

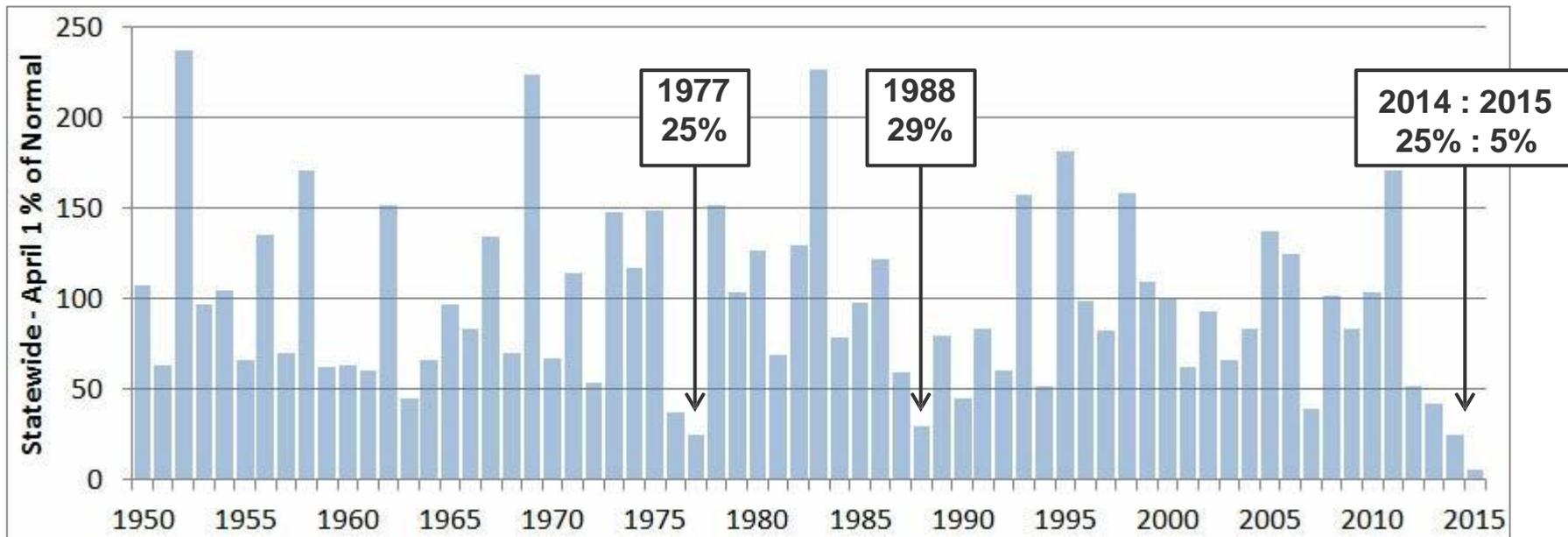


Water Supply Briefing

Contra Costa Local Agency Formation Commission
June 10, 2015

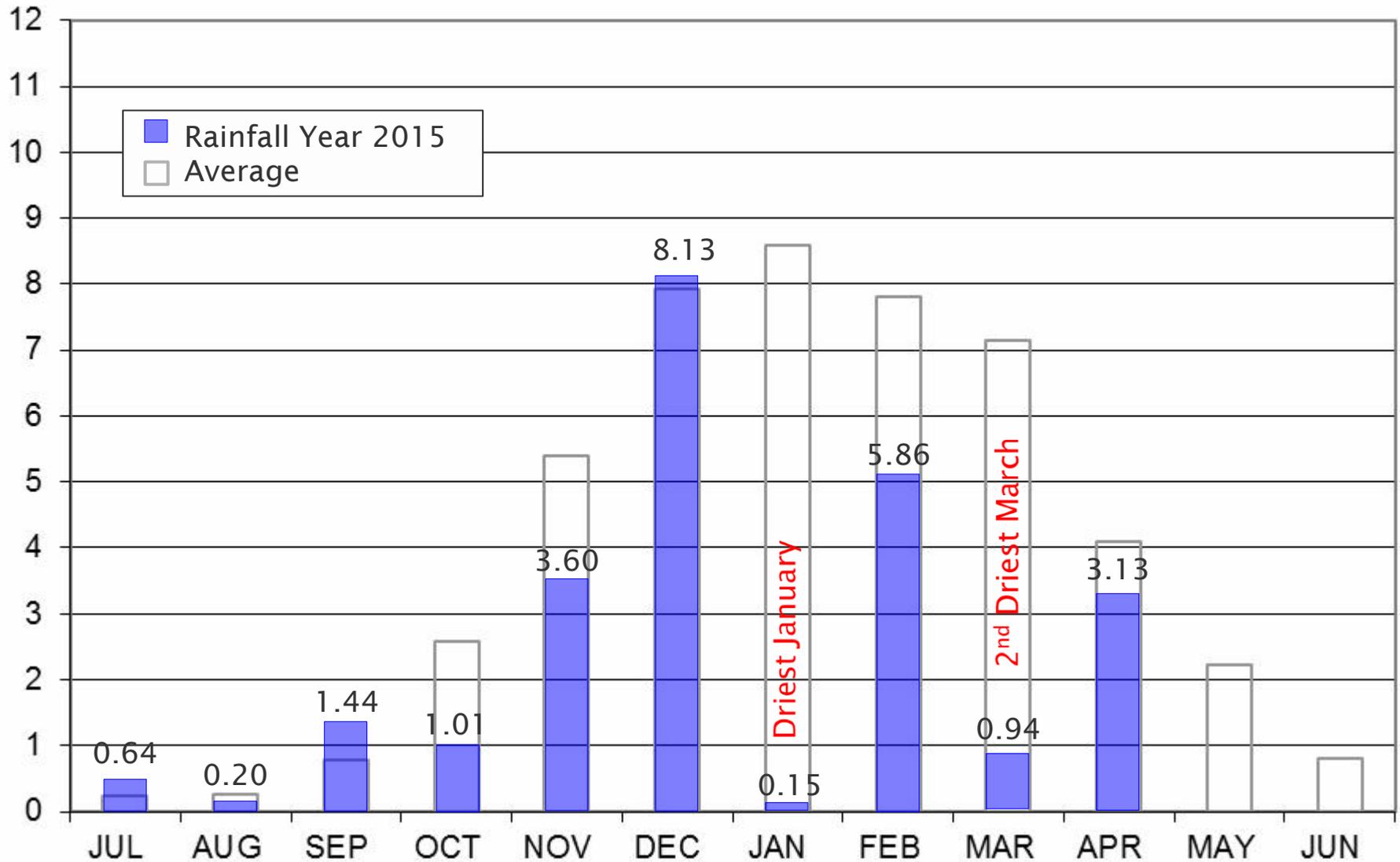
California Water Supply

April 1 Snow Survey - Historic Look



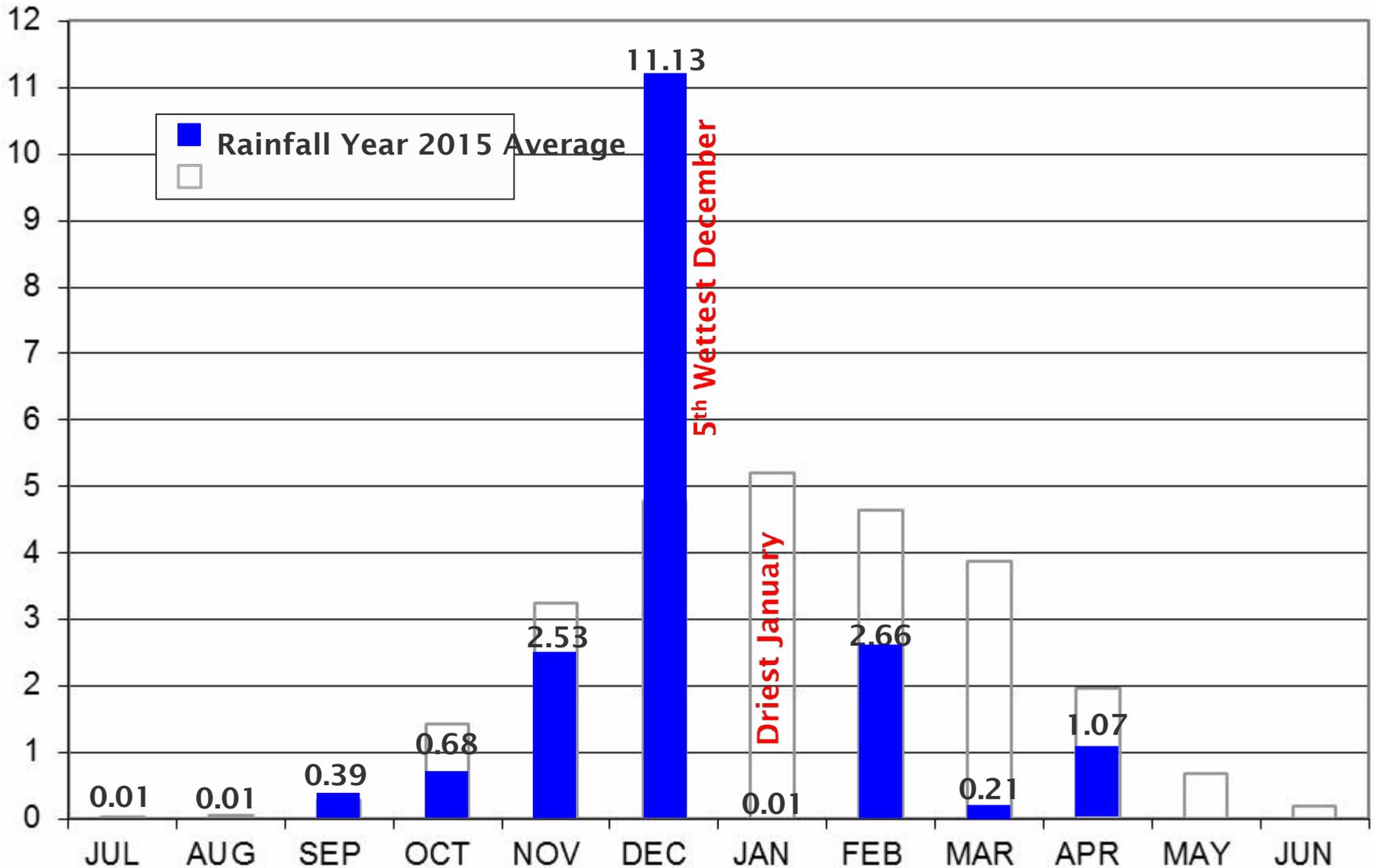
Current Water Supply

Mokelumne Precipitation



Current Water Supply

East Bay Precipitation



Current Water Supply

Precipitation & Snow



Mokelumne Precipitation

26.14"

(57% of average)

East Bay Precipitation

19.16"

(73% of average)

5% of the precipitation
accumulation season remaining



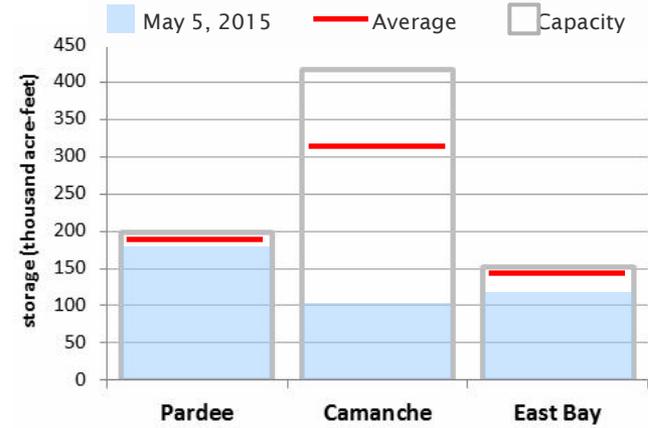
Ernst Schuetz

Current Water Supply

Reservoir Storage



Total System Storage
392,480 acre-feet
(62% of avg, 51% of capacity)



Water Supply Projections

Drought Sequences



Top 5 Driest Precipitation (assumes dry 2015 projection)

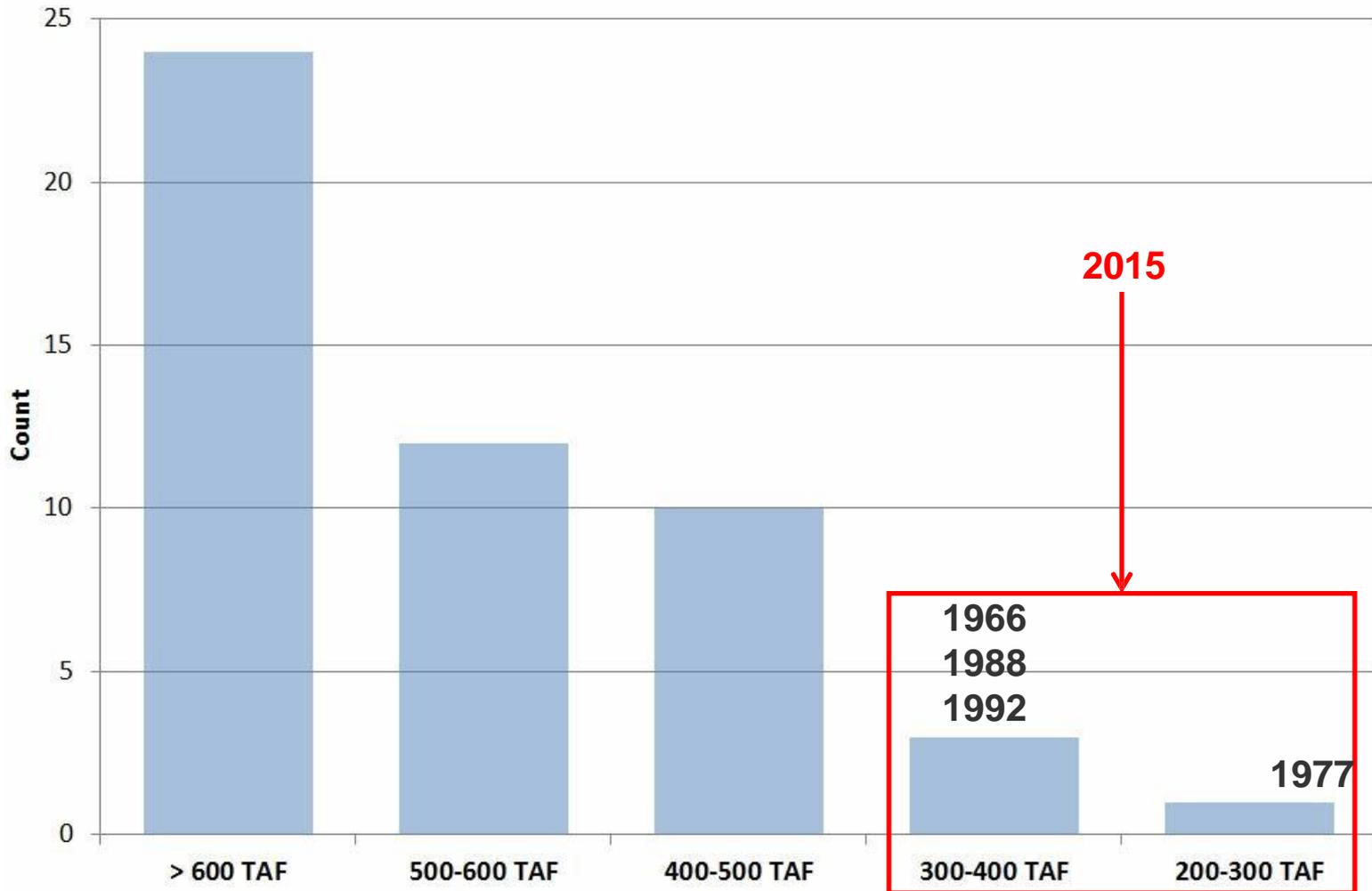
Rank	1 Year	2 Year Period	3 Year Period	4 Year Period
1	1977	1976-1977	2013-2015	2012-2015
2	2015	2014-2015	2012-2014	1987-1990
3	1976	1987-1988	1987-1989	1988-1991
4	1987	2013-2014	1959-1961	1931-1934
5	1988	2007-2008	1975-1977	1989-1992

Water Supply Projections

Historically Low Storage



**EBMUD End of Water Year Total System Storage
(since Water Year 1965)**



The 2015 Drought Plan



Supplemental Supply

+



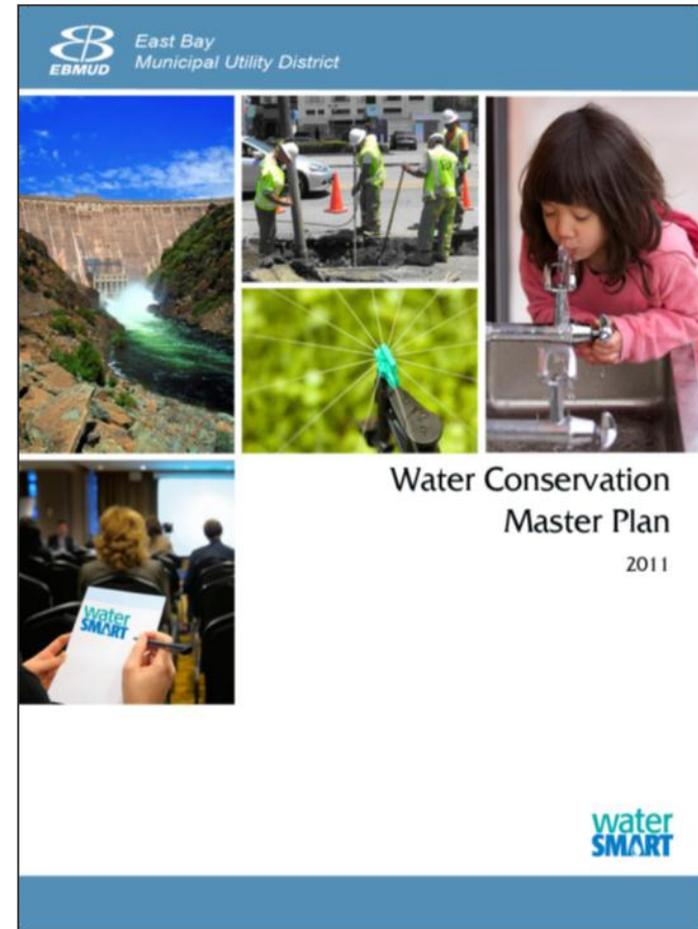
Customer Rationing

**A Community Effort
to Manage the Drought!**

2015 EBMUD Drought Actions



- Staged System of Drought Rates
- Water Shortage Emergency – Stage 4 Drought
- 20% community-wide reduction goal
- Purchase of additional water
- Prohibitions on water use
- Critical Drought Action Plan
 - Expand Outreach and Education
 - Expand Conservation Response



Mandatory District-wide 20% Demand Reduction Goal



- ✓ **District-wide** savings goal
- ✓ Community effort and everyone must step up
- ✓ Use is **not** based on individual water allocations
- ✓ Based on calendar year 2013
- ✓ Focus is on outdoor irrigation
- ✓ Penalties for high excessive use single-family residential customers who are not cutting back



EBMUD Section 28 Regulation Water Use Restrictions



- Watering of outdoor landscapes that cause excess runoff and no more than 2 days per week
- Using hose to wash vehicles, boats, trailers, aircraft without shut-off nozzle
- Washing down driveways and sidewalks
- Use of potable water in fountains or water features unless it is recirculated
- Flushing of sewers or hydrants (except for health & safety, operational need)

Section 28 – State Prohibitions Added



New State Prohibitions Added to Section 28

Potable water use to outdoor landscapes during and up to 48 hours after measurable rainfall.

Serving of drinking water other than by request at eating or drinking establishments

Operators of hotels and motels to offer option of choosing not to launder towels and linens daily.

Using potable water for irrigating ornamental turf on public street medians is prohibited.

Irrigating turf and ornamental landscape permitted no more than two days each week, not on consecutive days and ***before 9 a.m. and after 6 p.m.***

EBMUD Section 28 Drought Regulations Enforcement



Enforcement -

- Water Waste Procedure
 - Field Investigations, Community
- Process for noncompliance:
 - Customer contact
 - Written warning
 - Flow restriction
 - Discontinue service
- Associated water waste and monitoring charges
- Misdemeanor punishable by fine of up to \$1000



EBMUD Website Reporting of Water Waste



[Home](#) / [Water and drought](#) / [Conservation and rebates](#) / [Report water waste](#)

Note: All information noted below is required to provide important details to allow follow-up action to occur. Due to the high volume of incidences reported, follow-up may take up to a week or more. Please be assured that we strive to provide responsive service and are working diligently to address all water waste.

Type of water waste *

Amount of flow *

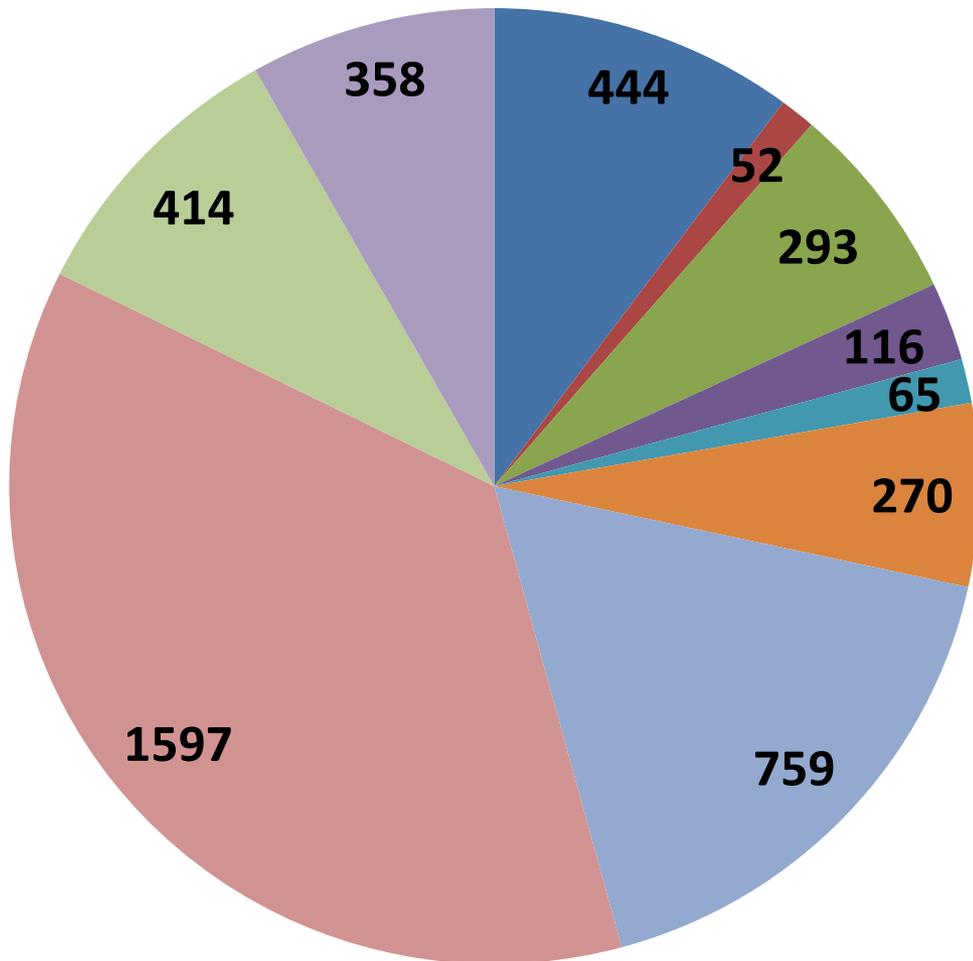
Type of property *

Address of problem (e.g. 1234 Main street) *

Cross street *

- [Leaks and high bills](#)
- [Residential](#)
- [Commercial](#)
- [Commercial Irrigation](#)
- [WaterSmart business certification](#)
- [Water conservation publications](#)
- [Conservation links](#)
- [▶ Report water waste](#)
- [WaterSmart gardener](#)
- [Water conservation appointment request](#)
- [WaterSmart tips](#)
- [Outdoor Conservation](#)

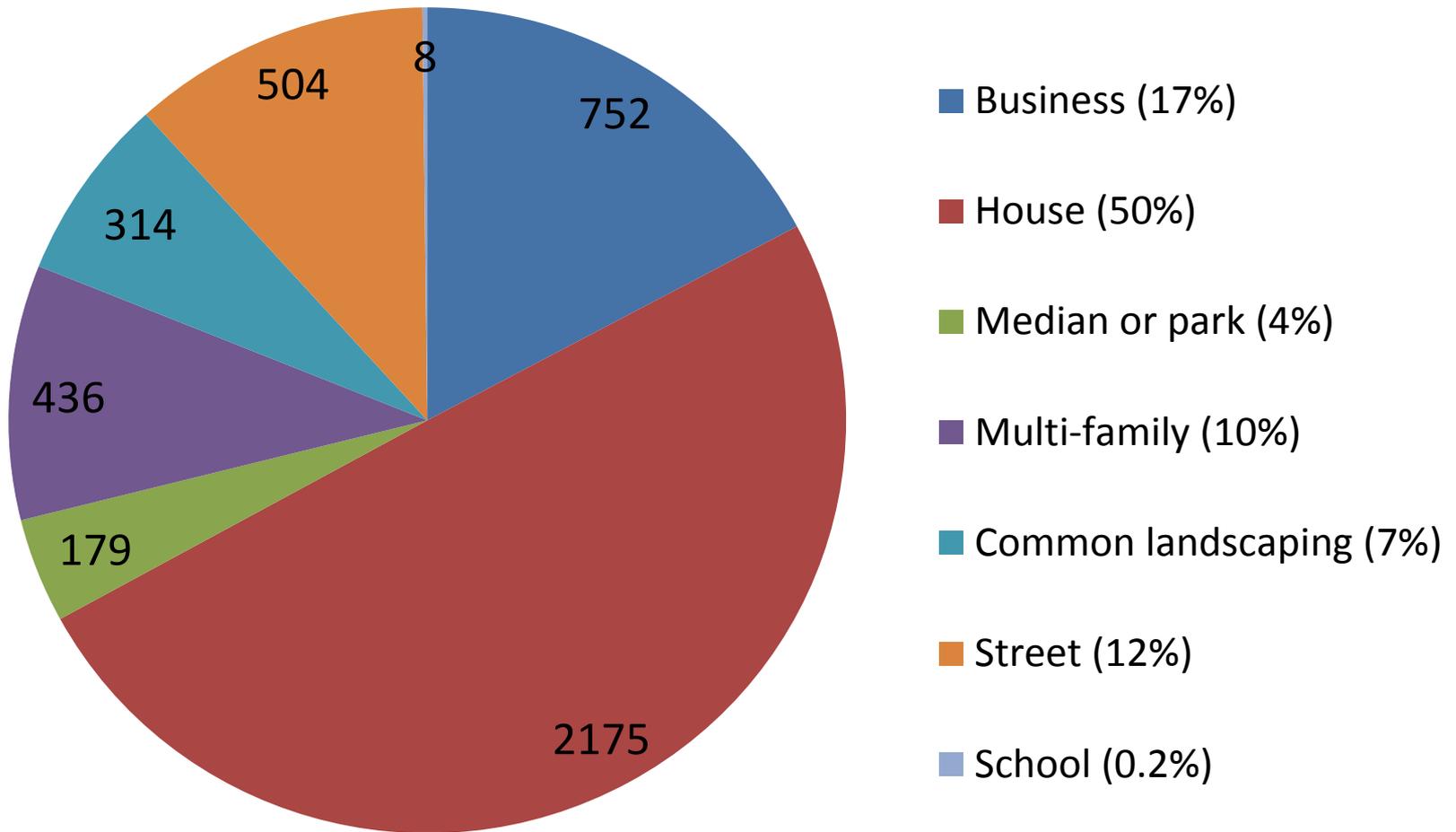
Water Waste Reporting and Enforcement



- Broken or misdirected sprinklers (10%)
- Hose without shutoff (1%)
- Hosing down sidewalk/driveway (7%)
- Hydrant Leak (3%)
- Leaking outdoor faucet (1%)
- Meter leak (6%)
- Other (17%)
- Overwatering (37%)
- Seepage from ground (9%)
- Street flooding (8%)

Total of 4,368 (Feb. '14 - June 4, 2015)

Water Waste Reporting and Enforcement



Total of 4,368 (Feb. '14 - June 4, 2015)

Water Savings Team Routes



Route #1:

- San Ramon, Danville, Alamo, Walnut Creek, Pleasant Hill

Route #2:

- Moraga, Lafayette, Orinda,

Route #3:

- Castro Valley, San Lorenzo, San Leandro

Route #4:

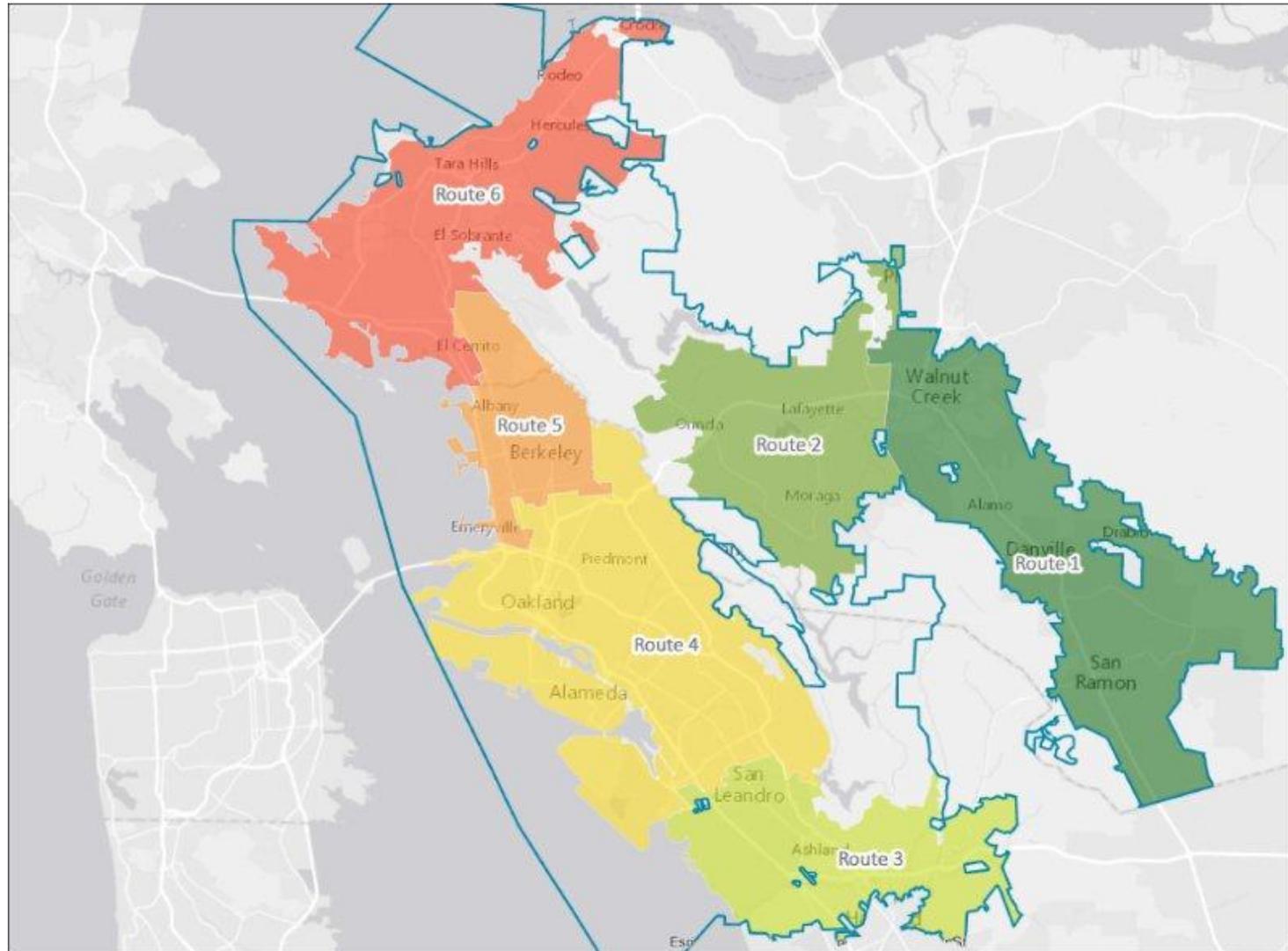
- Oakland, Alameda, Piedmont

Route #5:

- Emeryville, Berkeley, Albany, El Cerrito

Route #6:

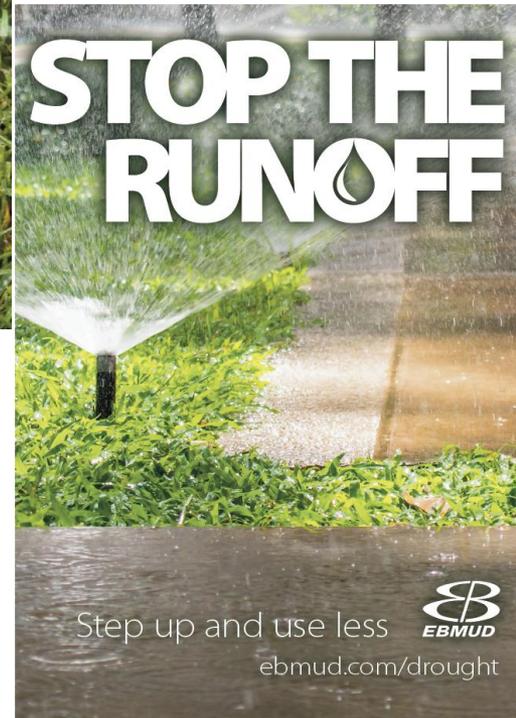
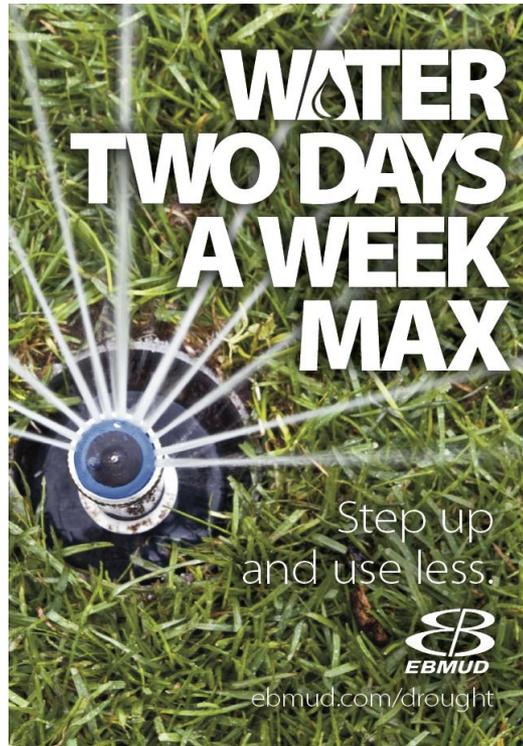
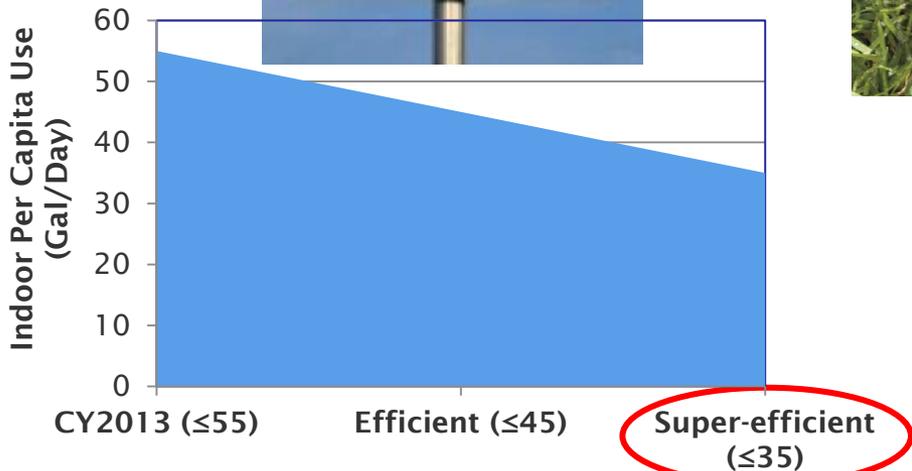
- Richmond, San Pablo, Pinole, Hercules, Rodeo, Crockett



Residential Indoor and All Outdoor Water Use



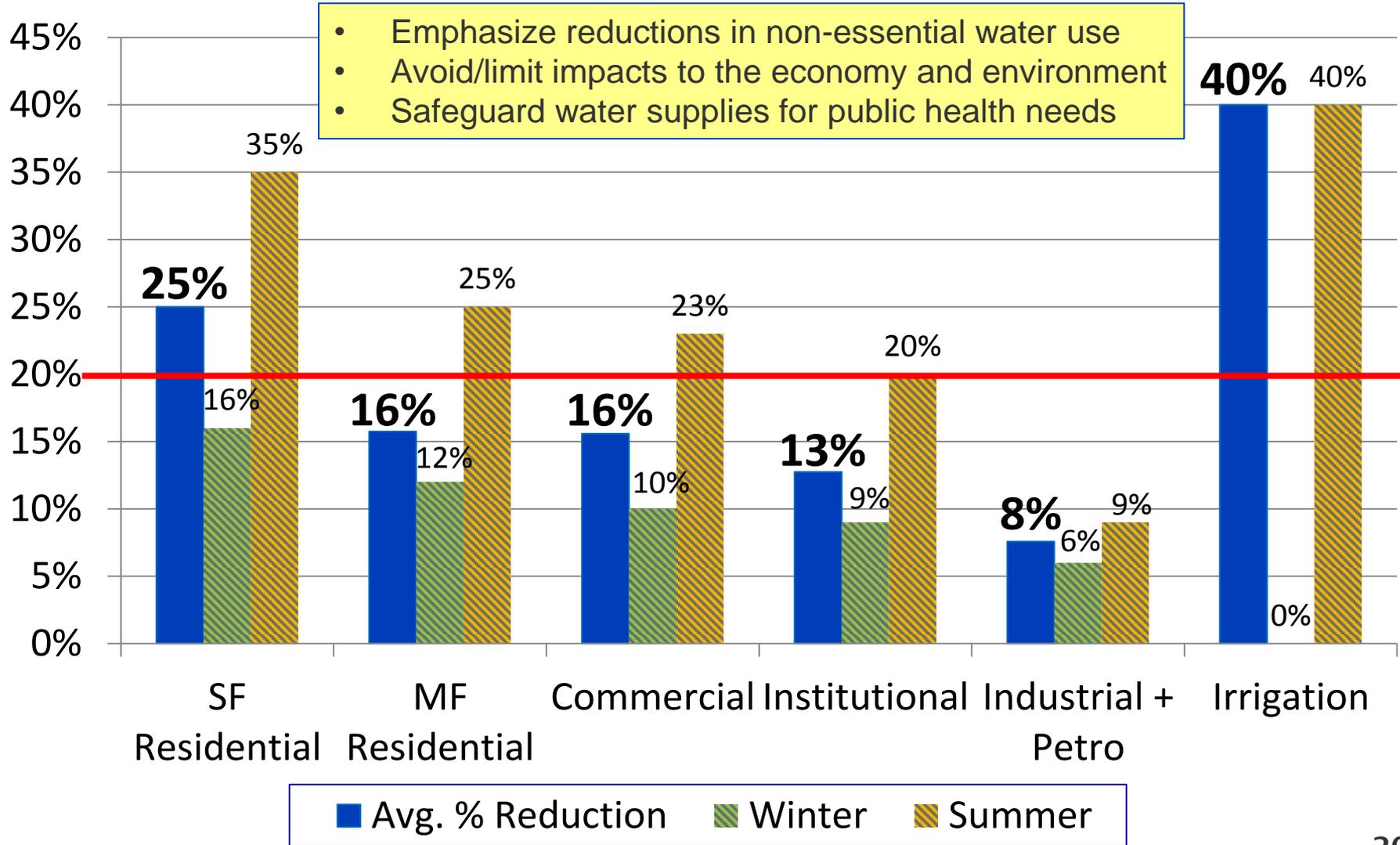
Strive for



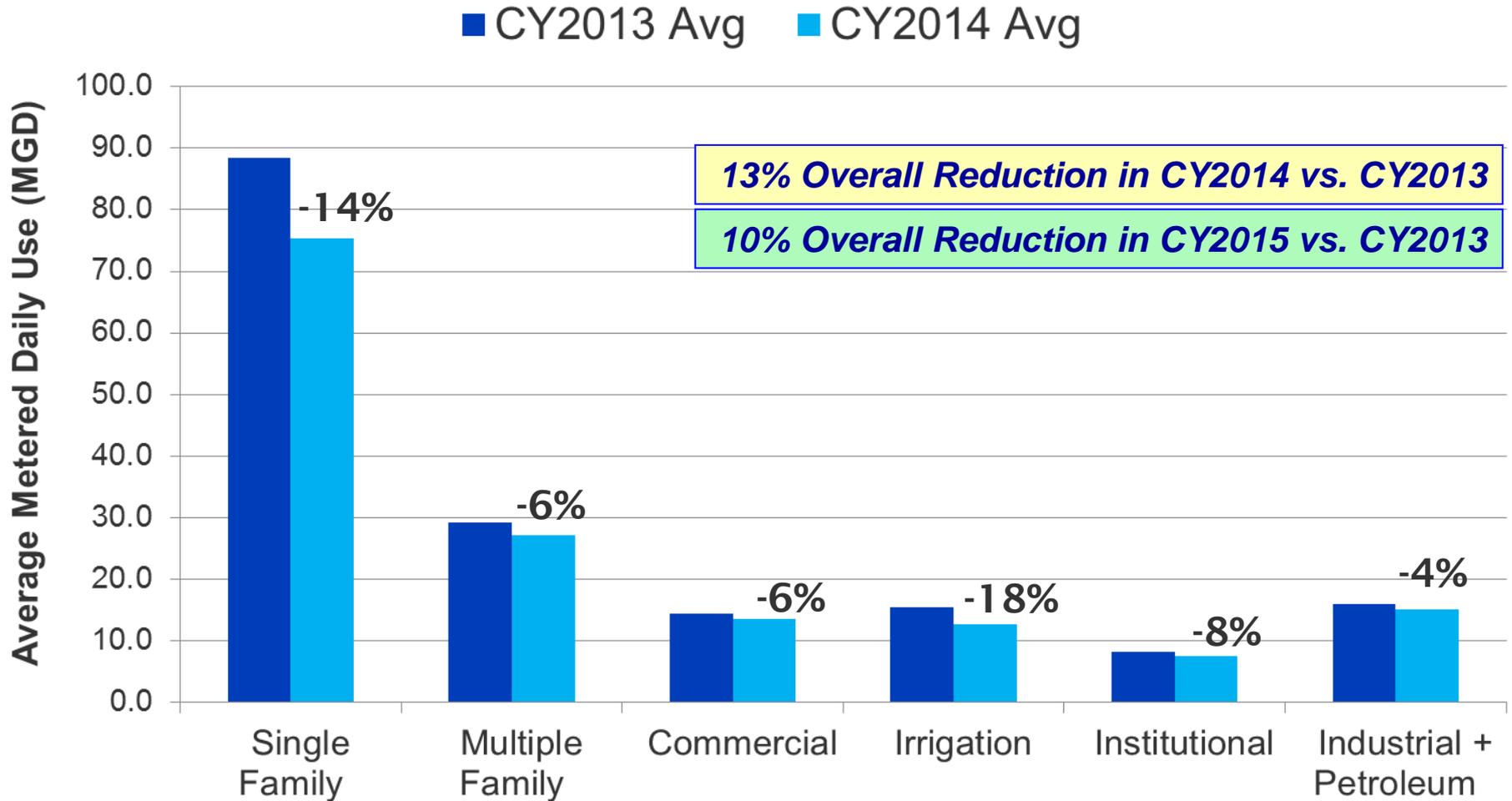
Water Conservation Goals to Achieve 20% System-wide Reduction



- Emphasize reductions in non-essential water use
- Avoid/limit impacts to the economy and environment
- Safeguard water supplies for public health needs



Average Metered Customer Use CY2013 and CY2014



Notes:

(1) Feb data begins on the 11th when EBMUD voluntary water use reductions were adopted.

Water & Information Management: Customer Engagement Initiatives



- Web services
- Self-survey kits
- Home Water Reports & irrigation budgets
- Leak notification
- Tips

- Online Home Water Works calculator
- Home Water Report expansion to 326,000 single-family customers
- Modified landscape irrigation water budgets w/2013 % reduction goals
- Expanded distribution of home survey kits
- WaterSmart Center tips, videos, tutorials



YOUR HOME WATER REPORT

Your WaterScore
JAN 23 TO MAY 24, 2013

You used more water than similar households.

Galons Per Day (GPD)
18 CLP = 478 GPD

Category	Value
Average Household	118 gpd
You	478 gpd

20% Drought Reduction Target

Month	18% GPD	15% GPD	12% GPD	9% GPD
May	18	15	12	9
Jun	18	15	12	9
Jul	18	15	12	9
Aug	18	15	12	9

Water-saving actions just for you

- Upgrade to a high-efficiency toilet
- Install smart meters
- Install high-efficiency showerheads

Log On

Education and Outreach



Public education

Marketing

Community events

Conservation workshops

Training & certifications

- WaterSmart Gardener Program
- Nursery advertising & forums
- Landscape Advisory Committee
- Green landscaper training
- Expanded school education
- Outreach to hotels/motels and restaurants
- WaterSmart Business Certification
- Community presentations & landscaping workshops

water SMART Plants

- Beautiful plants that thrive in the East Bay's winter-wet and summer-dry climate
- Water misers that require little to no water once grown
- Resilient plants that resist diseases and pests

I'm a water SMART Plant

Look for this tag!

EBMUD

Kid Scoop News

WATER SMART

presented by EBMUD

What if you turned on the faucet and nothing came out?

Replace the missing words.

SHOWER BUBBLE FAUCET
DRAINABLE SINK CUP

Water, Water Everywhere

Where do you get your water? When we need water, we just turn on a faucet. But where does it come from? It comes from a place called a watershed. A watershed is an area of land that drains water into a single body of water. The water then flows into a stream, river, or lake. Many plants and animals also depend on a clean and healthy watershed for their habitat.

Help the river find its way to the watershed.

HOW TO KEEP OUR BAY CLEAN

- Never pour chemicals down the drain.
- Use environmentally safe products whenever you can.
- Recycle and dispose of all trash properly.
- Don't be a water waster.

Water Wisdom Match the water-saving tip to the amount of water saved.

1. Turn off the water while you brush your teeth.
2. Use a home-made air-dryer instead of a hair dryer.
3. Keep your shower to under 2 minutes.
4. Use a home-made air-dryer instead of a hair dryer.
5. Use a spray bottle to clean windows and mirrors.

A. More than 50 gallons a week. B. Up to 10 gallons every day. C. 4 gallons every minute. D. More than 100 gallons. E. Up to 1,000 gallons a month. F. Up to 100 gallons a week.

Education and Outreach (Cont.)



- Public education
- Marketing
- Community events
- Conservation workshops
- Training & certifications

- Partnering with community based organizations
- Services for low-income, senior housing (e.g. Rising Sun)
- Services for property managers and homeowner associations
- Key contacts with city & county staff (e.g. public works, parks, etc.)



Community Signage



**THE LAWN
GOODBYE**

**GOLDEN
STATE
GOLDEN
LAWN**



ebmud.com/drought

We're doing our part to save water.

pping up and using less.



ebmud.com/rebates



FY15-16 Conservation Incentives



Plumbing
Fixtures

Appliances

Landscape

Irrigation
Systems

Process
Equipment

Customized

- Expanded \$2M budget for rebates
- Expanded free device distribution w/cities - *New*
- Expanded incentive/promotion of commercial technology upgrades
- Pilot “Pay as You Save” On-bill Financing – *New*



 EAST BAY
MUNICIPAL UTILITY DISTRICT



Up to \$ 2,500 Rebate
Single-Family Residential
Up to \$20,000 Rebate
Commercial & Multi-family
**For Lawn Conversion
& Irrigation Upgrades**

Effective January 1, 2013



Regulations Enforcement



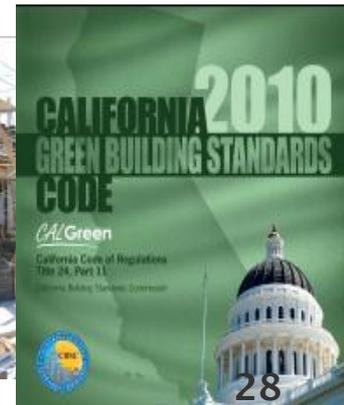
Section 28
Emergency
Regs

Local &
State
Ordinances

Plumbing
Code

Water Code

- 💧 Water Savings Team Patrol
- 💧 Outdoor water use restrictions (Section 28)
- 💧 Water waste monitoring & enforcement
- 💧 Excessive use and theft penalties
- 💧 Restaurant & hotel water saving practices
- 💧 New service plan check reviews (Section 31)



Supply Side Conservation



Leak
Detection

Meter
Accuracy

Water
Facility
Audits

Pressure
Management

Distribution
Area
Metering

- Expanded water loss control program monitoring and reporting
- Updated District facility water audits & efficiency plans
- Fixed Network Leak Detection Pilot Study (Kensington & Oakland)
- Distribution Metered Areas (Kensington & Danville)

Real Loss



Apparent Loss



Thank you for conserving...

LEAK is a four
letter
word.



ebmud.com

be water
SMART*er*

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