

# Moorpark-WWD1 DROUGHT



Presented by  
Dave Sasek, Director  
County of Ventura  
Water & Sanitation Department  
September 3, 2015

**OUR WATER  
SUPPLIES**

**CALIFORNIA  
DROUGHT**



**HOW DID WE  
GET HERE?**

**WHAT CAN  
WE DO?**

# VENTURA COUNTY'S WATER SUPPLIES



Local Stormwater  
Capture



State Water Project



Recycled  
Wastewater



Groundwater



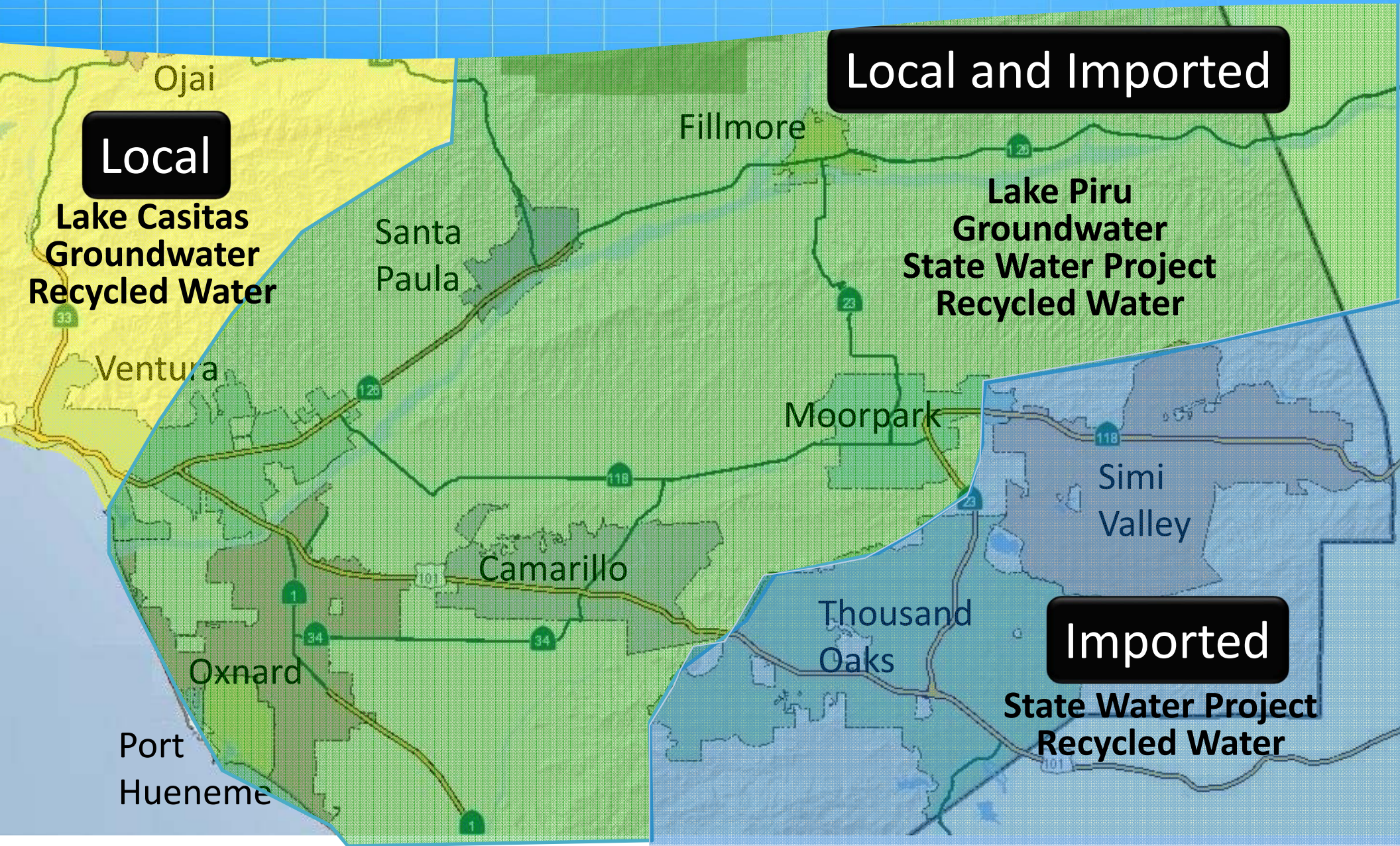


# STATE WATER PROJECT



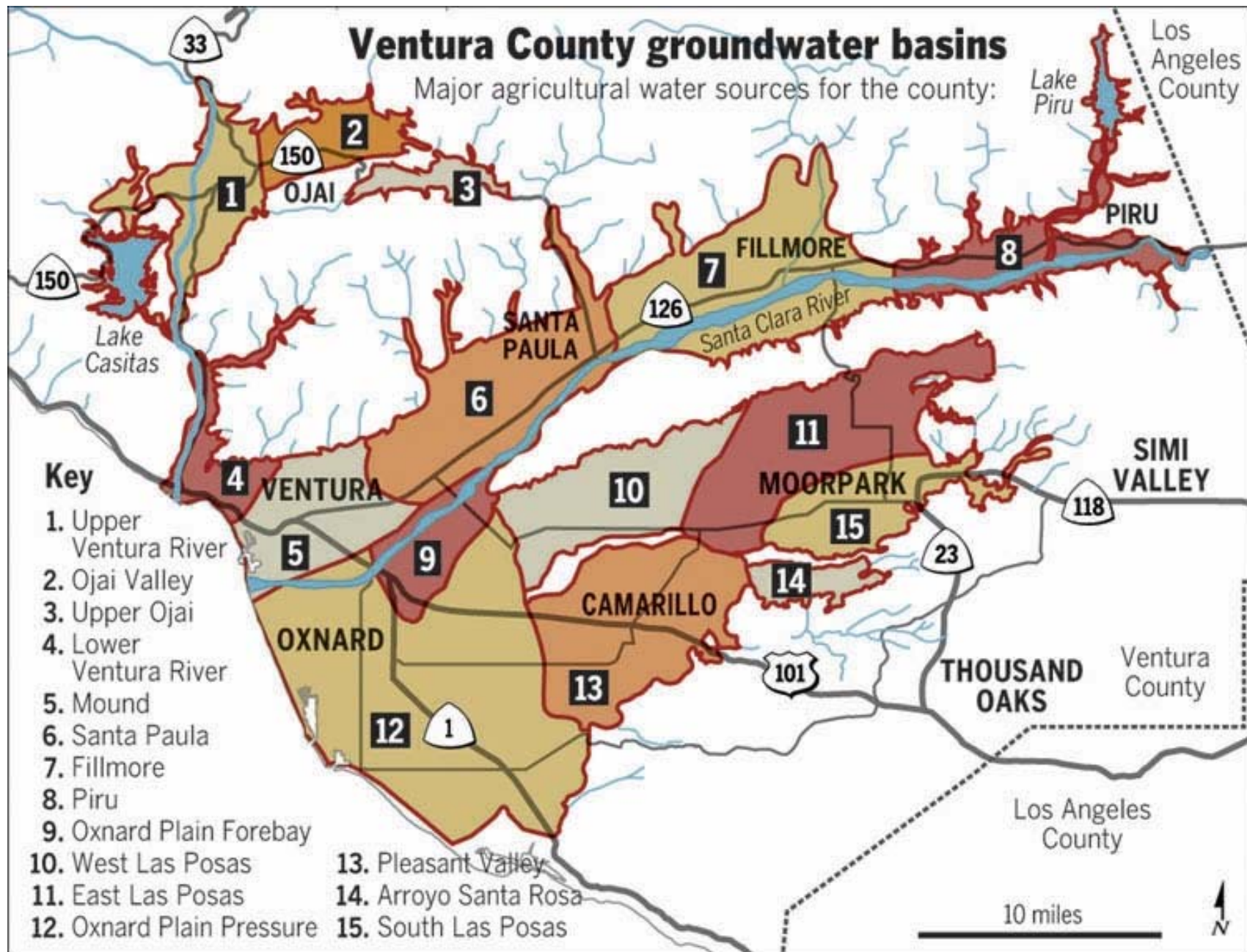


# WATER SUPPLY ORIGIN





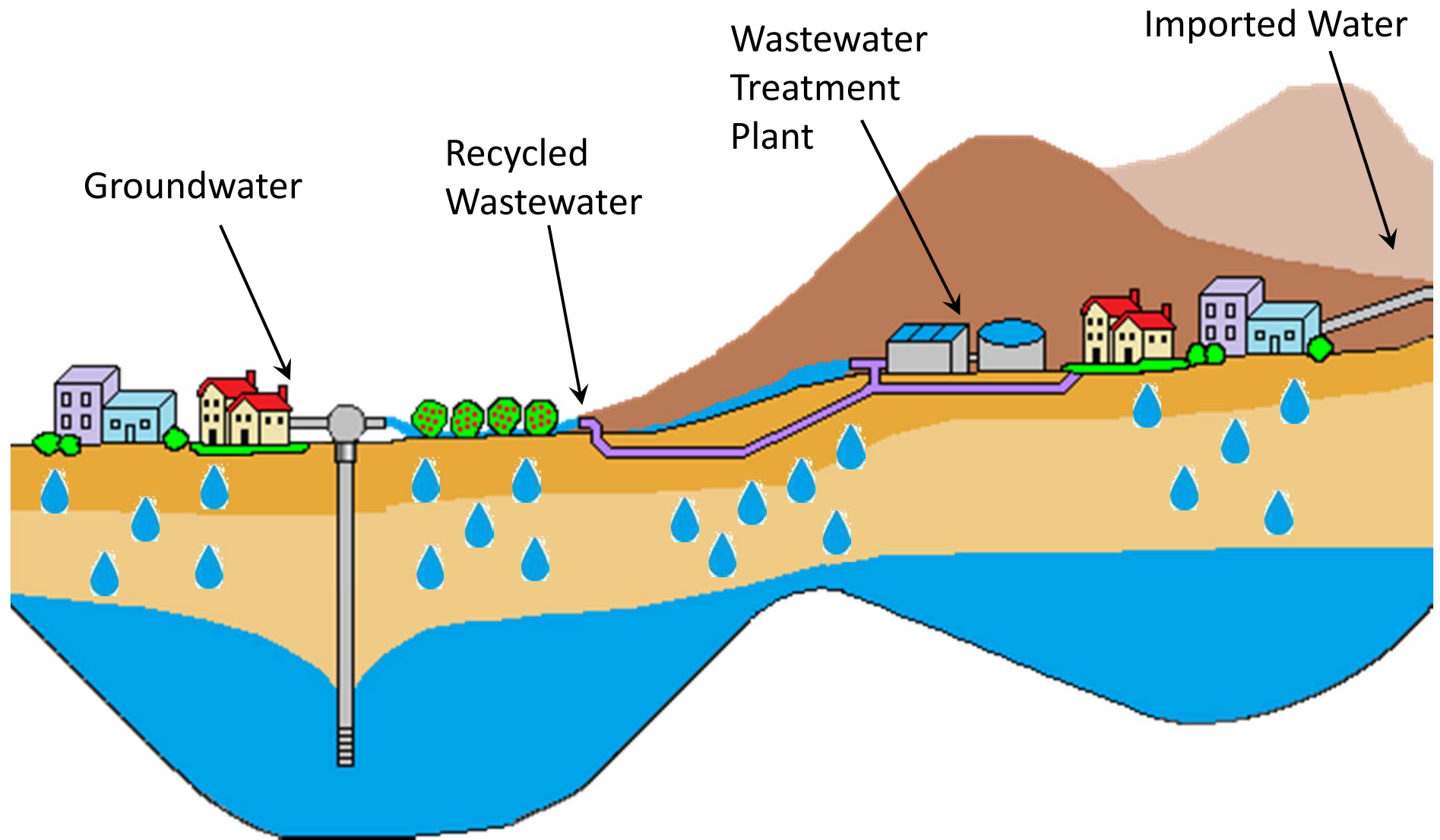
# GROUNDWATER



Source: Ventura County Watershed Protection District



# RECYCLED WATER



# **CALIFORNIA DROUGHT**





# CALIFORNIA WEATHER RECORD BREAKERS



**2013 - driest**

**2014 - hottest**

**2015 - lowest snowpack**

# LAKE OROVILLE 2011





# LAKE OROVILLE 2014



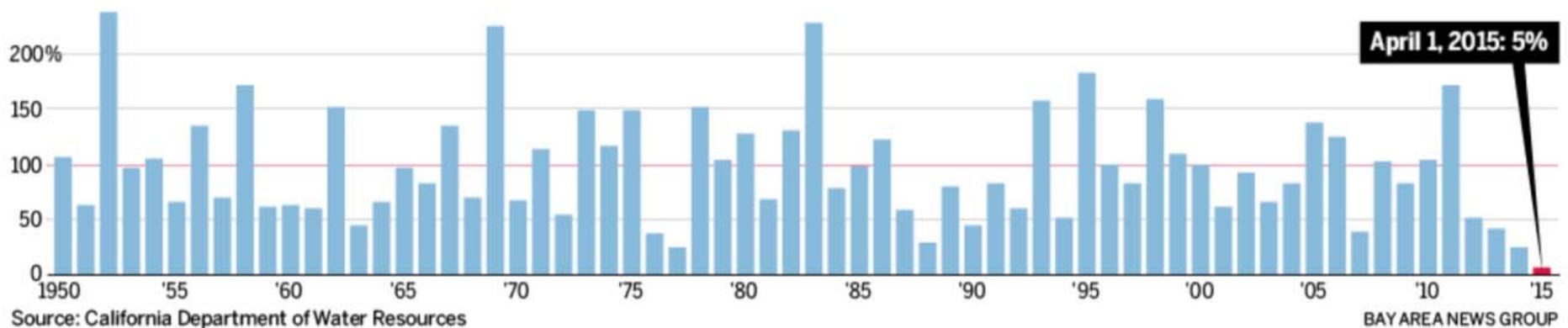


# CALIFORNIA WEATHER RECORD BREAKERS

## Sierra Snowpack Water Content

*“We’re not only setting a new low, we’re completely obliterating the old record.”*

–David Rizzardo, chief of snow surveys  
California Department of Water Resources

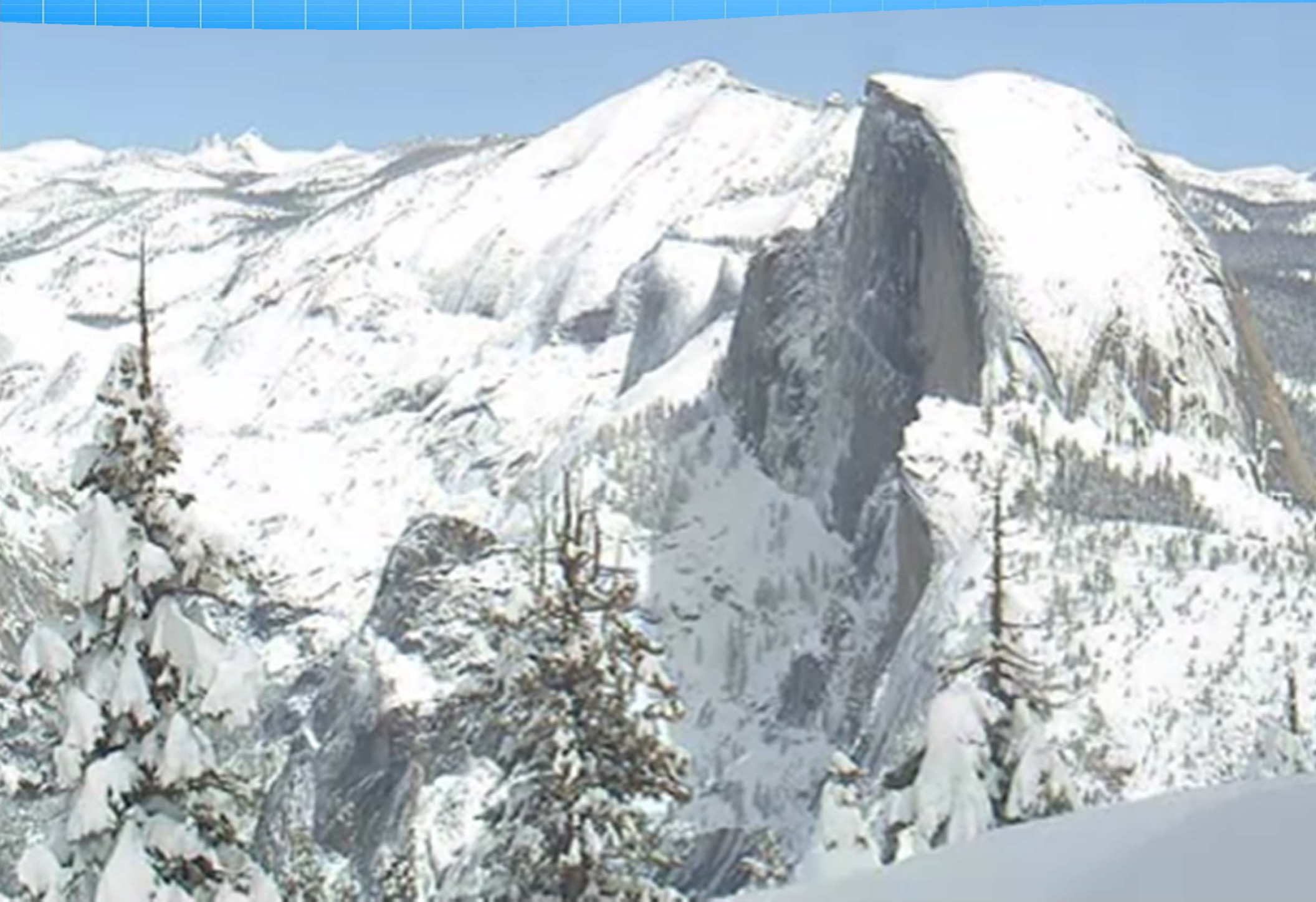




# HALF DOME YOSEMITE 2011

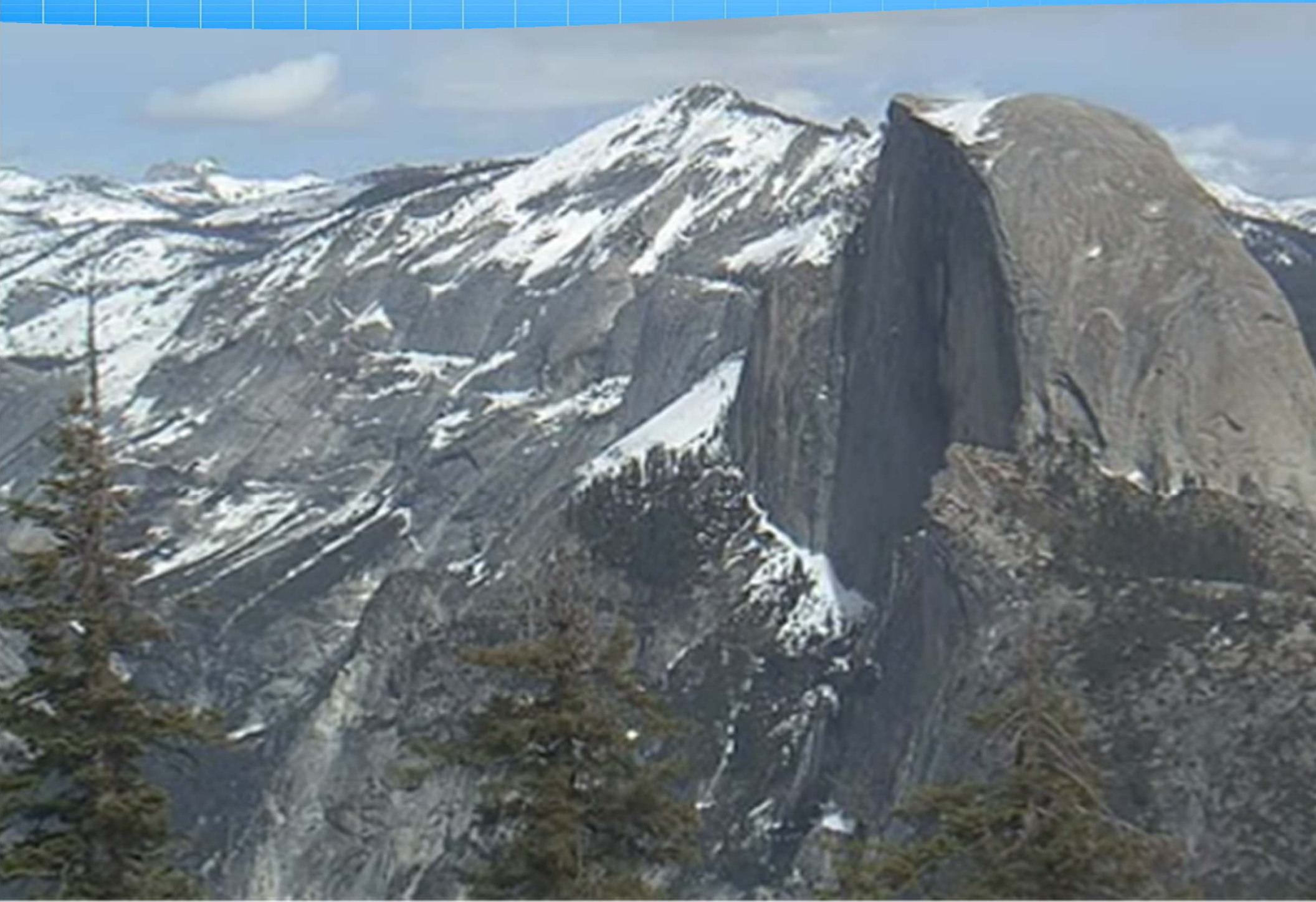


# HALF DOME YOSEMITE 2012





# HALF DOME YOSEMITE 2013





# HALF DOME YOSEMITE 2014





# HALF DOME YOSEMITE 2015





# LAKE MEAD APRIL 2015

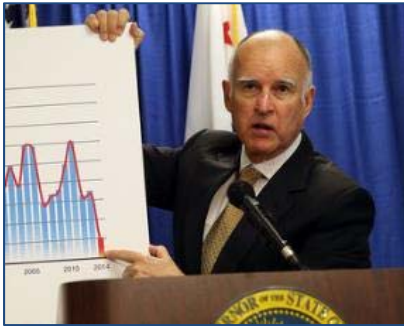
Reached lowest level since  
initial fill in the 1930s





# DROUGHT TIMELINE 2014

January – Governor calls for use restrictions & 20% voluntary conservation.



April - Fox Canyon GMA imposes 20% reduction in allowable pumping.



Rest of year - Central Valley farmers fallow land and/or drill deeper wells. Residential wells start to go dry, and water is trucked in for health and safety needs.



January - After 3 dry winters, & pumping restrictions, SWP & CVP at 0% allocations. SWP later adjusts to 5%.

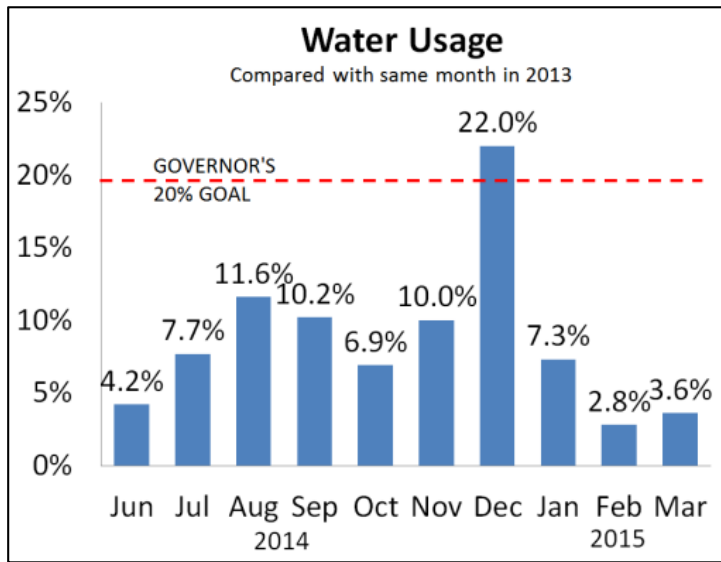


Rest of year - So Cal draws **half of its storage in lakes & aquifers** and invests in turf removal.





# DROUGHT TIMELINE 2015



May 5 – SWRCB adopts requirements for mandatory 25% reduction based on gallons per capita per day water use.

Early in year -  
State has not met Governor's 20% voluntary reduction goal.



April 1 – With lowest snowpack ever, Governor issues Executive Order for mandatory 25% cuts & additional use restrictions.

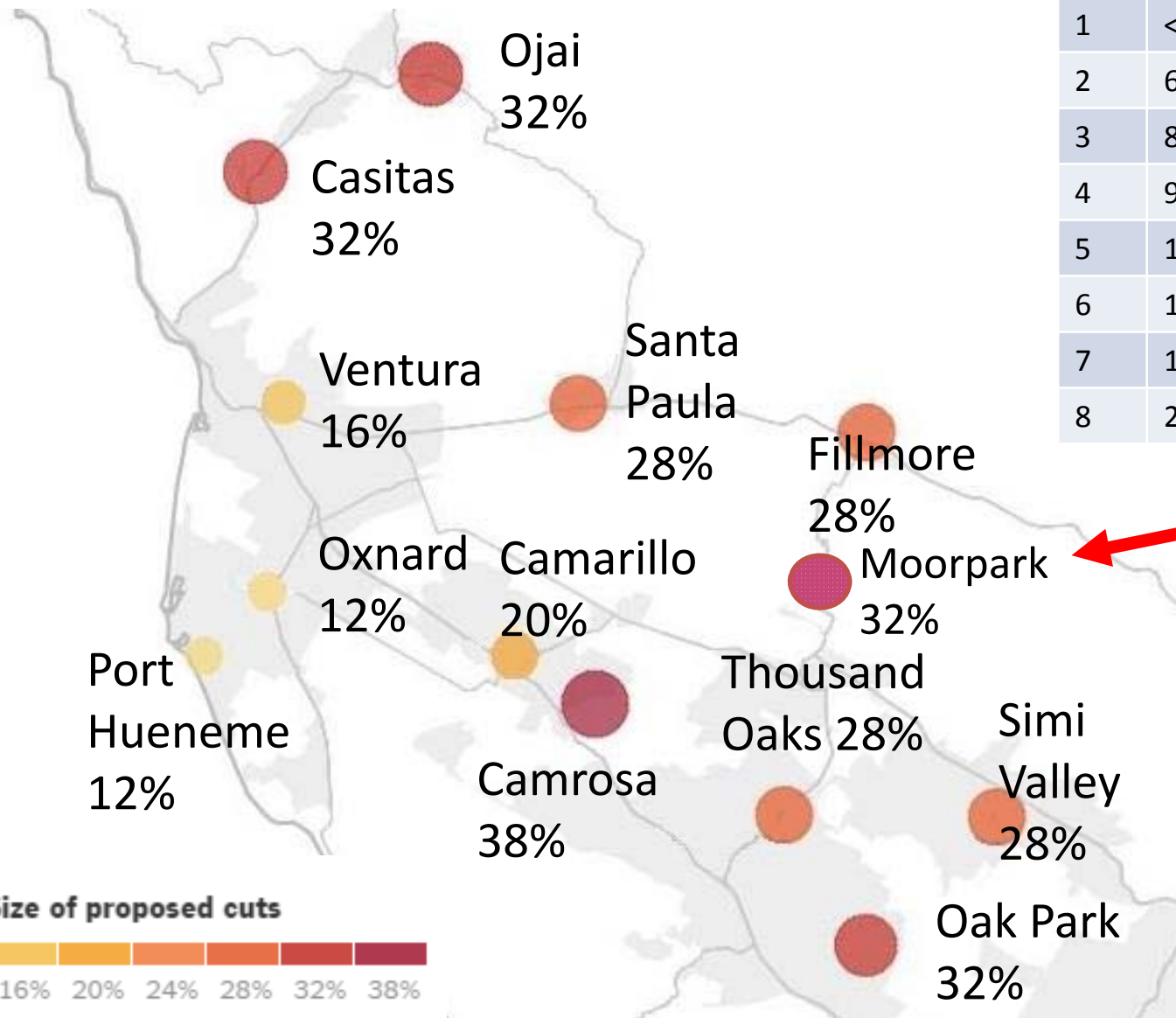


April 14 – MWD adopts allocations for 15% reduction plus financial penalties up to 3x water rate.



# SWRCB MANDATORY CUTBACKS

Tier	GPCD	% Reduction
1	<65	8%
2	65 < x < 80	12%
3	80 < x < 95	16%
4	95 < x < 110	20%
5	110 < x < 130	24%
6	130 < x < 170	28%
7	170 < x < 215	32%
8	215 <	36%



Size of proposed cuts

8% 12% 16% 20% 24% 28% 32% 38%



# SWRCB MANDATORY USE RESTRICTIONS

- No washing car without nozzle shutoff
- No washing of sidewalks & driveways
- No irrigating turf on public medians
- No runoff when irrigating
- Fountains must recirculate water
- No irrigation 48 hours after rainfall





# SWRCB MANDATORY USE RESTRICTIONS

- New construction must have drip or micro nozzles
- Restaurants must provide water only upon request
- Hotels must provide option of not washing linens





# DISTRICT REPRSONSE TIMELINE

May 5, 2015 –

- SWRCB adopted an emergency conservation regulation.
- VC BOS declared a Level 2 water shortage (\*restricts pool filling, etc.)

May 18, 2015 –

- The provisions of the emergency regulation went into effect directing each urban water suppliers to reduce 2015 water production by a set percentage, determined based on 2013 consumption for the period of June through Feb 2013. The District's mandated reduction is 32%.

June 11, 2015 –

- The District's Citizens Advisory Committee unanimously recommended an allocation reduction method designed to achieve overall 32% reduction of all water consumption.

June 22, 2015 –

- The District's Citizens Advisory Committee unanimously recommended a 6% water commodity rate increase, effective January 1, 2016, to enable continued funding of the District's operations and maintenance in view of the reduced revenues caused by drought conservation requirements and due to the increased cost of water from Calleguas and other increases in the cost of providing water service in the District.

August 11, 2015 –

- VC BOS approved the rate increase, reduced allocations, and surcharge.



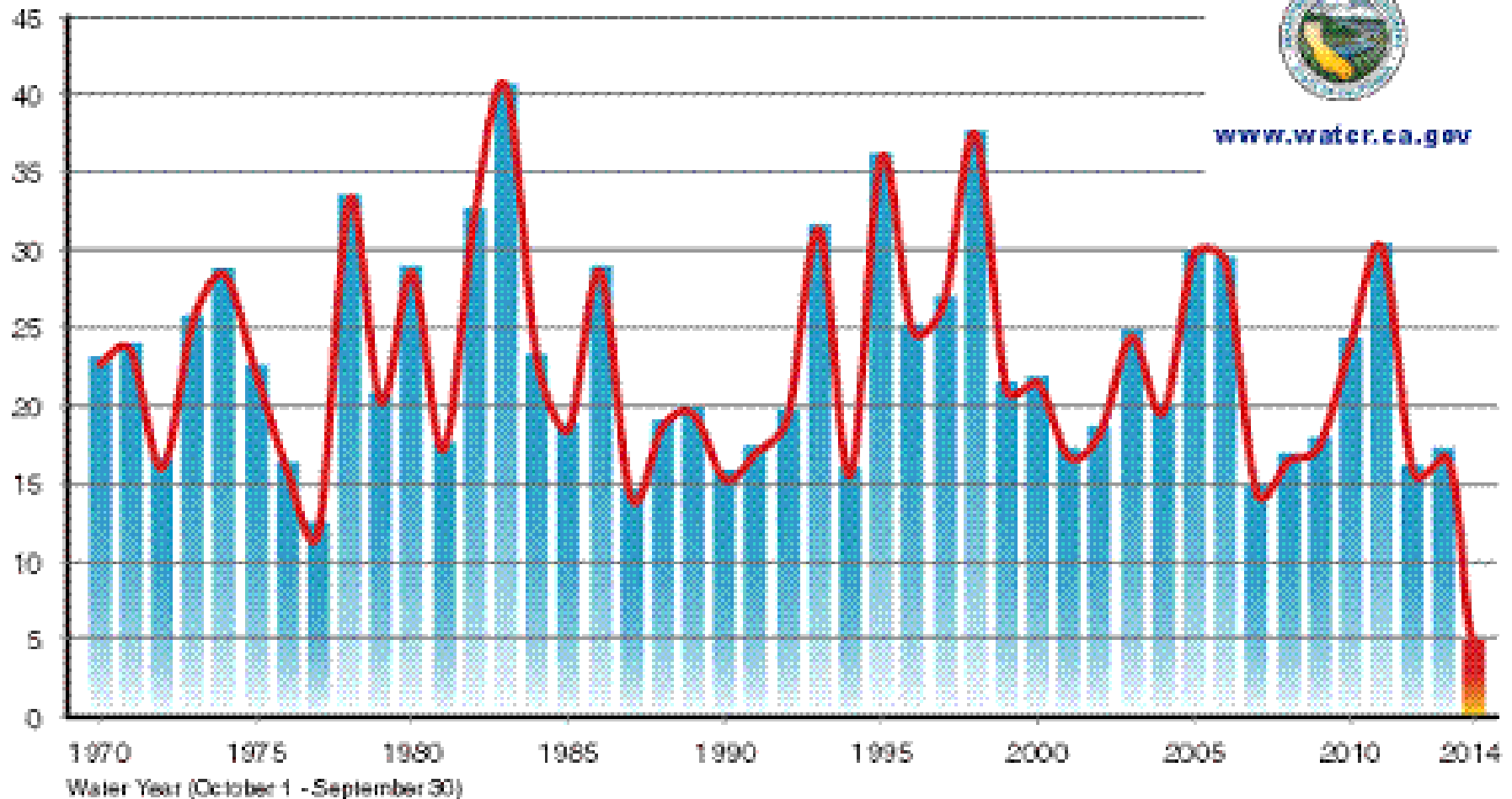


**HOW DID WE  
GET HERE?**

# IT HASN'T RAINED MUCH

## Statewide Average Precipitation - by water year

Average Precipitation (inches)



**But we have systemic problems which have exacerbated the effects of drought.**



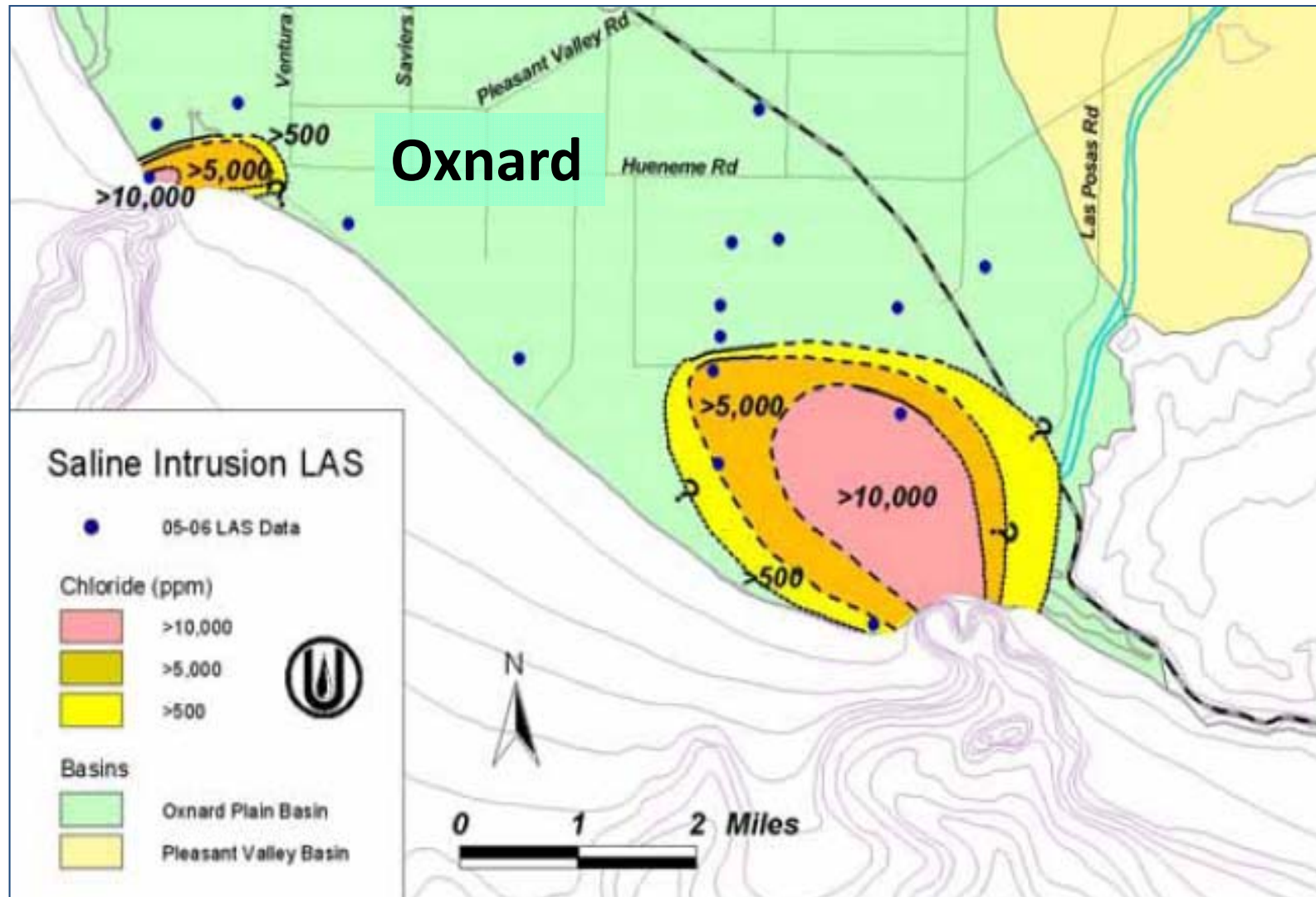
# DECADES OF DIVERSION FROM WATERWAYS HAVE HARMED THE ENVIRONMENT

An aerial photograph showing a river system in a dry, arid environment. A large dam with multiple spillways is visible on the right side of the river. The river flows from the top right towards the bottom left. The surrounding landscape is mostly brown and dry, with some patches of green vegetation and small trees. A dirt road or path runs along the left bank of the river. The overall scene suggests a water scarcity or the aftermath of water diversion.

**...so now we must divert less water.**



# WE HAVE OVERPUMPED OUR AQUIFERS

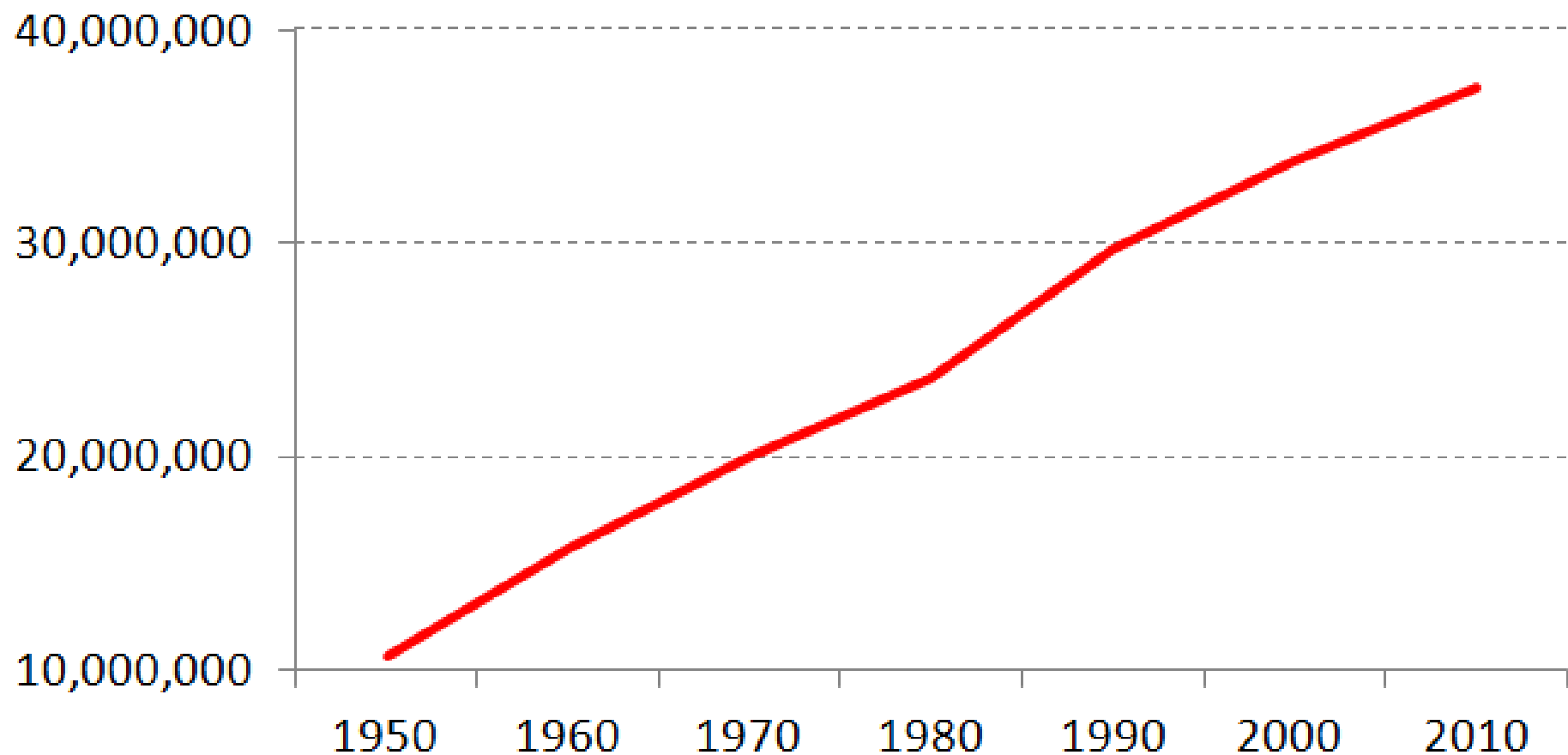


...so now we must pump less water.



# CALIFORNIA'S POPULATION HAS INCREASED

**Historical California Population**



# NEVADA AND ARIZONA POPULATIONS HAVE ALSO INCREASED



## **Population Growth 2000 to 2010**



>5%



>20%

**...so more people  
are competing for a  
finite water supply.**



WHAT CAN WE DO?



# WHAT YOU CAN DO TO REDUCE WATER USE

With emergency drought conditions persisting throughout California, the State Water Resources Control Board adopted Emergency Regulations requiring an **immediate 25% reduction** in overall urban potable water use statewide in accordance with Governor Brown's April 1, 2015, Executive Order. (Reductions vary by Waterworks District.)

The County of Ventura Board of Supervisors adopted a resolution on May 5, 2015, declaring a **Level 2 Water Supply Shortage** for Ventura County Waterworks District Nos. 1 (Moorpark), 17 (Bell Canyon), 19 (Somis), and Lake Sherwood Community Services District (Lake Sherwood).

**The following are things you can do immediately to cut your water use:**

## Indoor Use

- ◆ *Use washing machines and dishwashers only when full.*
- ◆ *Install an aerator on your kitchen faucet to reduce flow.*
- ◆ *Install low-flow shower heads.*
- ◆ *Shorten your time in the shower.*
- ◆ *Turn your bathroom faucet off when brushing your teeth or shaving.*
- ◆ *Use a bucket to catch water when running it to warm up, then reuse this water for outdoor irrigation needs.*

## Outdoor Use

- ◆ *Cut your outdoor irrigation in half. Reduce the number of days and the number of minutes per station on your irrigation system. (This one action alone will greatly help us achieve our conservation goal.)*
- ◆ *Adjust your sprinklers to ensure only your yard is being watered, not your house, sidewalk, or street.*
- ◆ *Add a layer of mulch around trees and plants to reduce evaporation and keep the soil cool.*
- ◆ *Use a broom instead of a hose to clean driveways, sidewalks, and patios.*
- ◆ *Keep a cover on your pool/spa to prevent evaporation.*
- ◆ *Don't irrigate during rain or within 48 hours following measurable rainfall.*



# WASTE-WATER PROHIBITIONS

## DISTRICT RULES AND REGULATIONS

### PERMANENT WATER CONSERVATION MEASURES COMMERCIAL, INDUSTRIAL, AND GOVERNMENTAL CUSTOMERS

#### ***WATER-WASTE PROHIBITIONS***

- Serving water in restaurants and food service establishments unless water is requested by customer
- Outdoor irrigation between 7 a.m. and 9 p.m.
- Using potable water to wash sidewalks and driveways, except if necessary to eliminate dangers to public health and/or safety
- Operation of ornamental fountain unless water is recirculated
- Operation of a commercial conveyor car wash without the use of a recirculating water system or without a waiver from the District
- Installation of a non-recirculating water system in a new commercial conveyor car wash or a new commercial laundry system

# NEW RATES EFFECTIVE JAN 2016

<i>Tiers</i>	<i>Current</i>	<i>Approved 6% Increase Effective January 1, 2016</i>
Tier I	\$2.928/HCF \$1,275.44/AF	\$3.104/HCF \$1,352.10/AF
Tier II	\$3.074/HCF \$1,339.03/AF	\$3.259/HCF \$1,419.62/AF
Tier III	\$4.611/HCF \$2,008.55/AF	\$4.889/HCF \$2,129.65/AF
Tier IV	\$7.685/HCF \$3,347.59/AF	\$8.148/HCF \$3,549.27/AF
HCF = Hundred Cubic Feet; AF = Acre Feet		



# NEW AG RATES EFFECTIVE JAN 2016

<i>Tiers</i>	<i>Current</i>	<i>Approved 6% Increase Effective January 1, 2016</i>
Tier I	\$1.696/HCF \$738.78/AF	\$1.798/HCF \$783.21/AF
Tier II	\$2.928/HCF \$1,275.44/AF	\$3.104/HCF \$1,352.10/AF
HCF = Hundred Cubic Feet; AF = Acre Feet		

# WATER SUPPLY ALLOCATION-SURCHARGE

<i>Date</i>	<i>Action</i>
April 14, 2015	<ul style="list-style-type: none"><li>• Metropolitan approved a Water Supply Allocation Plan</li><li>• Declared a Regional Level 3 Water Shortage</li><li>• Imposed a 15% reduction in wholesales water supply</li><li>• Instituted a surcharge for exceeding the allocation<ul style="list-style-type: none"><li>• \$1,480/AF (up to 15%)</li><li>• \$2,960/AF (in excess of 15%)</li></ul></li></ul>
April 15, 2015	Calleguas Board voted to pass surcharges on to retail water purveyors
June 11, 2015	WWD 1 Citizens' Advisory Committee supports the proposal to pass-through surcharges on to individual high water users based upon water allocated within the tiers.

## Potential Surcharges for excessive water use:

10% over allocation:

**WWD 1=\$1.3M**

At the same rate as 2014:

**WWD 1=\$2.9M**



# INITIAL CALLEGUAS MWD SUPPLY ALLOCATIONS-SURCHARGE (5/12/2015)

## Allocation Impacts

### Total Available Water Supply

Allocation Year Planned Local Supply	1,755	
CMWD Allocation	8,506	
<b>Total Available Water Supply</b>		<b>10,261</b>

### Wholesale Shortage

Allocation Year Imported Water Demand	10,139	
CMWD Allocation	8,506	
<b>Percentage reduction in wholesale delivery</b>		<b>16.1%</b>

### Retail Shortage

Allocation Year Retail Water Demand	11,894	
Total Water Supply	10,261	
<b>Percentage reduction in retail delivery</b>		<b>13.7%</b>

### ***Applicable MWD surcharge:***

If 10% over CMWD Allocation	\$1,258,833
If no reduction from Allocation Year Retail Water Demand	\$2,945,420

# WWD 1 ALLOCATION REDUCTION & SURCHARGE CALCULATION

## WWD 1 37% ALLOCATION REDUCTION

*Example of Predominant BANs\* (BANs 3, 7 and 13) during Peak Demand Period*

<b>BANs</b>	<b>Tier I</b>	<b>Tier II</b>	<b>Tier III</b>	<b>Tier IV</b>	<b>Surcharge of \$3.398 per HCF</b>	<b>Surcharge of \$6.795 per HCF</b>
<b>BAN 3</b>	0-10.08	10.09-26.46	26.47-46.31	>46.31	29.06-33.42	≥ 33.43
<b>BAN 7</b>	0-20.16	20.17-52.92	52.93-92.61	>92.61	58.12-66.84	≥ 66.85
<b>BAN 13</b>	0-35.28	35.29-92.61	92.62-162.07	>162.07	101.71-116.97	≥ 116.98

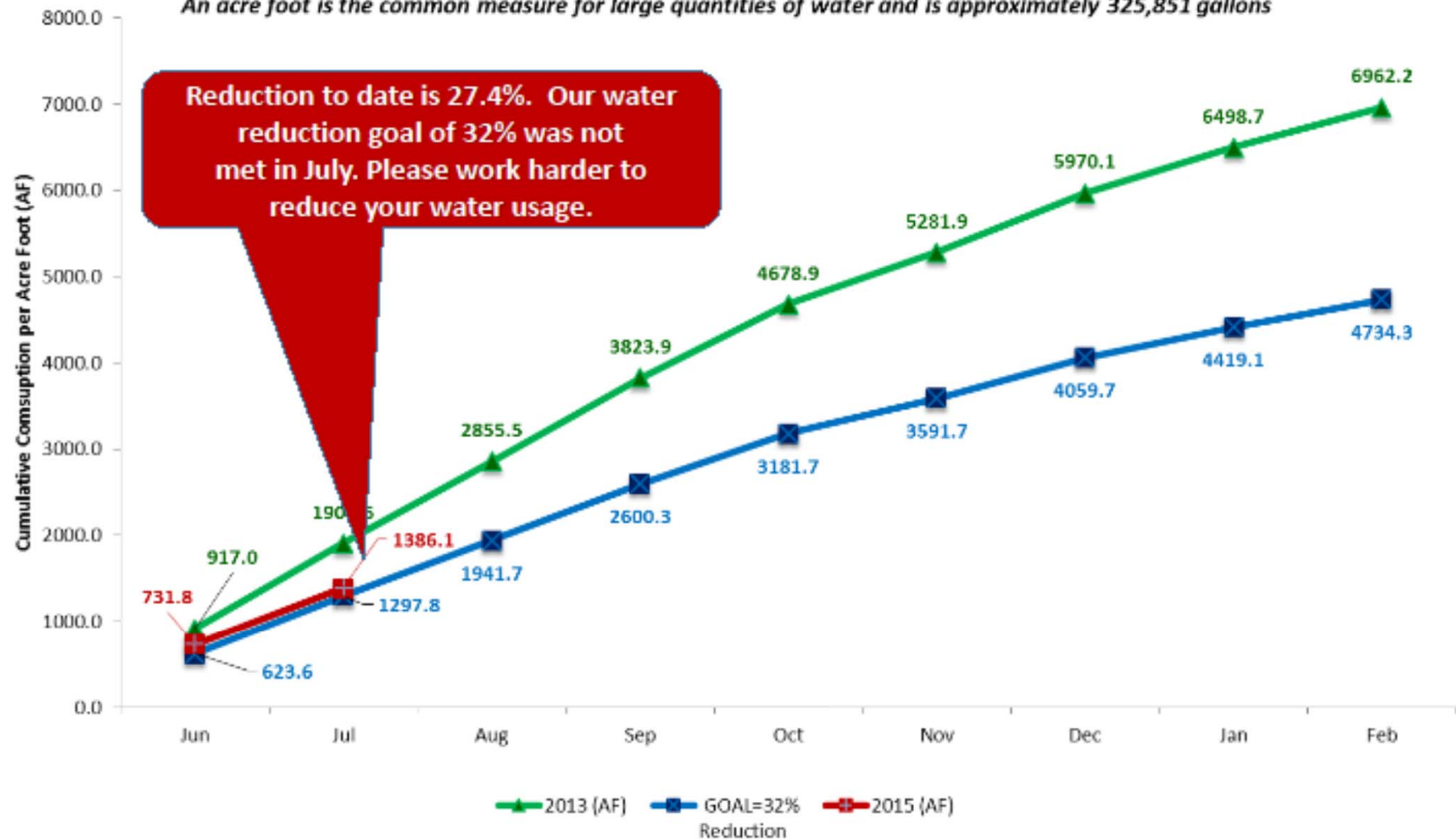
\* BAN = Billing Adjustment Unit; \*\* HCF = Hundred Cubic Feet (748 Gallons)



# DISTRICT 1 WATER REDUCTION COMPLIANCE TRACKER

## Moorpark (WWD 1) Water Reduction Tracker (Excluding Agriculture)

An acre foot is the common measure for large quantities of water and is approximately 325,851 gallons



# SWRCB NOTICE OF VIOLATION



RECEIVED

AUG 10 2015



EDMUND G. BROWN Jr.  
GOVERNOR



MATTHEW RODRIGUEZ  
SECRETARY FOR  
ENVIRONMENTAL PROTECTION

State Water Resources Control Board

PWA/WATER & SANITATION

August 7, 2015

Mr. Jeff Pratt, PW Director  
Ventura County Waterworks District No. 1  
6767 Spring Road  
Moorpark, CA 93021


**SUBJECT: NOTICE OF VIOLATION FOR FAILURE TO MEET WATER CONSERVATION  
STANDARD AND ORDER FOR ADDITIONAL INFORMATION**

As of August 7, 2015, our records indicate that Ventura County Waterworks District No. 1 has not met the conservation standard for June. You should immediately take additional steps to enhance water conservation efforts and ensure that the conservation requirement is met in future months.

**The State Water Board requires that you comply with the Emergency Regulation immediately.**



# CALIFORNIA LEGISLATIVE INFORMATION



**AB-2100**

- Prohibits an association from imposing fines or assessment against a member of a separate interest for reducing or eliminating watering of vegetation or lawns during any period for which the Gov. has declared a state of emergency, or a local government has declared a local emergency, due to drought.

**AB-2104**

- Provides that a provision of the governing documents or of the architectural or landscaping guidelines or policies shall be void and unenforceable if it contains conditions that have the effect of prohibiting, low water-using plants as a replacement of existing turf.

**AB-349**

(Pending)

- Further narrows the ability of an HOA to restrict “low water-using plants,” an area where associations are already very limited. It would void any provision of the governing documents of HOA guidelines that prohibit the use of low water-using landscapes that require “not more than a specified amount of water”, including artificial turf.

**SB-992**

- Prohibits an association from imposing fines or assessment on separate interest owners for yard maintenance issues related to under-watered plants and reducing or eliminating watering of vegetation or lawns during any period for which the Gov. declared a state of emergency due to drought.



For details on the legislative bills visit [http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\\_id=201520160AB349](http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160AB349)

# REBATE INFORMATION

## Visit **bewaterwise.com**<sup>®</sup> For Water Efficiency Upgrade **REBATES**



### Residential Water\$mart Program

Indoor Fixtures	
High-Efficiency Toilets (Tank-Type)	\$125
High-Efficiency Clothes Washers	\$110
Landscaping Equipment	
Smart Irrigation Controllers	\$105/Controller for less than one acre \$35/Station for areas larger than one acre
Soil Moisture Sensor Systems	\$80/Controller for less than one acre \$35/Station for areas larger than one acre
Rain Barrels	\$75
Rotating Nozzles for Pop-up Spray Heads	\$4/Nozzle (minimum of 15)
Turf Removal	
Removal of Irrigated Turf	\$2/square foot of irrigated turf removed and replaced with drought-tolerant plants or other approved landscape options (\$6,000 cap per property / multiple rebates allowed)

### Commercial Water\$mart Program

Plumbing Fixtures	
High-Efficiency Toilets (Multi-Family)	\$145/Toilet - 1.06 gallons per flush or less \$100/Toilet - 1.28 gallons per flush or less
High-Efficiency Toilets (Flushometer/Tank)	\$100
Ultra-Low and Zero-Water Urinals	\$200
Plumbing Flow Control Valves	\$5/Valve (minimum of 10)
Landscaping Equipment	
Smart Irrigation Controllers/ Central Computer Irrigation Controllers	\$35/Station
Soil Moisture Sensor Systems	\$35/Irrigation controller station
Rotating Nozzles for Pop-up Spray Heads	\$4/Nozzle (minimum of 15)
Large Rotary Nozzles	\$13/Set (minimum of 8 sets)
In-Stem Flow Regulators	\$1/Regulator (minimum of 25)
Turf Removal	
Removal of Irrigated Turf	\$1/square foot of irrigated turf removed and replaced with drought-tolerant plants or other approved landscape options (\$25,000 annual cap per property)

Food Equipment	
Connectionless Food Steamers	\$485/Compartment
Air-Cooled Ice Machines	\$1,000

HVAC Equipment	
Cooling Tower Conductivity Controllers	\$625
Cooling Tower pH Controllers	\$1,750

Medical and Dental Equipment	
Laminar Flow Restrictors	\$10/Restrictor (minimum of 10)
Dry Vacuum Pumps	\$125/0.5HP (up to 2HP max)



For more information, visit:  
**bewaterwise.com**

\*\*\*\* Rebates are subject to change. Visit [bewaterwise.com](http://bewaterwise.com) for current rebate amounts and program details. \*\*\*\*



## Lose the Lawn

Save water... Save money!

Reserve your rebate at  
**bewaterwise.com**<sup>®</sup>



New front yard of W&S Dept. Management Assistant who participated in Turf Removal Program.



# TURF REMOVAL PROGRAM

After May 12, 2015

RESIDENTIAL

\$2/sf

Max: \$25k

PUBLIC AGENCY

**PROGRAM OUT  
OF FUNDS**

COMMERCIAL

\$1/sq ft

Max: \$25k

# SLOW YOUR H<sub>2</sub>O CAMPAIGN

# SlowYourH<sub>2</sub>O.org

[OUR DISTRICTS](#)[WATER WISE TIPS AND REGULATIONS](#)[FACTS](#)[REPORT WATER WASTE](#)

## FROM THE COUNTY OF VENTURA WATER AND SANITATION DEPARTMENT **NOTICE OF LEVEL 2 WATER SUPPLY SHORTAGE**

### VENTURA COUNTY WATERWORKS DISTRICTS

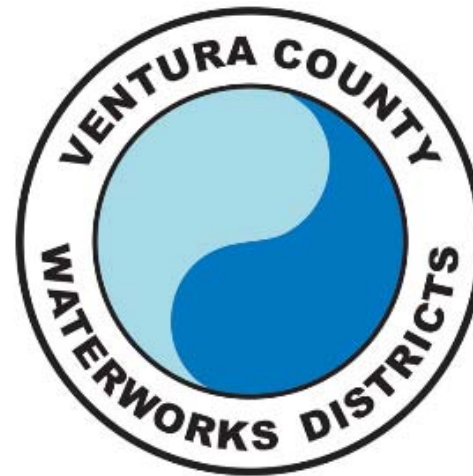
NOS. 1 (Moorpark), 17 (Bell Canyon), 19 (Somis) and 38 (Lake Sherwood)

On May 1, 2015, the Ventura County Board of Supervisors declared a Level 2 Water Supply Shortage.

Please review mandatory conservation information regarding your Waterworks District.

With emergency drought conditions persisting throughout California, the State Water Resources Control Board adopted Emergency Regulations requiring an **IMMEDIATE 25% REDUCTION** in overall urban potable water use statewide in accordance with Governor Edmund G. Brown's April 1, 2015, Executive Order. *Reductions vary by Waterworks District.*

**Please be aware outdoor irrigation is NOT permitted during and 48 hours following measurable rainfall.**

[LEARN MORE](#)



# SLOW YOUR H<sub>2</sub>O CAMPAIGN

## MOORPARK CALIFORNIA

To our Moorpark customers, in order to meet State mandates and to avoid potential surcharges from the Calleguas Municipal Water District (the District's water wholesaler) we are required to reduce overall water use by 32% in accordance with Governor Edmund G. Brown's April 1, 2015, Executive Order. *Keep up with the District's water saving progress and water source levels below:*

[CLICK HERE](#)

TO REVIEW THE COMPLETE SET OF RULES AND REGULATIONS FOR WATERWORKS DISTRICT NO. 1 - MOORPARK

[CLICK HERE](#)

TO REVIEW THE NOTICE OF PROPOSED WATER ALLOCATION REDUCTIONS AND RATE INCREASE FOR MOORPARK

[CLICK HERE](#)

TO REVIEW THE CITY COUNCIL DROUGHT MEETING PRESENTATION FOR MOORPARK

## HELP US SLOW OUR H<sub>2</sub>O BY 32%

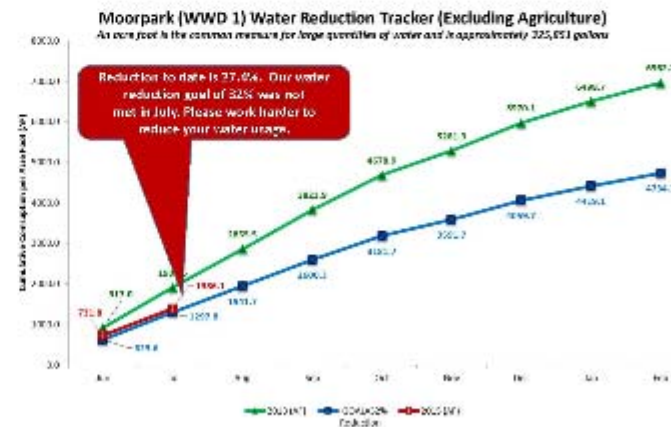


LOCAL WATER SUPPLY

IMPORTED WATER SUPPLY

## HOW IS MOORPARK DOING?

To monitor the progress being made in meeting the District's water reduction goal, staff is tracking water use and comparing it to usage in 2013 and to what it should be to meet the 32% water reduction goal.



# SLOW YOUR H<sub>2</sub>O CAMPAIGN

## REPORT WATER WASTE

Please use the form below to report water conservation incidents or issues.  
The information submitted will be kept confidential.

Date of Incident (required)

Time of Incident

Location (required)

Please select the District for which you are reporting water waste. For any water waste occurring in a different service area, please contact that service provider directly. (required)

1 (Moorpark) ▼

Nature of Incident (required)

Additional Comments

Name (required)

Phone

Email (required)

Submit »

## WATER AND SANITATION DEPARTMENT

For questions regarding these Rules and Regulations or in case of emergency, please call or visit our office.

Phone: (805) 378-3000

Address: 6767 Spring Rd. Moorpark, CA 93021





# DISTRICT 1 CONSERVATION EFFORTS

## **IMPORTANT NOTICE** **(WATER CONSERVATION RULES AND REGULATIONS)**

Address \_\_\_\_\_

Meter # \_\_\_\_\_

You have been observed violating the Water Conservation Rule circled below. Repeat violations are subject to penalty and the possibility of water service restriction. The Rules in their complete text, as well as Hearing and Appeal Procedures, will be mailed to you at the billing address for this water service.

# SOCIAL MEDIA

“Slow Your H<sub>2</sub>O” campaign

<http://www.slowyourh2o.org/>

VCWWD’s microsite

 <https://www.facebook.com/VCPWA>

 <https://twitter.com/vcpublicworks>



FOR MORE INFORMATION



**Call the County of Ventura  
Water and Sanitation Department  
at 805-378-3000**

or visit our website at

<http://pwa.ventura.org/water-sanitation-department/water-and-sanitation-services>

<https://www.facebook.com/VCPWA>

