM/REPORTWATERWASTE

- SEND AN EMAIL WITH INFORMATION AND PHOTOS TO <u>WATERCONSERVATION@EBMUD.COM</u>
- LEAVE A VOICEMAIL AT THE WATER WASTE HOTLINE: CALL 1-866-40-EBMUD AND PRESS 5 FOR NON-ACCOUNT INQUIRIES







Hydrant



Meter



Main line

EBMUD GETS LEAKS TOO!



Report EBMUD leaks at 1-866-40-EBMUD and press 1 for Dispatch

WHAT ARE WE ASKING OUR CUSTOMERS TO DO?

1. Irrigate efficiently

2. Find and fix leaks









WHAT CAN YOU DO TO SAVE WATER

- CHECK YOUR HOME FOR LEAKS
 - EBMUD.COM/LEAKS
- CONDUCT A HOME AUDIT
 - EBMUD.COM/HOMESURVEYKIT
- UPGRADE YOUR OUTDOOR LANDSCAPE AND
 IRRIGATION
 - EBMUD.COM/REBATES
- SIGN UP FOR MY WATER REPORT PROGRAM
 - EBMUD.COM/MYWATERREPORT





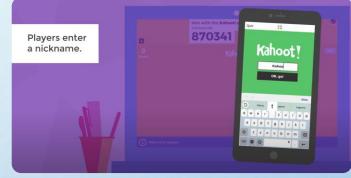


Report water waste

WATER CONSERVATION TRIVIA TIME









To join the game, visit Kahoot.it on a separate device (smart phone, tablet, computer)

This device will become your remote to respond to questions!



Images courtesy of Kahoot!

FUTURE OF CONSERVATION AT EBMUD





Having trouble paying
 your water bill?

EBMUD can help!

You may qualify for assistance Call 866-403-2683 or visit ebmud.com/CAP to find out.

Watersmart Calculator



Let's Get Started!

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

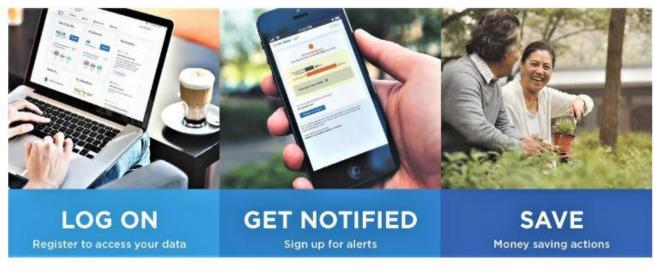


ebmud.com/water/conservation-and-rebates/residential/watersmart-calculator

SIGN UP FOR MY WATER USE

EBMUD.COM/MYWATERINFO

EBMUD offers a FREE online portal to all customers to help track and manage water use.



Step 1: Sign in

First-time user: make sure you have your EBMUD account number on hand, and follow these instructions.

Step 2: Set up leak and high use alerts

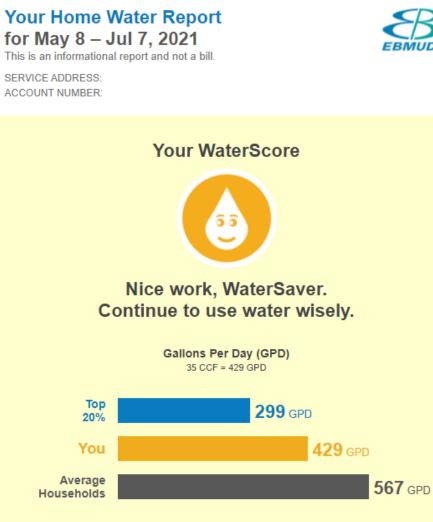
Notifications via text message or email are helpful when you use autopay for bills, and might not notice an important increase in your water bill.

My Use Notifications

You will be notified when you use over **2X** times your normal use.

Driest year since 1977: Make every drop count.

PERSONALIZED HOME WATER REPORTS



Your water use is compared to homes in EBMUD's service area with 4 occupants and a similar yard size and climate.

Learn more about your water use 💽

Your personalized plan

Selected based on your household characteristics, yard size, and historical water use. Log on to update your profile



Replace your grass 💽



Update your landscape. Change to beautiful, WaterSmart plants.

S Rebate

Fill up the clothes washer **O**

Run full loads of clothes to save energy and water.

Trim plants near spray heads 💽



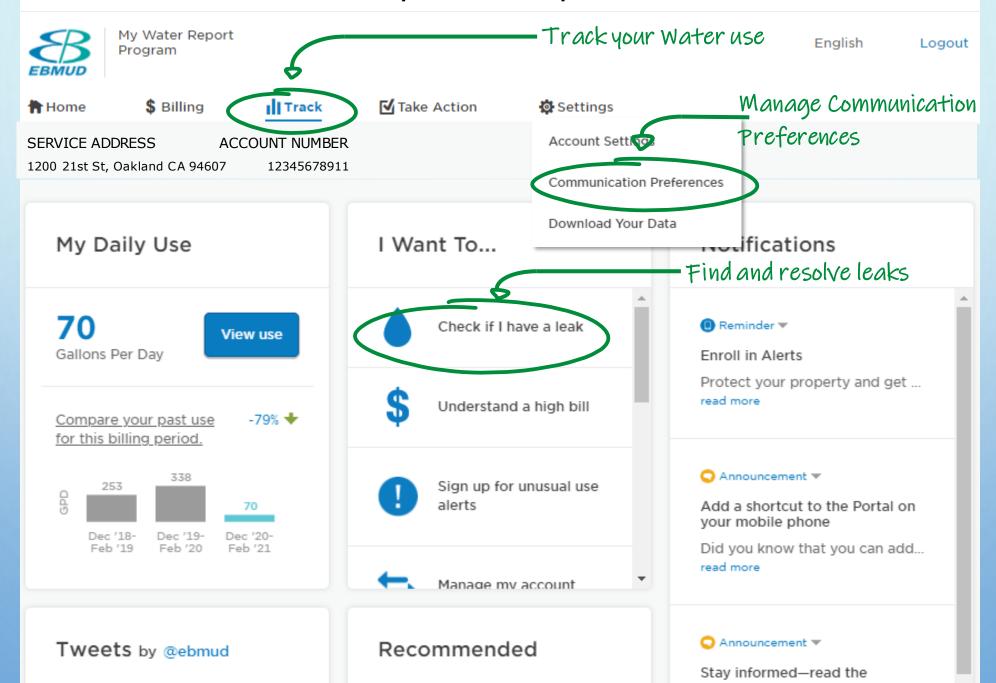
Trim leaves that may be blocking the flow of water from your sprinkler heads.

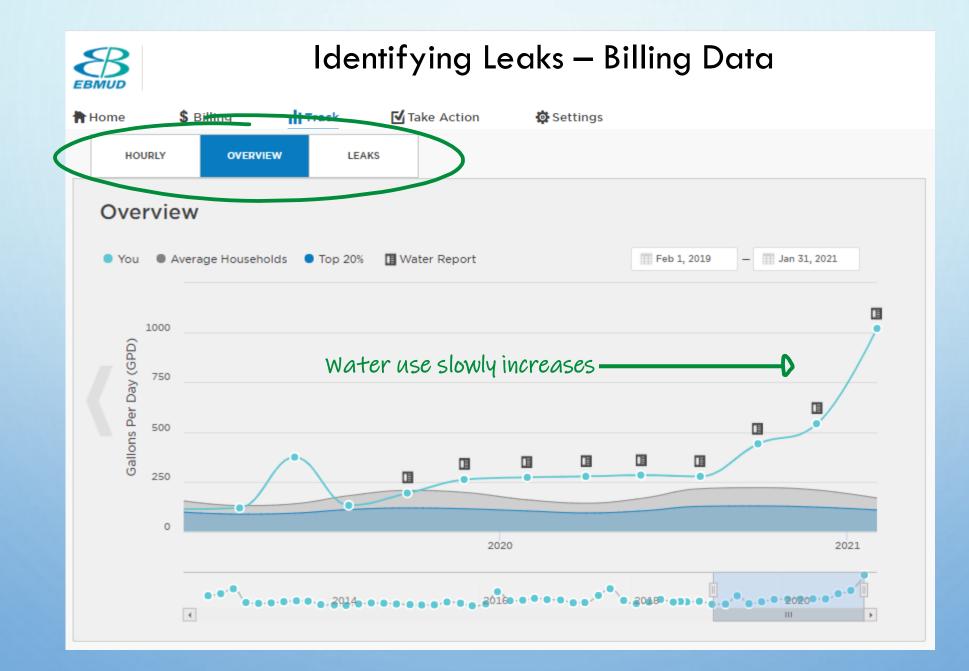
See more ways to save! O

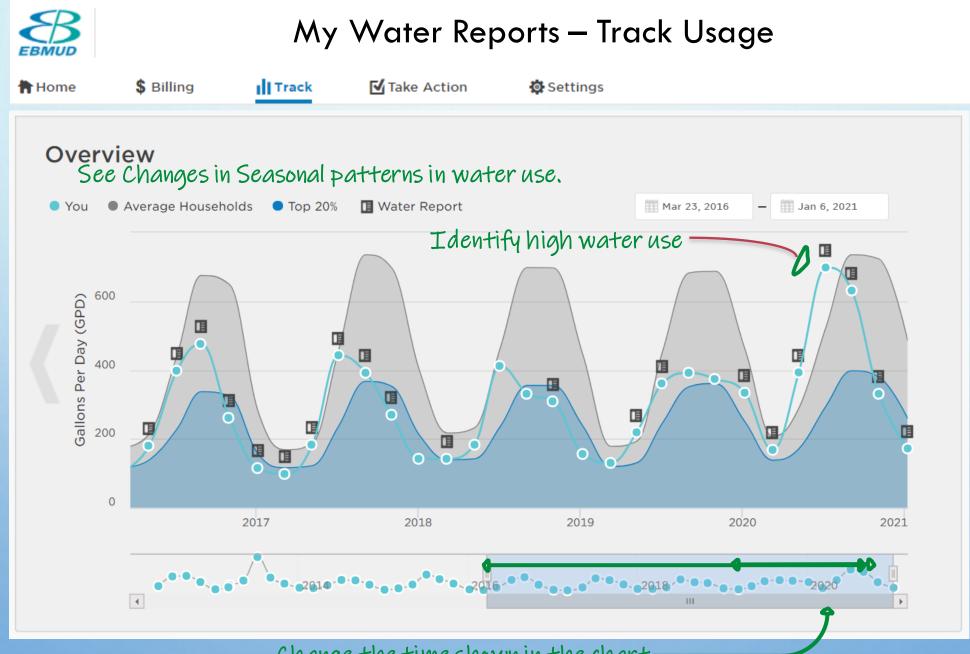
Contact us (866) 403-2683 WaterConservation@ebmud.com ebmud.com/trackusage

Follow us

My Water Reports







Change the time shown in the chart-



Identifying Leaks – Hourly Data







Challenge

Drop food coloring in the

tank. If color seeps into

the bowl, replace the

EBMIUD

The most common causes of irregular water use are easy to find and fix. For more detailed tips, log on to ebmud.waterinsight.com/LeakCheck.

Running Toilets = Listen for running water or do a dye test. Check the flapper and the float valve.

Irrigation Check your controller settings. Inspect your system for breaks or excessively damp areas.

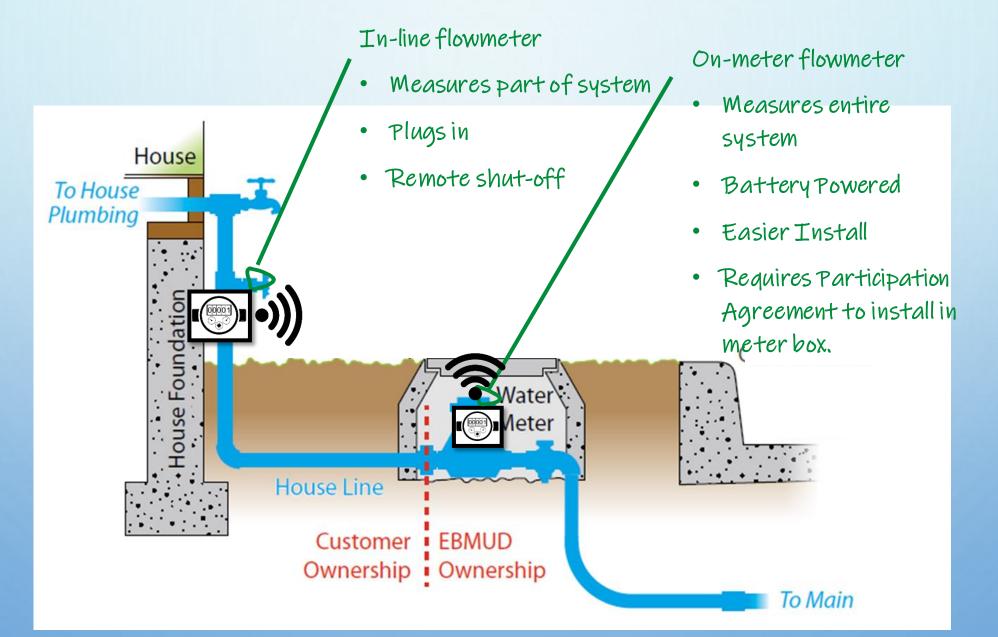
Pipes & Fixtures Look for wet spots

near your faucets, showerheads, and water heater, and behind appliances.

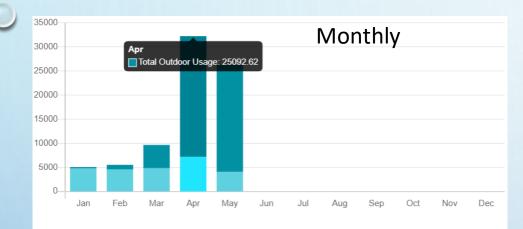


0

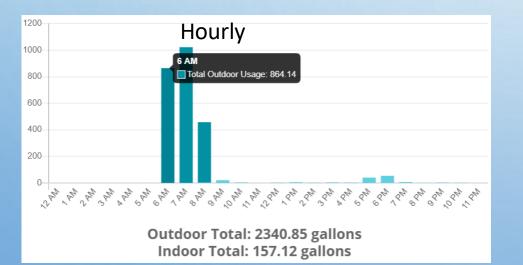
Flowmeter Types

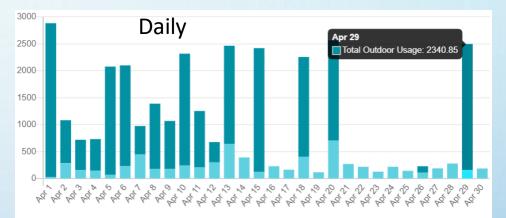


EXAMPLE FLOWMETER PORTAL

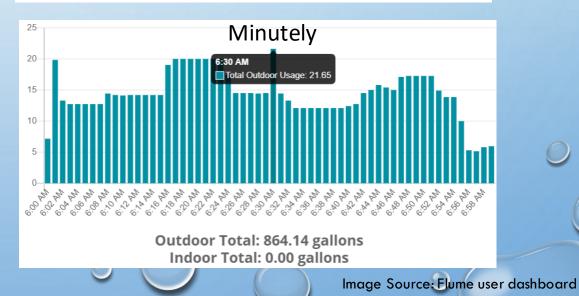


Outdoor Total: 53488.95 gallons Indoor Total: 25286.58 gallons





Outdoor Total: 25092.62 gallons Indoor Total: 7155.69 gallons



0

Customized

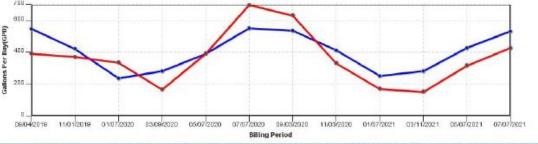
Water Budgets water SMART

Recommended Water Budget Single Family

Thank you for participating in our Single Family Water Budget Program. The following is your customized water usage profiles for the last two years. The graphical description compares your measured water usage versus your budgeted water usage for each billing period. The purpose of the budget report is to show customers how efficiently water is being used inside and outside the home.

Customer Name:		
Service Address:		
City:		
Account #:		
Meter #:		
Est. Irrigated Area(sq. ft):	3875	
Household occupants	4	
Base Household use	160	
Water Budget Summary	Used	Budgeted
Gallons used last 12 months	121,924	147,326
Gallons used previous year	144,364	148,198
Percent of budget last 12 months		83%
Percent of budget for previous year		97%
2 years estimated savings in gallons:		29,236
F100		





Billing Period	09/04/19	11/01/19	01/07/20	03/09/20	05/07/20	07/07/20	09/03/20	11/03/20	01/07/21	03/11/21	05/07/21	07/07/21
Budget(GPD)	549	423	238	284	391	550	538	413	250	281	428	533
Consumption(GPD)	392	374	335	169	393	699	632	331	173	154	315	429
Evapotranspiration(ET)	12.28	7.88	2.72	3.98	7.05	12.23	11.36	7.98	3.04	3.94	7.91	11.79

EBMUD estimates the average indoor water use per person with high efficiency fixtures at 40 gpd (gallons per day).

Evapotranspiration (ETo) represents the estimated water need of cool season grass (in inches) for each billing period. The Water Budget Calculation does not use rain, typically irrigation systems can be turned off for the winter months of November, December, January, and February.

The Maximum Allowable Water Budget for landscaping, effective Jamuary 2010, is calculated using 80% of ETo for the irrigated area of landscaping. If you feel the irrigated area is not accurate or would like more information on this program, contact EBMUD at (510) 287-1900.



www.ebmud.com/watersmart

We make it easy to conserve. E

Social Media Outreach

 973 impressions earned for #WaterWednesday post on Twitter; 681 impressions earned on Facebook



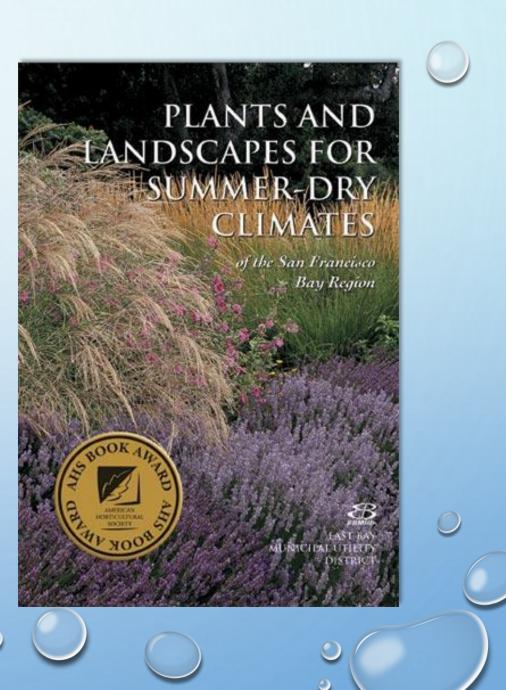
PLANT RESOURCES

• EBMUD PLANT BOOK SUMMER-DRY.COM OR ORDER ONLINE AT EBMUD.COM/STORE

- EBMUD LOW WATER USE PLANT LIST EBMUD.COM/PLANTS
- UC DAVIS ALL STAR PLANT LIST

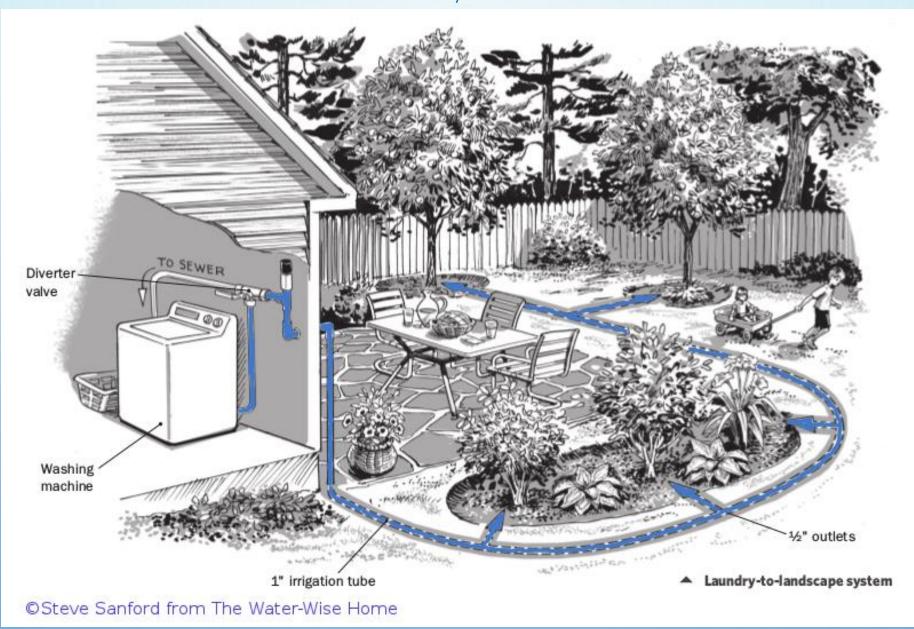
ARBORETUM.UCDAVIS.EDU/ARBORETUM-ALL-STARS

- WUCOLS DATABASE UCANR.EDU/SITES/WUCOLS
- CALSCAPE CALSCAPE.ORG
- FIRESCAPE BOOKLET EBMUD.COM/FIRESCAPE



LAUNDRY TO LANDSCAPE

EBMUD.COM/GRAYWATER



ASK A WATER CONSERVATION EXPERT! GOT A QUESTION? TYPE YOUR QUESTION IN THE CHAT

• LEARN MORE:

- EBMUD.COM/WATERSMART
- EBMUD.COM/WATERWEDNESDAY
- EBMUD.COM/DROUGHT
- CONTACT US:
 - FOR WATER WEDNESDAY INQUIRIES: <u>WATERWEDNESDAY@EBMUD.COM</u>
 - FOR WATER CONSERVATION: <u>WATERCONSERVATION@EBMUD.COM</u>