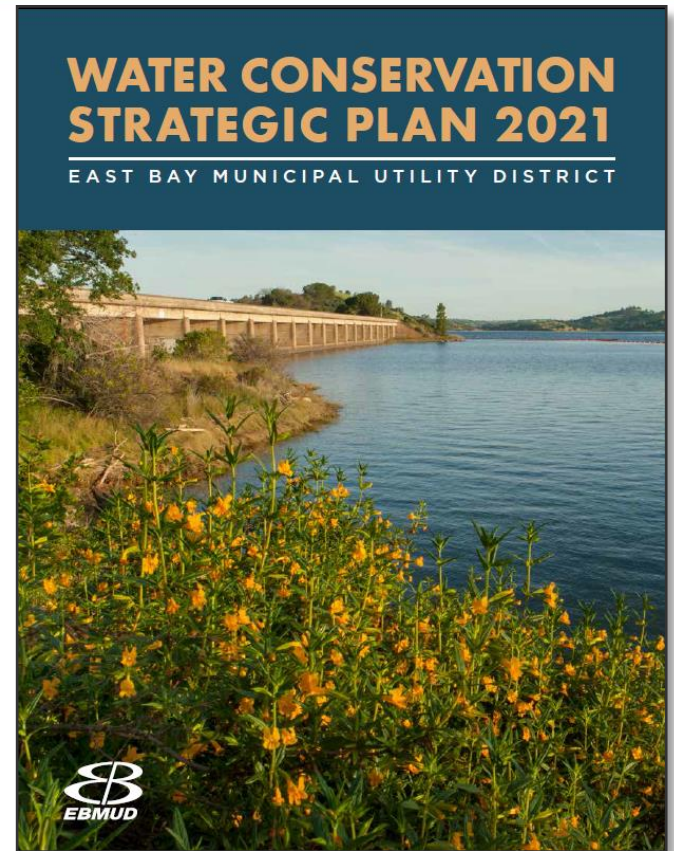


EBMUD
Landscape Advisory Committee
General Meeting

with a special presentation on
Water Conservation for the
Next Decade

Feb 28, 2022



Upcoming Events



MWELO Plan Check (ReScape)

March 1, 8:30am-1:30pm

Firescaping Qualification Training (ReScape)

March 10-11, 9am-1pm

Spring Garden Maintenance Practices/Mantenimiento del jardín en la primavera

March 24, 1pm-2pm ([English with Spanish interpretation - ebmud.com/watersmart](http://ebmud.com/watersmart))

Water-Wise Landscape Design and Plant Selection (CCWD)

Weds. Mar. 30, 10am

Sheet Mulching, Compost and Mulch Selection/Consejos y trucos para cubiertas de mantillo

April 14, 1pm-2pm ([English with Spanish interpretation - ebmud.com/watersmart](http://ebmud.com/watersmart))

Bring Back the Natives Tour

April 16-17 (virtual), April 30-May 1 (in-person)

Ruth Bancroft Garden Tour

April 23, 9am-4pm

Drip Irrigation 101 (CCWD)

Weds. Apr 27, 10am

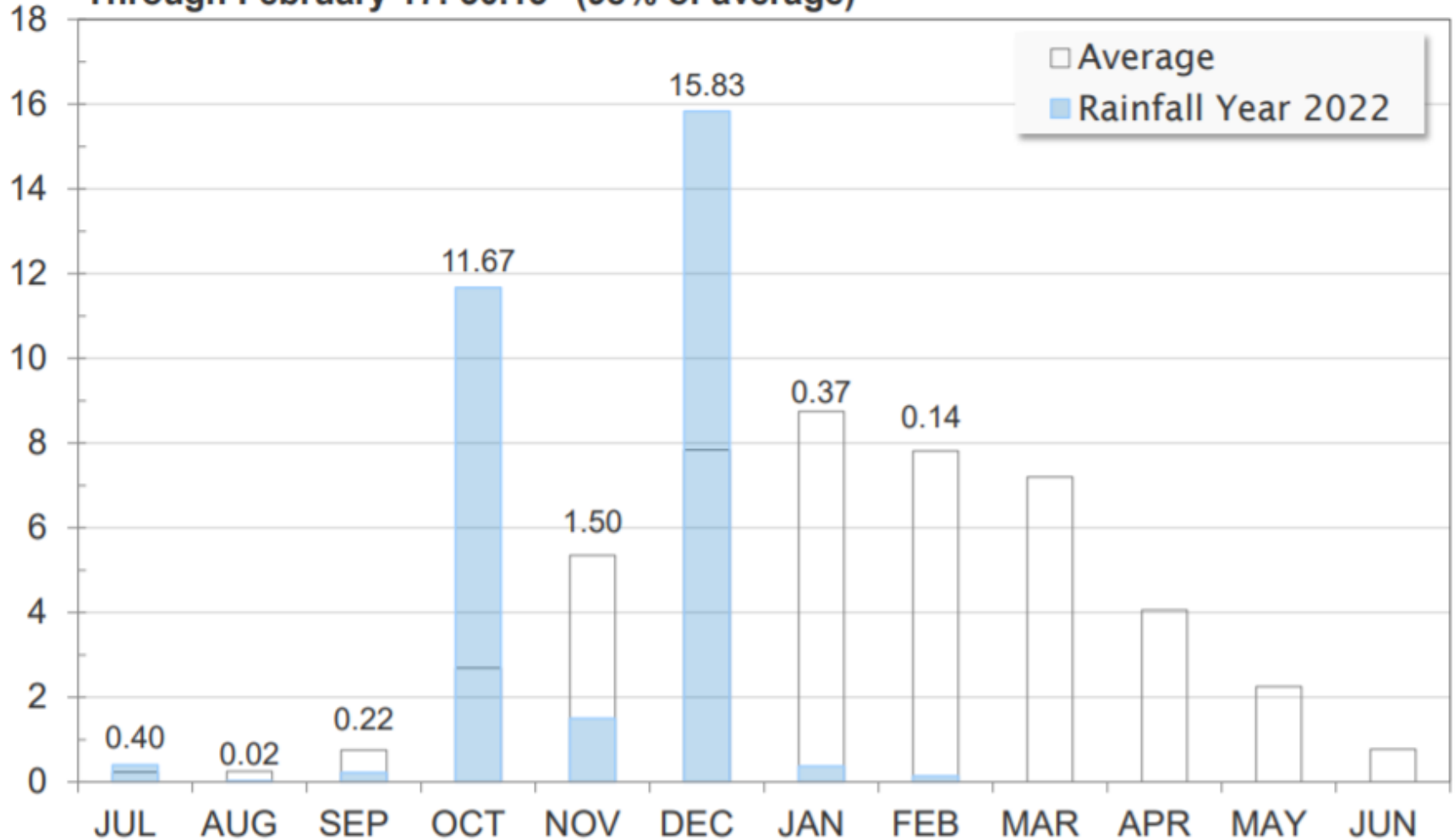
HOA and Multifamily Landscape Rebate Virtual Office Hour

May 19, 12-1pm (ebmud.com/watersmart)

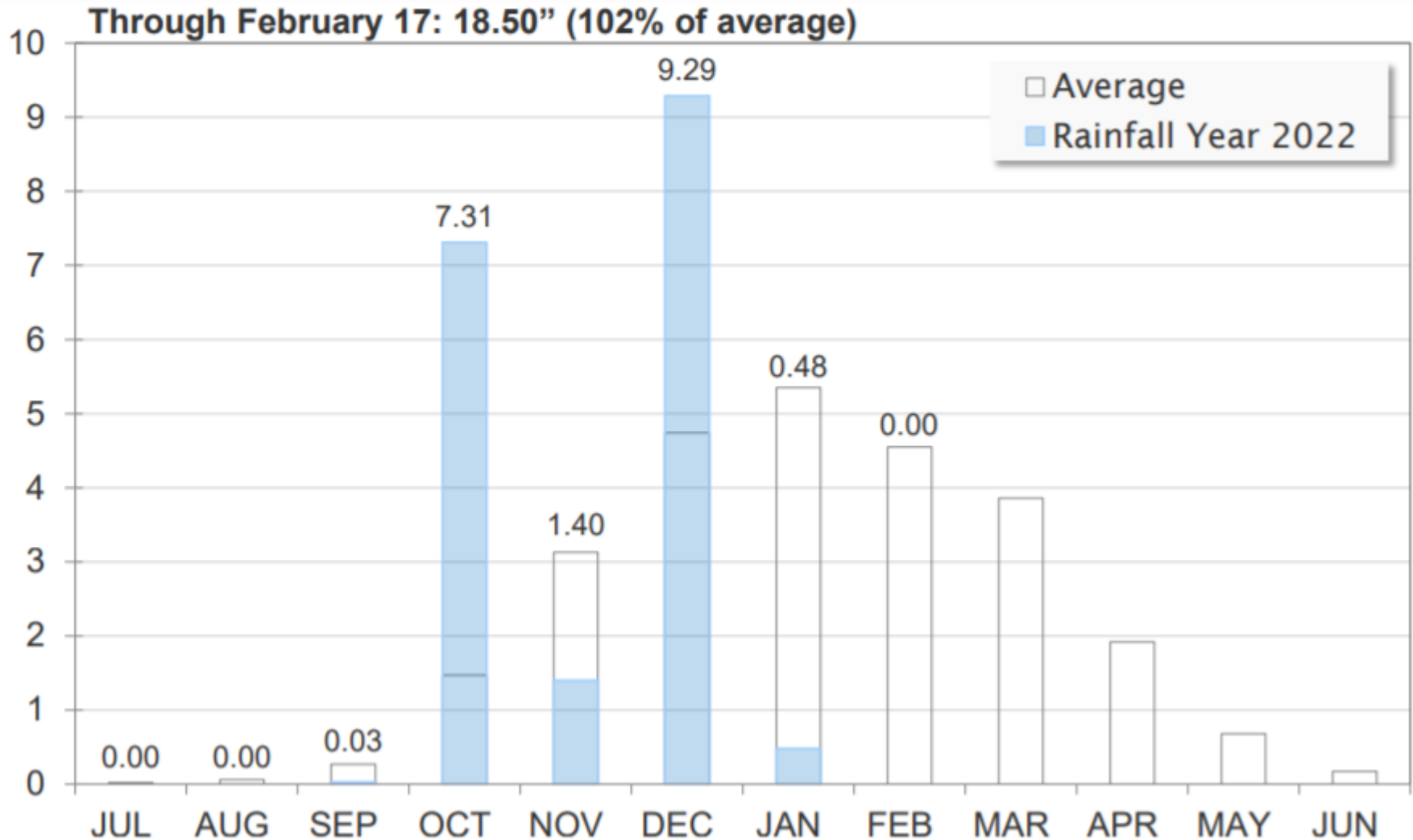
Mokelumne Precipitation



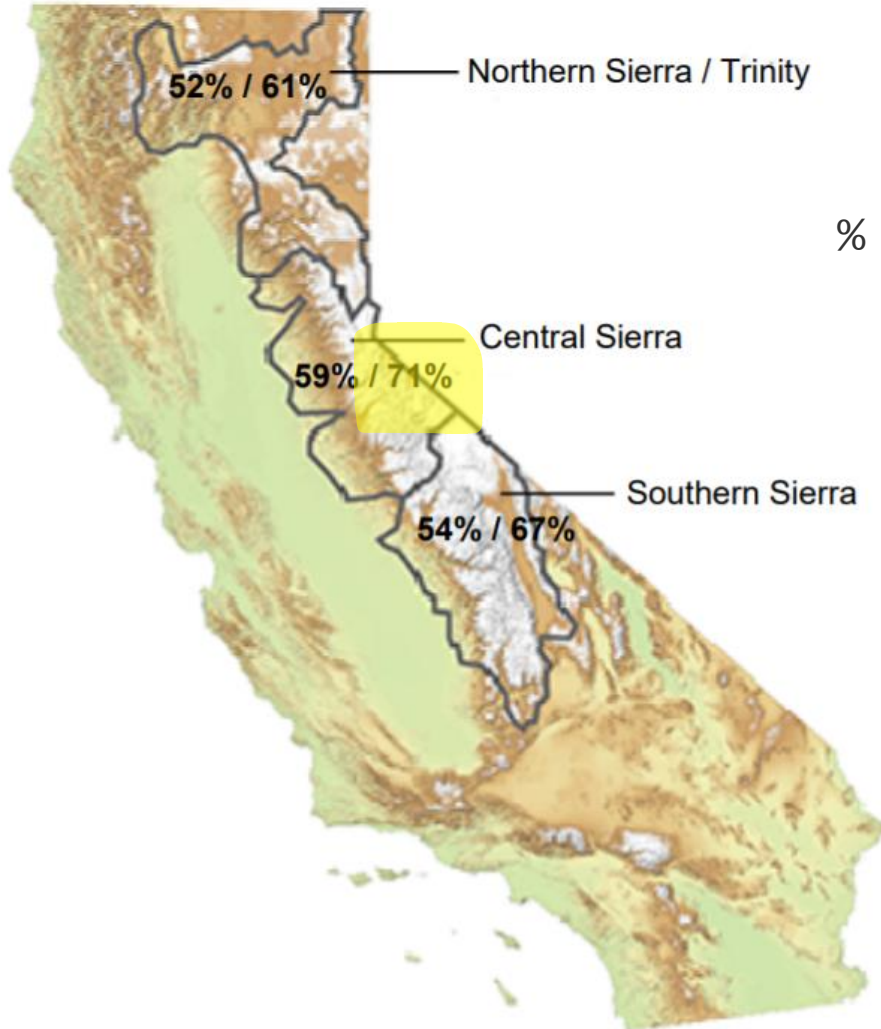
Through February 17: 30.15" (98% of average)



East Bay Precipitation



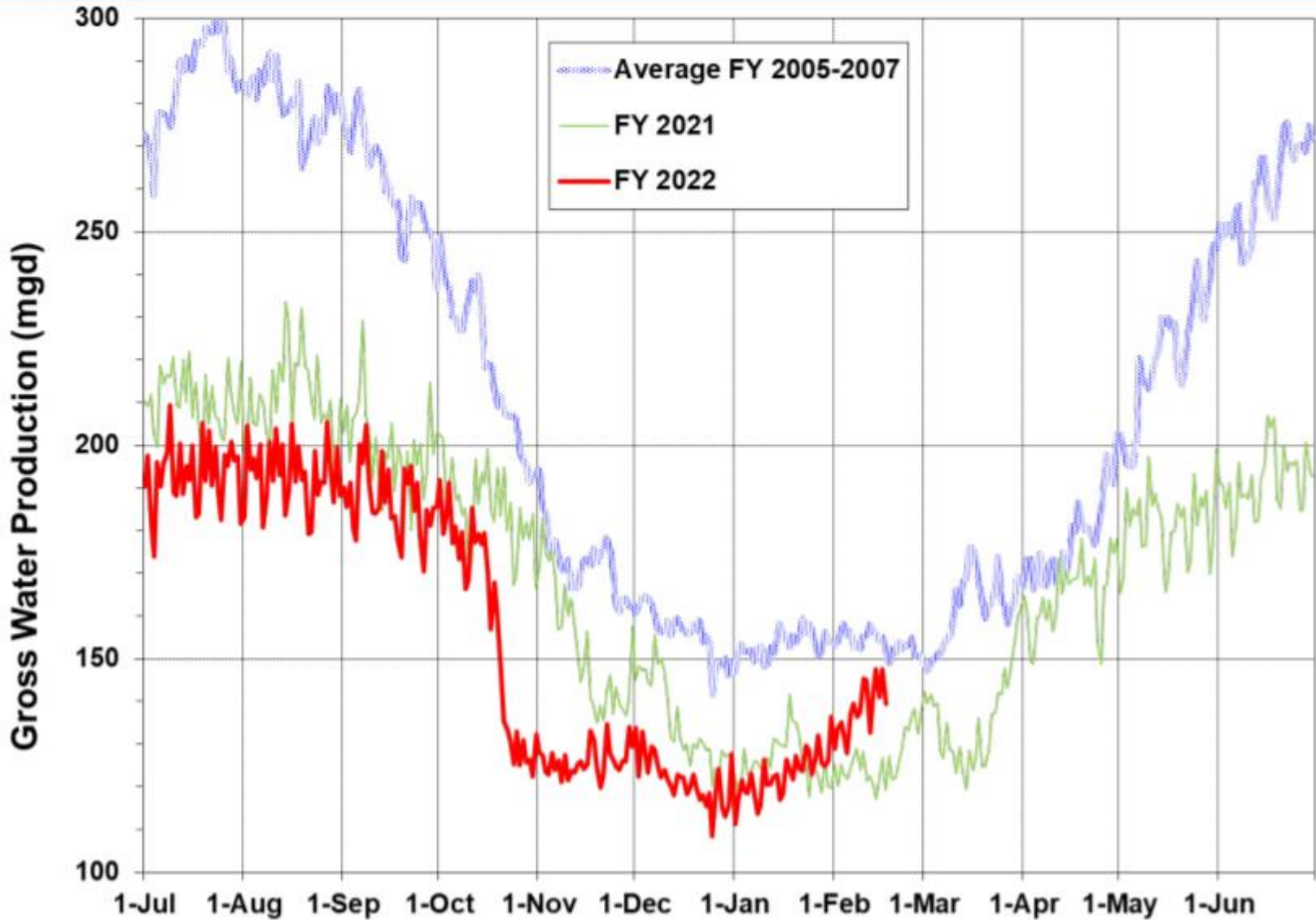
California Water Supply Automated Sensor Snow Water Equivalents



% of April 1 Average / % of Normal for This Date

Statewide Average: 55% / 66%

Water Production



Monthly Comparison FY22/FY21



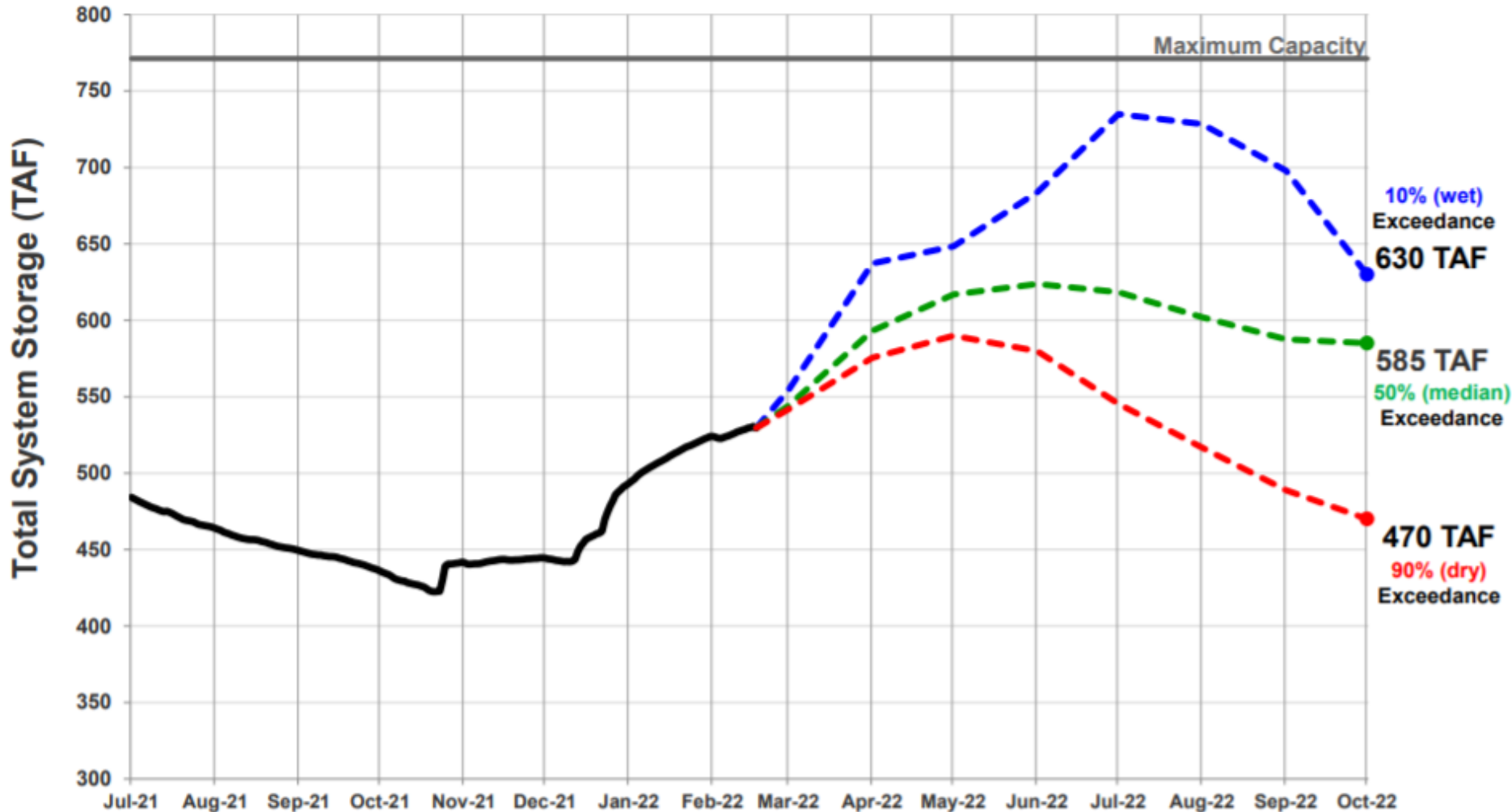
**Italicized numbers for the current month indicate a to-date comparison with previous year, otherwise previous year data are totals*

	Gross Water Production (mgd) to Date											
	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22
Actual	193	193	187	158	126	122	123	139	-	-	-	-
WOH FY2022	125	126	124	113	99	97	98	105	-	-	-	-
EOH FY2022	68	67	63	45	27	25	25	34	-	-	-	-
Last Yr	210	211	200	185	153	135	126	126	136	165	182	192
WHO FY2021	137	137	133	125	112	104	99	99	103	115	123	127
EOH FY2021	73	74	67	60	41	31	27	27	33	50	59	65
% Change	-8%	-9%	-6%	-15%	-18%	-10%	-2%	10%	-	-	-	-

Projected 2022 Total System Storage



Total System Storage WY2022



Supplemental Water Supply



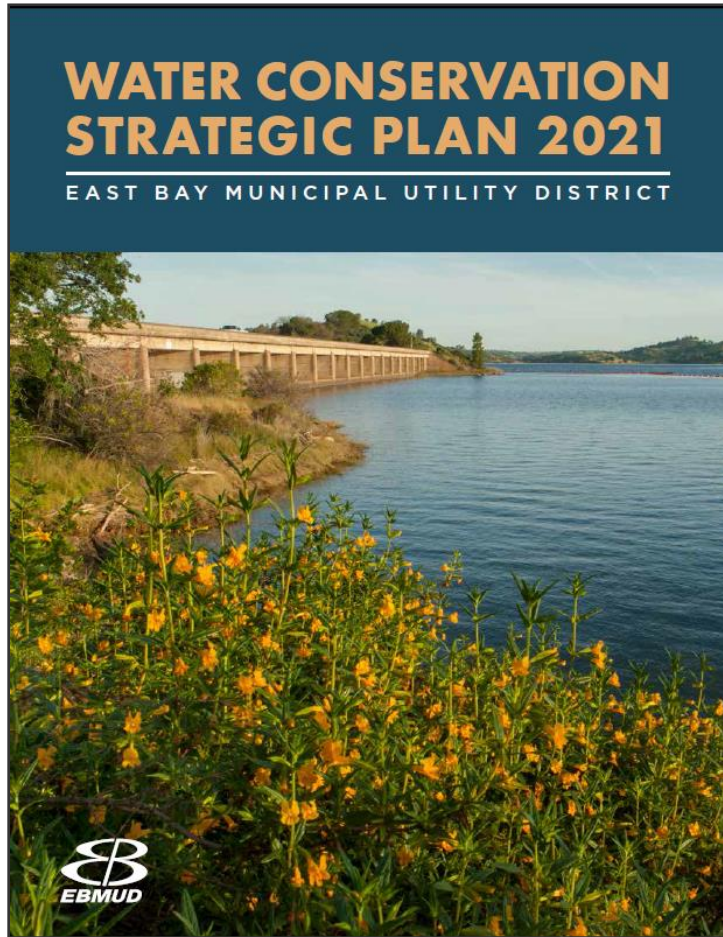
- Record dry January and February to date
- Runoff forecasts adjusted to account for lower soil moisture
- Freeport operations restarted February 8, 2022
- Diversion totals through February 17:
 - 23,300 AF diverted of 35,250 AF allocated by US Bureau of Reclamation
 - 2,310 AF diverted since restart
- Contract Year 2022 CVP supply pending
- Imports will be re-suspended if hydrology improves



Freeport Intake Facility



Agenda

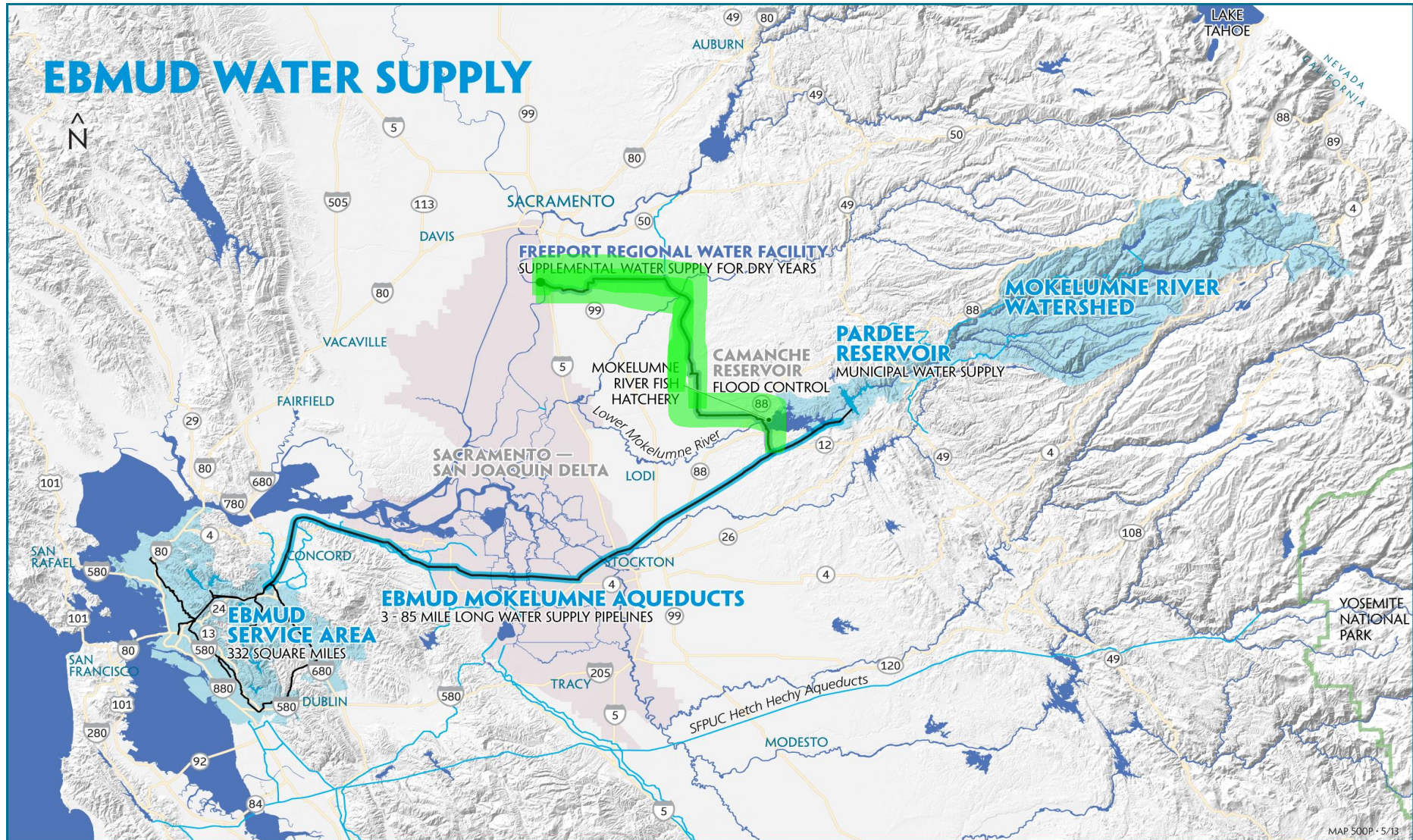


- Program background, drivers, and goals
- Program elements
 - Water Management Services
 - Incentives & Rebates
 - Education & Outreach
 - Regulation & Legislation
 - Supply Side Conservation
 - Research & Development
- Implementation
- The LAC connection

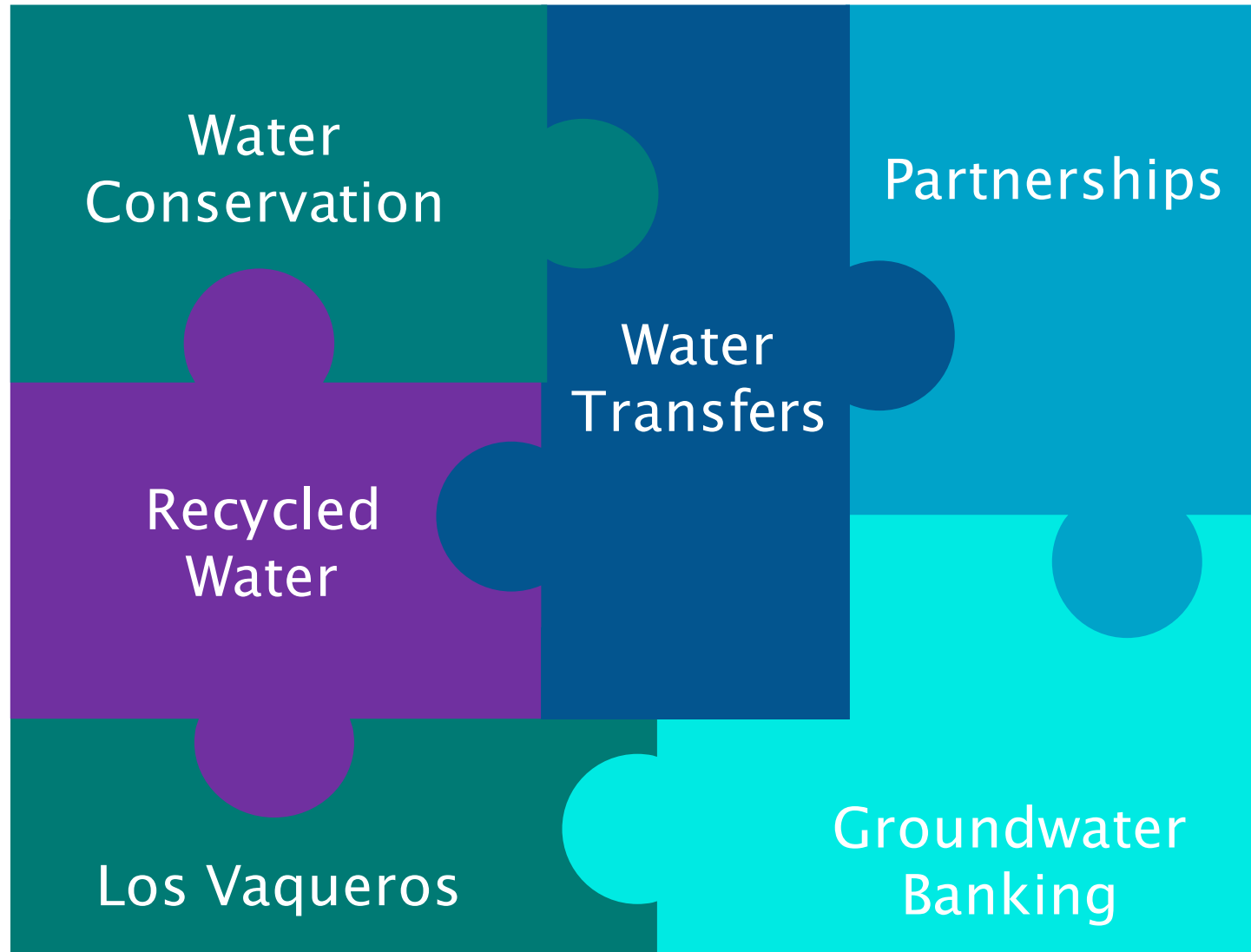
Background



From the Snowflake to the Bay



EBMUD's Long-Term Water Supply Planning



EBMUD Water Conservation Program



EAST BAY MUNICIPAL UTILITY DISTRICT

Ultra-Low-Flush Toilet Rebate Program

For Business and Residential Customers

Water Conservation Division
P.O. Box 24055, MS 48
Oakland, CA 94623
510.287.0590

STEPS TO RECEIVE A REBATE

1. Review EBMUD approved fixture list.
2. Purchase and install your new toilet(s). Toilets must replace existing toilets using more than 1.6 gallons per flush. No rebates are given for new construction.
3. Fill out the application below. ALL INFORMATION MUST BE PROVIDED.
4. Return completed application and original, legible purchase receipt to: EBMUD, P.O. Box 24055, MS 48, Oakland, CA 94623.
If you need your original receipts returned, please enclose a self-addressed stamped envelope.



2021 WCSP Update



Future Program Drivers



East Bay Municipal Utility District
@ebmud

Garden for the 🌸🌸🌸! This fall, start a California native garden and bring nature to your doorstep. Find native plant sales, nurseries and resources at bit.ly/naturehood1.
#fallplantingseason #naturehoodgardening



4:44 PM · Nov 9, 2020 · Twitter Web App

1 Retweet 4 Likes

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

FINAL REPORT
April 2017



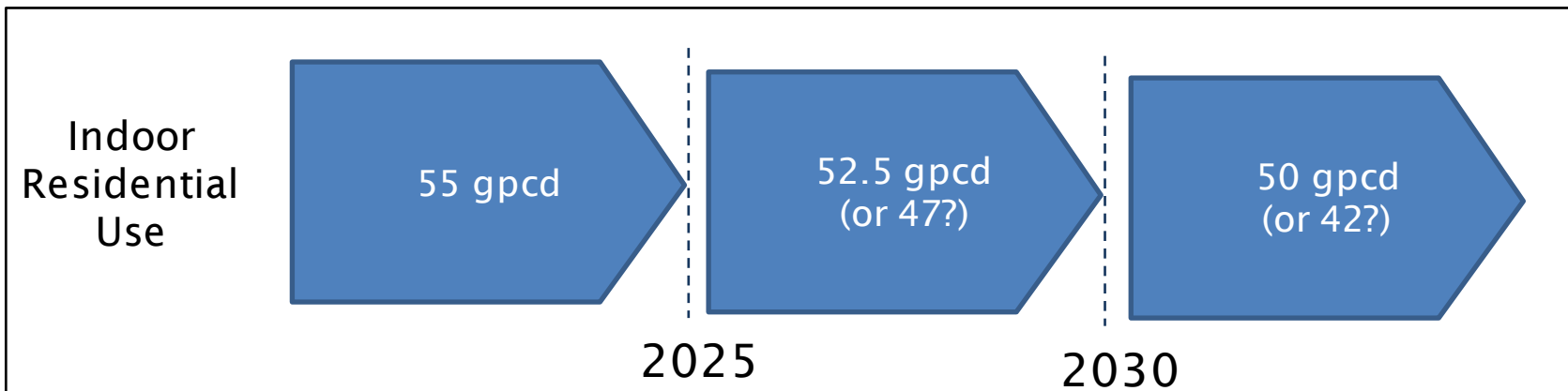
Regulatory Requirements



Water Use Objectives:

$$\begin{aligned} &\text{Indoor Residential Use} \\ &+ \\ &\text{Outdoor Residential Use} \\ &+ \\ &\text{Dedicated Commercial Irrigation Use} \\ &+ \\ &\underline{\text{Distribution System Water Loss}} \\ &= \end{aligned}$$

Annual Water Use Objectives

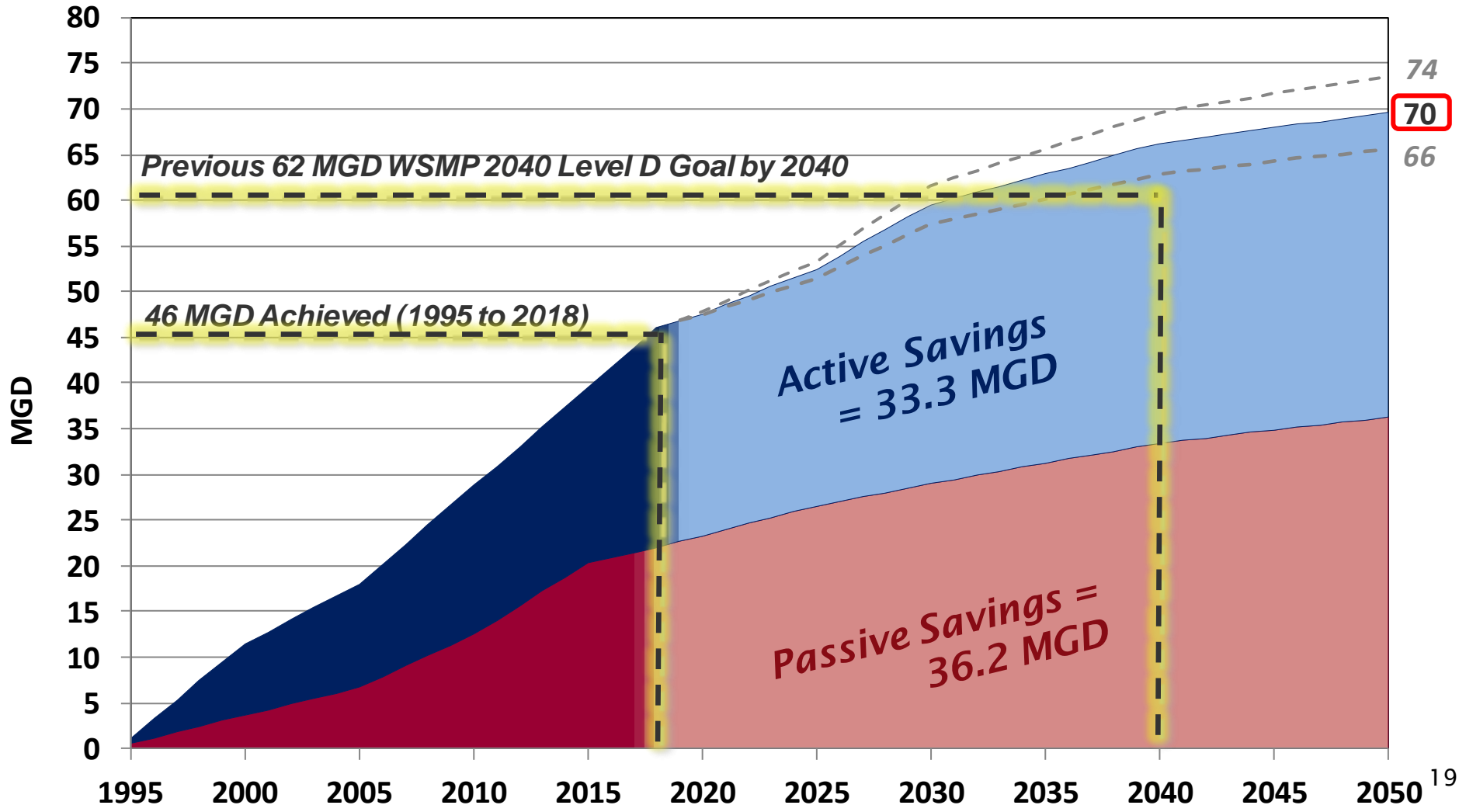


District Strategies Improving Resiliency

Water Conservation - Looking Forward



Water Conservation Forecasts



District Strategies Improving Resiliency

Water Conservation - Master Plan (2021 Update)



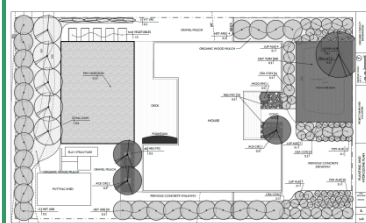
Water Management



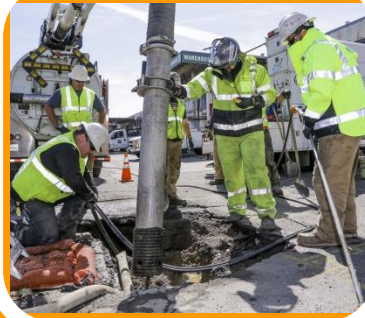
Rebates & Incentives



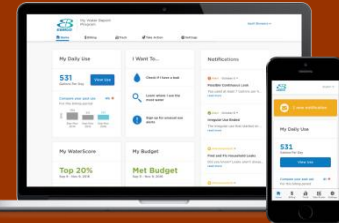
Education & Outreach



Regulation & Legislation

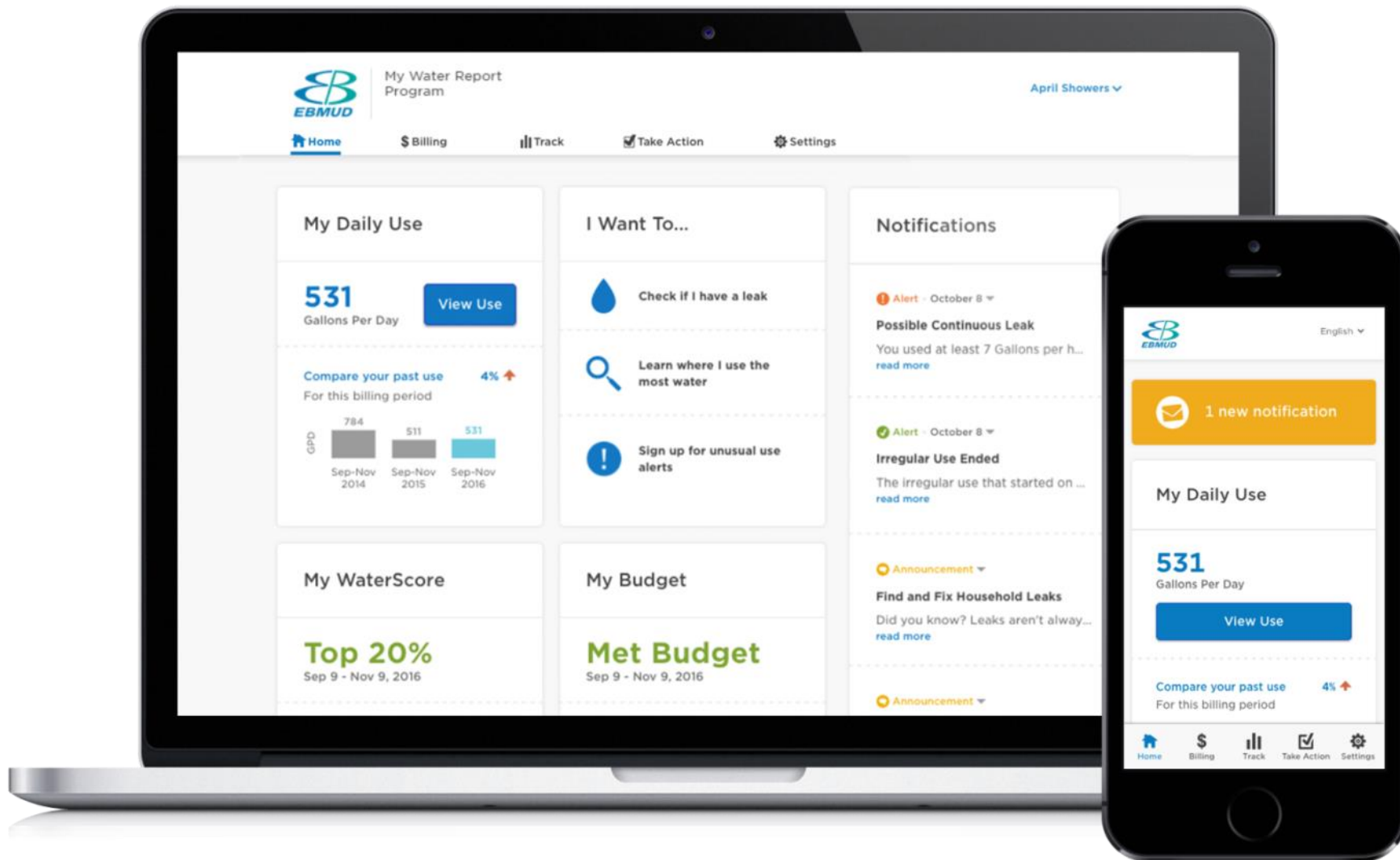


Supply Side Conservation



Research & Development

Water Management Services



Water Management Services: Empowering Customers



WaterSmart Program
123 Main Street
Anytown, CA 98765

415.555.5555 | info@citywater.com

YOUR HOME WATER REPORT

THIS IS AN INFORMATIONAL REPORT AND NOT A BILL.

SERVICE ADDRESS: 456 Washington St., Anytown
ACCOUNT NUMBER: 123873124-01

SIGN UP TO GET THIS REPORT VIA EMAIL:
citywater.com

Blair Jones
123 Washington St.
Anytown, CA 98765

Your WaterScore
AUG 1 to SEP 31, 2014

You used **more water** than most of your neighbors.

Gallons Per Day (GPD)
22 CCF = 276 GPD

Efficient Neighbors	111 gpd
Average Neighbors	250 gpd
You	276 gpd

Are we comparing you fairly?
2 occupants and a 2,000 to 4,000 sq. ft. yard. Not right? Log on to correct us. Your comparisons and recommendations will adjust accordingly.
citywater.com

How much you could be saving
If you took the actions below, you'd be closer to **152 GPD**. That's **\$515** per year in potential savings.

Water-saving actions just for you
Selected assuming your home has 2 occupants and a 2,000 to 4,000 sq. ft. yard.
[Log on to correct us!](#)

Potential savings if you:

Install a faucet aerator

24 GALLONS PER DAY
\$142 DOLLARS PER YEAR

Fill up the clothes washer

18 GALLONS PER DAY
\$92 DOLLARS PER YEAR

Change grass to native plants

82 GALLONS PER DAY
\$281 DOLLARS PER YEAR

[Log On](#)

Take the guesswork out of saving water. See:

- Where you're using the most
- All actions relevant to you
- Step-by-step tips and rebates

citywater.com

Registration Code: XYZXYZ
Zip Code: 98765

A free service offered by your water utility and powered by WaterSmart Software®

EAST BAY MUNICIPAL UTILITY DISTRICT

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: Matthew P Blackwell
Service Address: 1111 Richmond St
City: El Cerrito
Account #: 1149300001
Name #: 14403268
Est. Licensed Account #: 900
Household occupancy: 2
Days Household use: 88

Water Budget Summary:

	Used	Budgeted
Gallons used last 12 months:	41,340	49,257
Gallons used previous year:	41,324	48,451
Percent of budget for 12 months:		84%
Percent of budget for previous year:		87%
2 years estimated savings in gallons:		1,607

Irrigated Area at 1111 Richmond St

Billing Period	10/15/13	11/15/13	12/15/13	1/15/14	2/15/14	3/15/14	4/15/14	5/15/14	6/15/14	7/15/14	8/15/14	9/15/14	10/15/14	11/15/14	12/15/14
Budget (GPD)	165	162	173	177	167	140	99	108	113	170	166	140	140	140	140
Measured (GPD)	79	73	113	174	177	159	72	114	143	151	154	154	154	154	154
Program (gallons/ST)	3.03	2.93	7.43	39.56	12.4	7.68	12.8	13.91	7.02	12.3	10.93	7.49	7.49	7.49	7.49

EBMUD estimates the average indoor water use per person with high efficiency fixtures at 40 gpd (gallons per day). Program (gallons/ST) is the average outdoor water used (and savings) for outdoor use for each billing period. The Water Budget Calculation does not use a seasonal irrigation schedule but is based off the average monthly of November, December, January, and February. The WaterSmart Adaptive Water Budget for landscaping efficiency (Smart) 2015 is calculated using 90% of CFC for the irrigated area of landscaping. If you feel the irrigated area is not accurate or would like more information on this program, contact EBMD at (415) 287-7965.

www.ebmud.com/watersmart

We make it easy to conserve.

EAST BAY MUNICIPAL UTILITY DISTRICT

Commercial, Institutional, Industrial Newsletter

Volume 12, 2020

Key Takeaway

- The District is planning to integrate water budgets into standard water reports.

22

Water Management Services: IRIS Water Budgets




- Customized monthly water budgets for large irrigation accounts
- Includes local weather data, parcel information
- EBMUD is planning to modernize this system and expand to residential customers

EAST BAY MUNICIPAL UTILITY DISTRICT

water SMART | **Maximum Allowable Water Budget**

Thank you for participating in our Landscape Irrigation Water Budget Program. The following is your customized water usage profile for the past two years. ERMUD records indicate that this account primarily serves landscape irrigation. The graph compares your measured water usage to your budgeted water usage for each billing period.

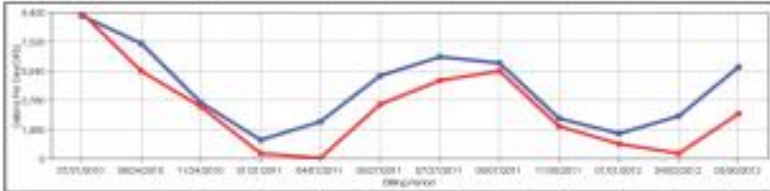
Customer Name	Gardens of Watertown HCA	
Service Address	1000 Winding Ct.	
City	Watertown	
Account #	123456789000	
Meter #	12345678	
Est. Irrigated Area	62,839	



Irrigated Area at 1000 Winding Ct.


Water Budget Summary	Used	Budgeted
Gallons used last 12 months	1,050,940	1,570,859
Gallons used previous year	1,330,496	1,712,653
Used: 2,381,436	Budget: 3,283,513	Percent: 72%

Congratulations—meeting your water budget saved you **\$3,682**.

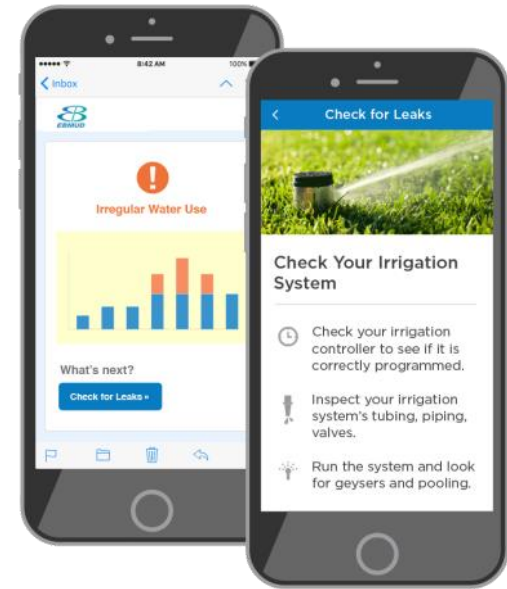
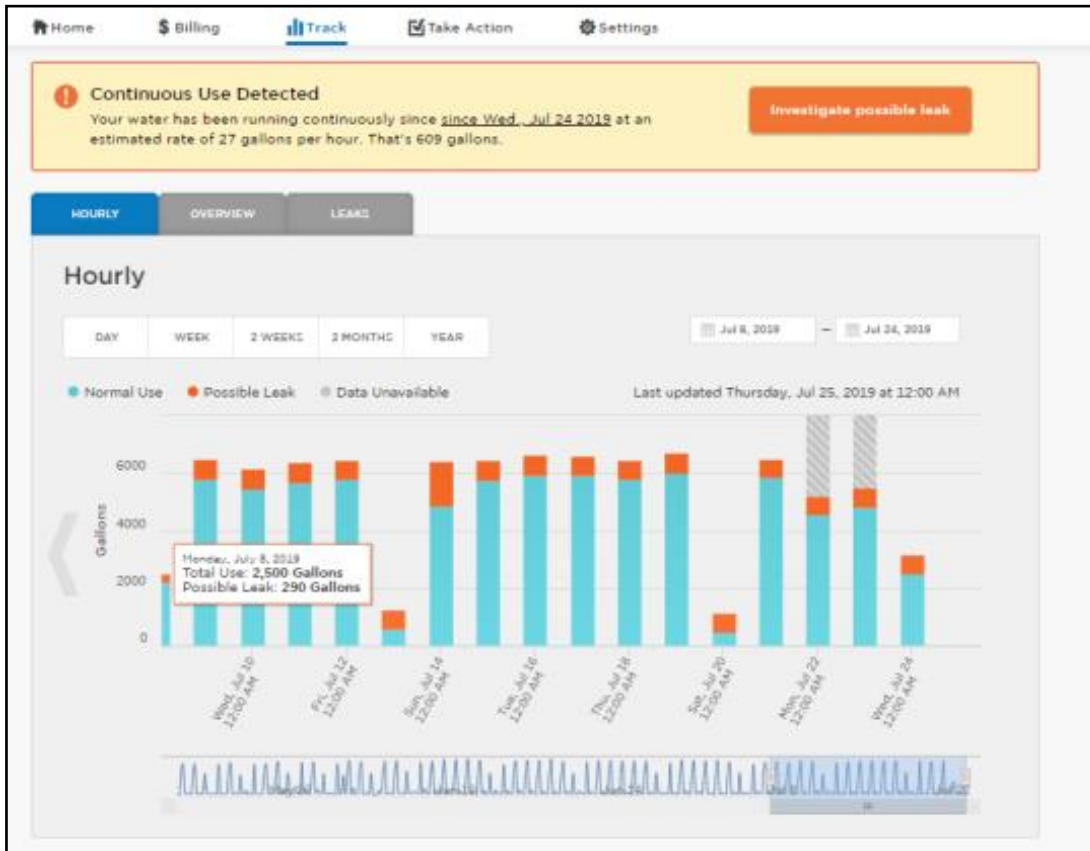


Billing Period	8/15/19	9/14/19	10/13/19	11/11/19	12/10/19	1/7/20	2/4/20	3/4/20	4/1/20	5/1/20	6/1/20	7/1/20	8/1/20	9/1/20	10/1/20	11/1/20	12/1/20	1/1/21	2/1/21	3/1/21	4/1/21	5/1/21	6/1/21	7/1/21	8/1/21	9/1/21				
BudgetedGPD	8285	7420	3634	1221	2438	5372	6601	6171	3628	1653	2770	5098	6601	6171	3628	1653	2770	5098	6601	6171	3628	1653	2770	5098	6601	6171	3628	1653	2770	5098
ConsumptionGPD	8480	5671	1387	396	62	312	2877	2670	2090	1613	186	2915	2670	2090	1613	186	2915	2670	2090	1613	186	2915	2670	2090	1613	186	2915	2670	2090	
EvapotranspirationETI	18.1	10.43	5.88	2.72	8.63	8.6	12.85	12.21	9.37	4.21	5.88	10.43	12.21	9.37	4.21	5.88	10.43	12.21	9.37	4.21	5.88	10.43	12.21	9.37	4.21	5.88	10.43	12.21	9.37	

*ET-I 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, effective January 2018, is calculated using 60% of Reference Evapotranspiration (ETI) for the irrigated area of established landscapes, using the new Model Efficient Landscape Ordinance from the State of California, Department of Water Resources (DWR). If you feel the irrigated area is not accurate or would like more information on this program, contact EBMUD at 510-968-7615.




www.ebmud.com/watersmart | We make it easy to conserve. 

Water Management Services: New Tools and Technology



LEAKS 101

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.
---	--	--

Key Takeaway

- 1 New technology gives us better tools to help customers save water.

Rebates & Incentives



- Some rebates “sunsetting” due to market saturation
- Commercial & multifamily
- Current focus is outdoor water use
- New: flowmeter rebate



Key Takeaways

- 1 Incentives and rebates continue to be important, but they may look different than they did ten years ago.
- 2 New focus on improving landscape designs for lasting savings.

Rebates & Incentives: Landscape Rebate Components



- Lawn replacement
- Efficient irrigation
 - Drip conversion
 - High efficiency nozzles
 - Smart controllers
 - Pressure regulators
 - Irrigation submeters

Rebates & Incentives: Super Rebate & Median Rebate



Super Rebate

Adopt these best practices:

- Sheet mulching
- Use of compost
- Native plants
- Planting in the cool season

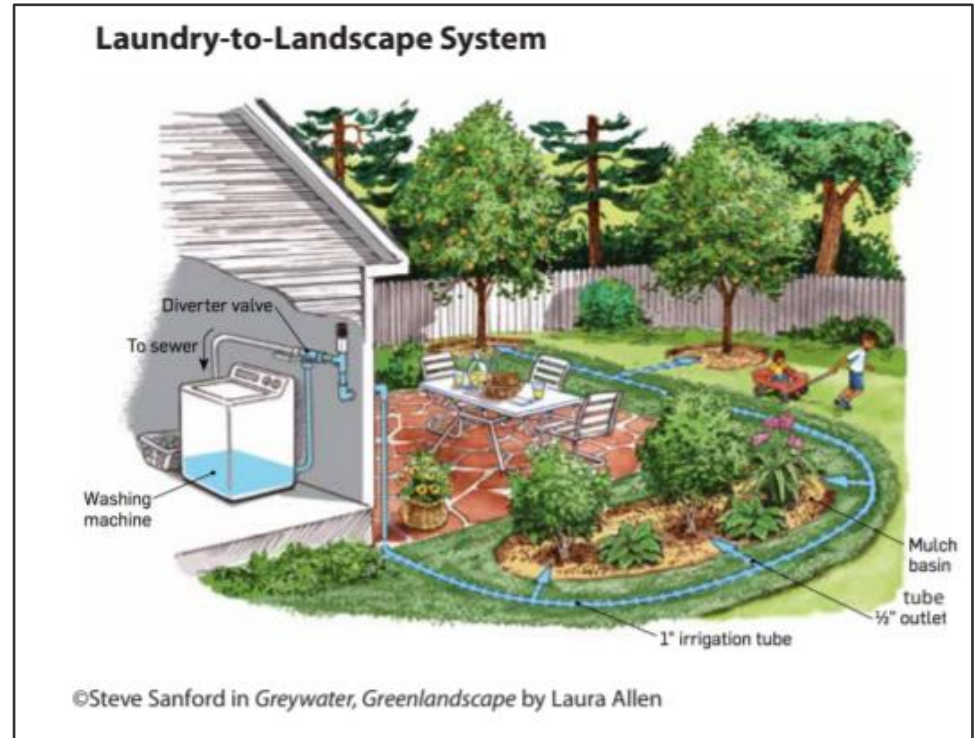


Medians

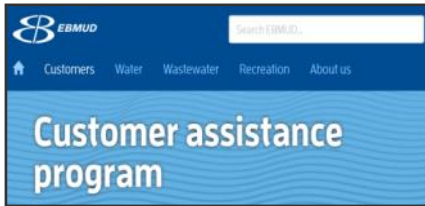
Double the standard rebate for strips of turf surrounded by hardscape

Perfect for HOAs, Cities, commercial properties

Rebates & Incentives: Flowmeter & Graywater Rebates



Rebates & Incentives: Designed With Equity in Mind



Coordination with CAP Program



FlumeCares Partnership



PG&E Water-Energy Coordination Program



Leak Repair/Assistance Program

Education & Outreach



EAST BAY MUNICIPAL UTILITY DISTRICT

water SMART Neighborhood Scavenger Hunt

The plants on this list are special! They are native to California, which means they are adapted to CA's climate and need little to no extra water in the dry summer months. Native plants are a great choice for the garden because they save water and also provide critical habitat and food for birds, butterflies, and beneficial insects. Grab this list and let's get started! How many of these plants can you find?

Scoring:
Plants = 1 point, Bee = 1 bonus point, Butterfly = 2 bonus points, Hummingbirds = 3 bonus points

Plant Name	Image	Image	Image	Image	Image
Thousand-Year Old Willow	California Redwood	Blackberry	California Poppy	California Sage	California Poppy
California Redwood	Blackberry	California Poppy	California Sage	California Poppy	California Poppy
California Poppy	California Sage	California Poppy	California Poppy	California Poppy	California Poppy
California Poppy	California Poppy	California Poppy	California Poppy	California Poppy	California Poppy
California Poppy	California Poppy	California Poppy	California Poppy	California Poppy	California Poppy

www.ebmud.com/watersmart

For more low-water use plant inspiration check out ebmud.com/plants

We make it easy to conserve. EBMUD



Key Takeaway

- 1 Updating materials and using new platforms to reach customers.

Education & Outreach Webinars Series and Office Hours



East Bay Municipal Utility District Retweeted

 StopWaste
@stopwasteorg

 Thirsty lawns are not compatible in our changing California climate. Join @ebmud for a zoom office hour chat on Sept. 22 to answer all of your questions about converting your lawn into a beautiful garden using compost, including rebates to save you \$.
bit.ly/3nChMfe



2:35 PM · Sep 16, 2021 · Sprout Social

3 Retweets · 6 Likes



EBMUD GARDEN CLASSES

Sept 30 Fall Garden Maintenance

Oct 14 Save our Water, Save our Trees

Classes are on Zoom in English and Spanish
More info: ebmud.com/WaterSmart

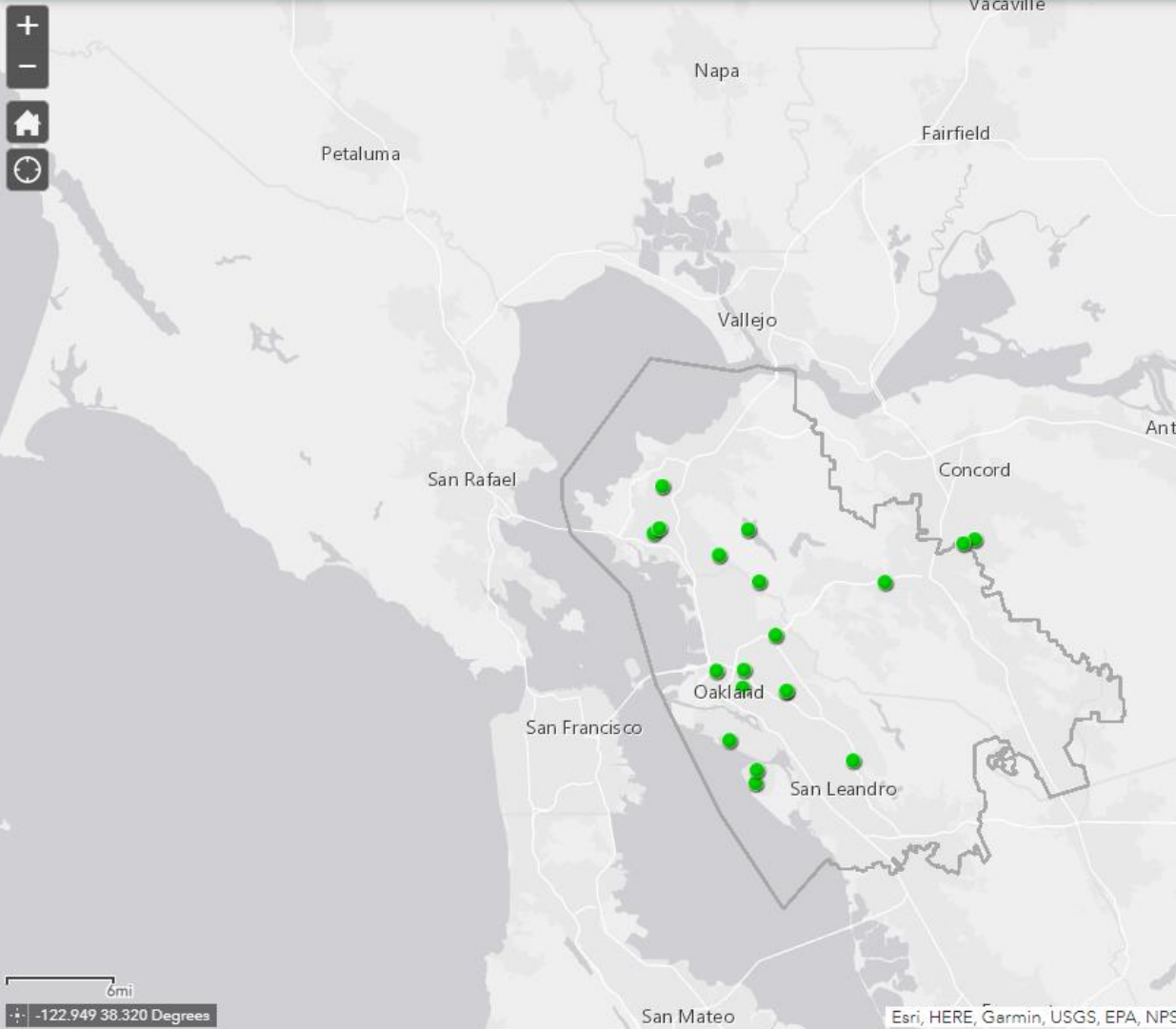
Ask a landscaping EXPERT



Education & Outreach: Demonstration Gardens



Sustainable landscape map



0mi
-122.949 38.320 Degrees

Education & Outreach: Advertising and Marketing



Just a sip,
please

ebmud.com/drought

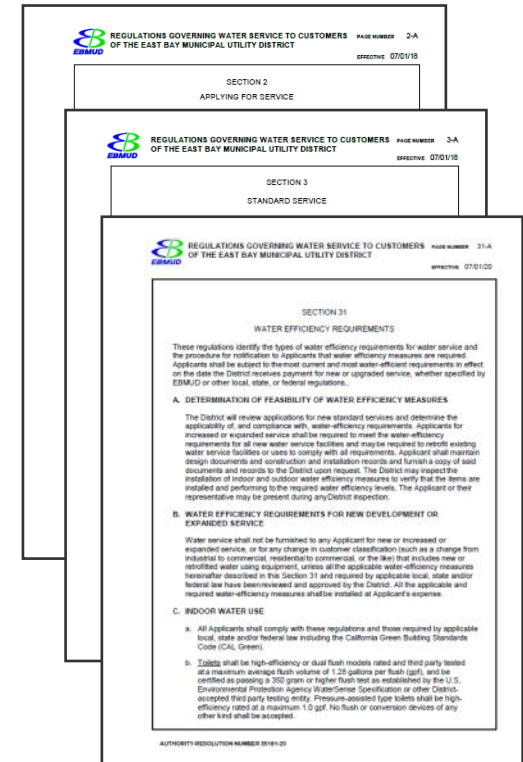
make
every drop
count



Regulations & Legislation



- **State and Federal Efficiency Regulations**
- **State Long-Term Framework and SB 555**
- **District Water Service Regulations**
 - Section 31 Reviews of Applications for New Service



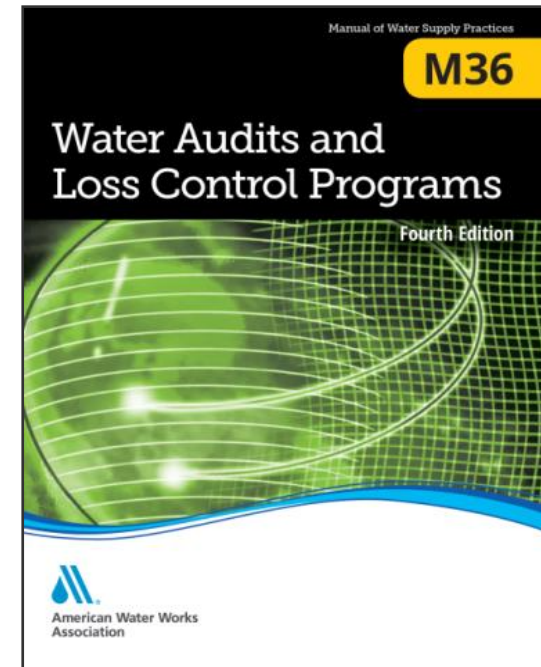
Key Takeaway

- 1 Regulatory requirements will continue to drive water conservation.

Supply Side Conservation



- Pressure management
- Active leak detection
- Speed and quality of repairs
- Infrastructure management



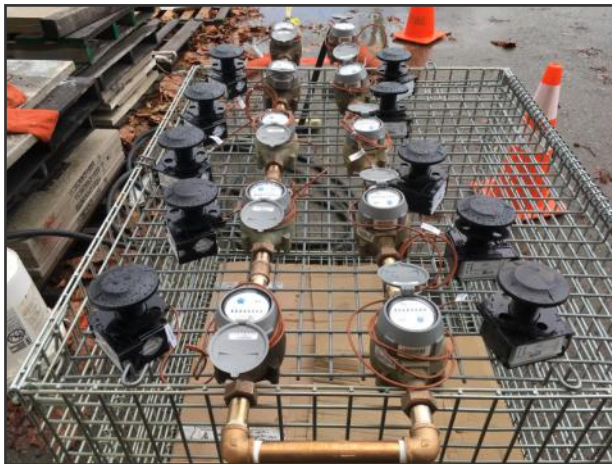
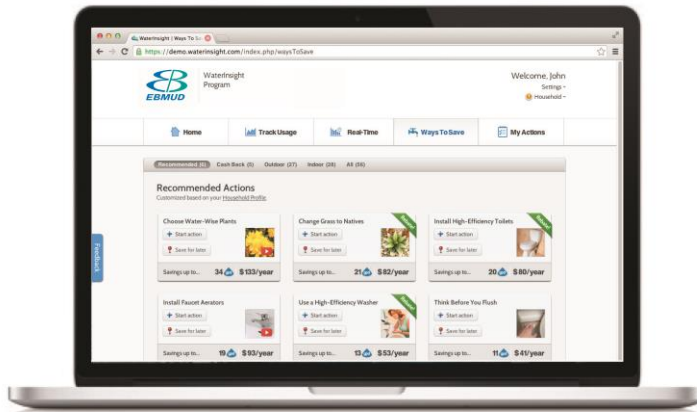
New Techniques to Find Leaks

FROM SPACE
ON EARTH
AT HOME

LEARN MORE ABOUT THE WATER FLOWMETER REBATE AT EBMUD.COM/REBATES

The image shows a satellite in space on the right and a smartphone displaying a water flowmeter rebate form on the left. A globe is visible in the background.

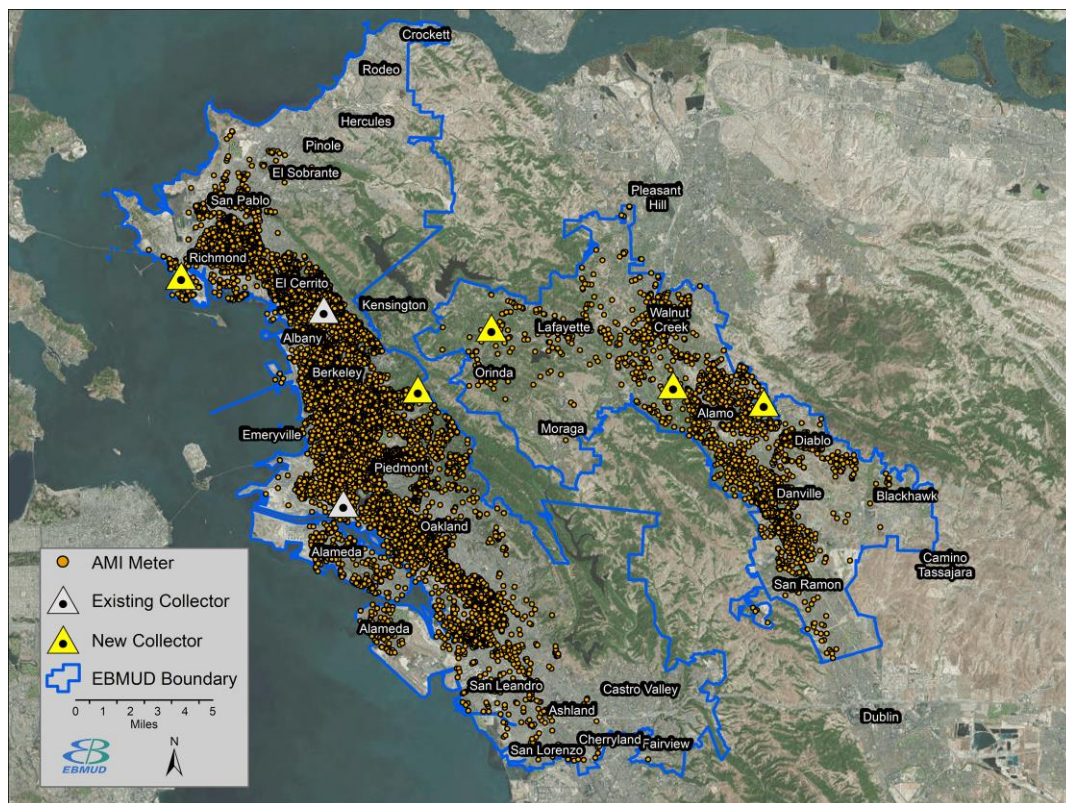
Research & Development



Key Takeaway

- 1 Continue to be a leader in research and development.

Research & Development: Current Focus on AMI

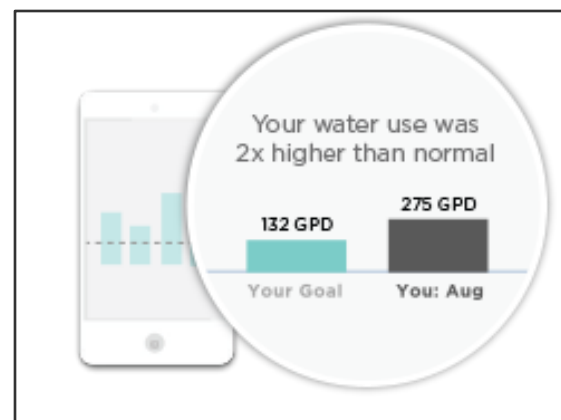


EAST BAY MUNICIPAL UTILITY DISTRICT

Real time water use data

Now in your hands!

ebmud.com/mywaterreport



Key Takeaway

- 1 Better data = better tools and more water savings.

1



Marketing and Outreach

2



Partnerships

3



Grant Funding

4



Technology

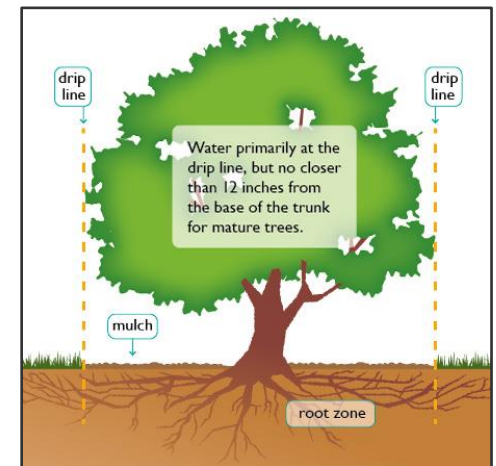
The LAC Connection



You Are a Key Partner!



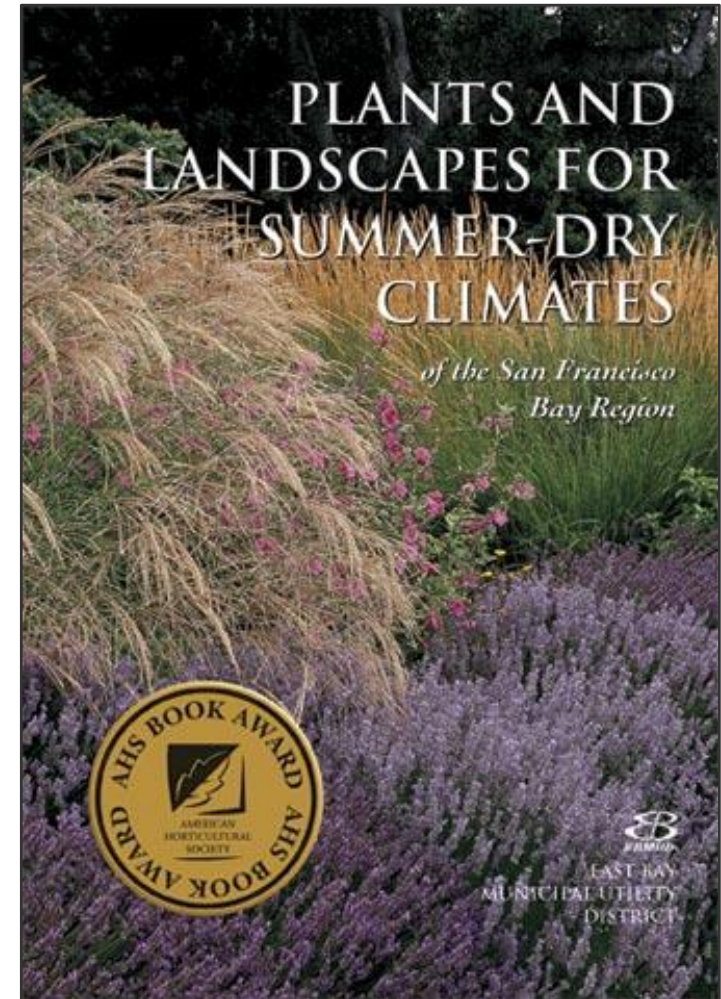
- Changing paradigms
- Forum for networking, peer to peer discussions
- Professional development
- Education and outreach



Program Development



- Feedback on EBMUD programs and rebates
- Development of new tools, materials, and resources
- Innovation and testing new technology
- ...other?





Questions, thoughts, ideas?