

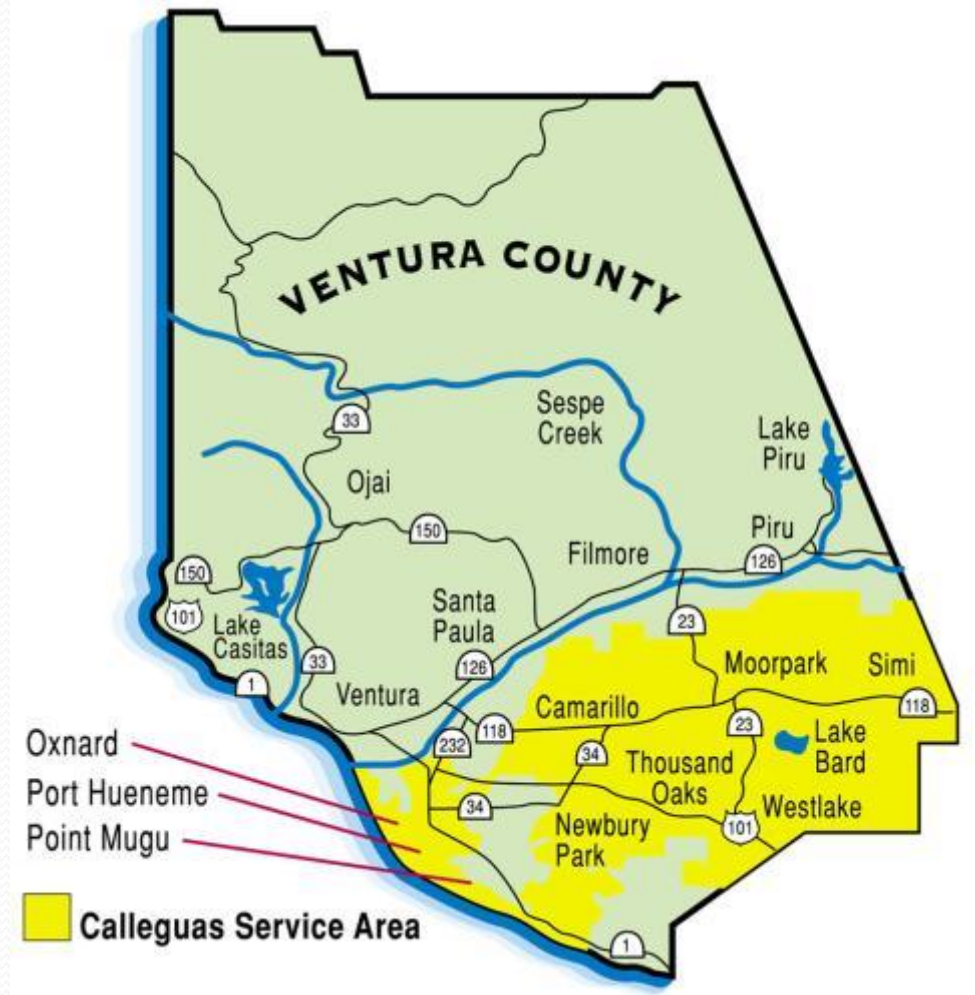
# Water Supply & Drought Update



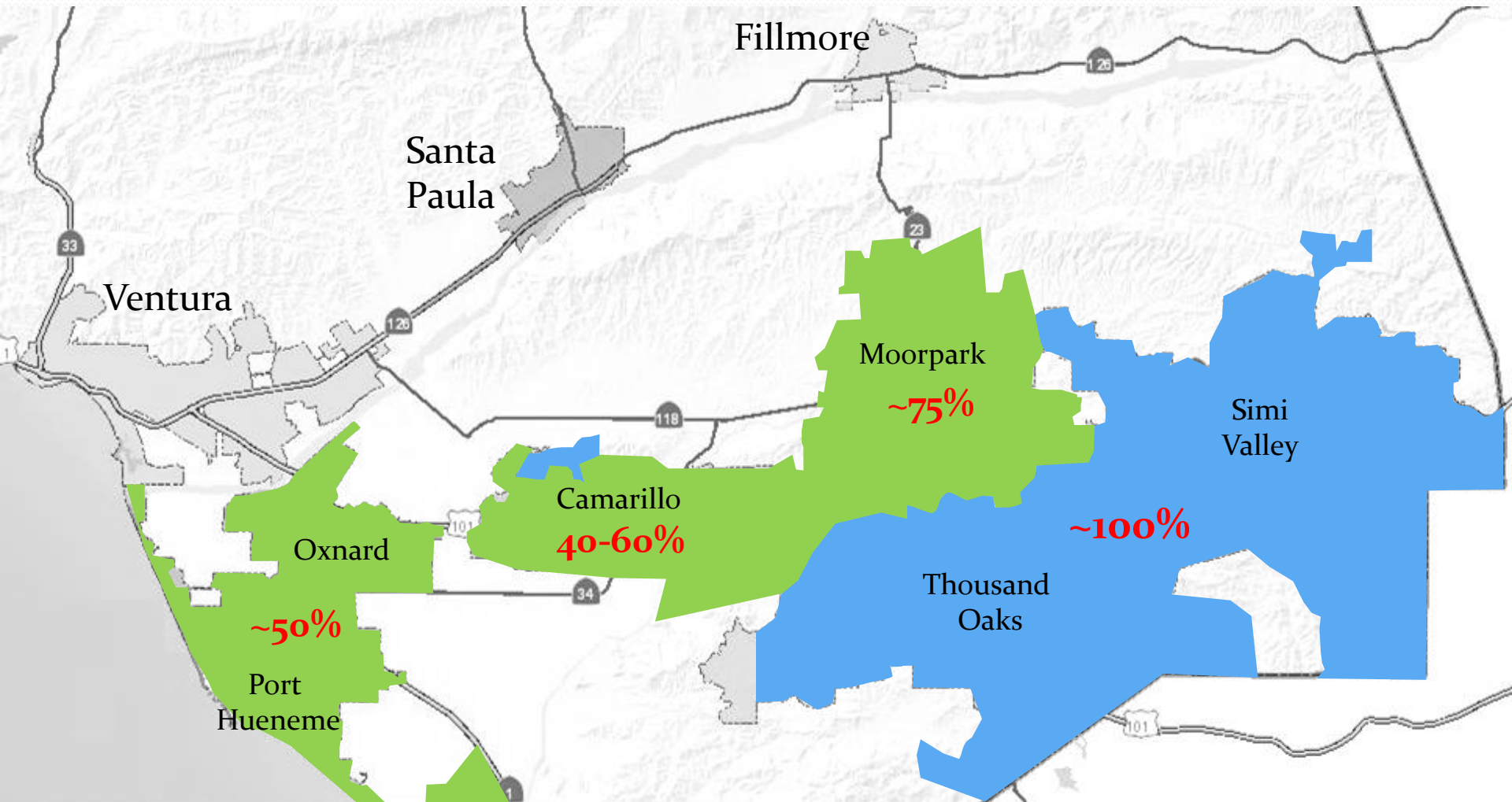
VCSQMP Meeting  
October 15, 2014

# Calleguas Municipal Water District

- Formed in 1953 under MWD Act of 1911 by local communities.
- Supplies imported State water to 19 water agencies and cities serving about 630,000 people in southern Ventura County.
- Annual deliveries of ~110,000 acre feet
- Annual Operating Budget of ~\$110 million
  - Imported water cost >75% (incl. ~400M in fixed cost for SWP)



# Regional Dependence on Imported Water



# Value of Imported Water for VC

- A primary, if not sole, water supply for three-quarters of Ventura County's residents.
- Local groundwater supplies typically blended with higher quality imported water to meet standards.
- Source for recycled water, which is used not only for direct irrigation, but also serves as an essential supply of recharge to local aquifers.

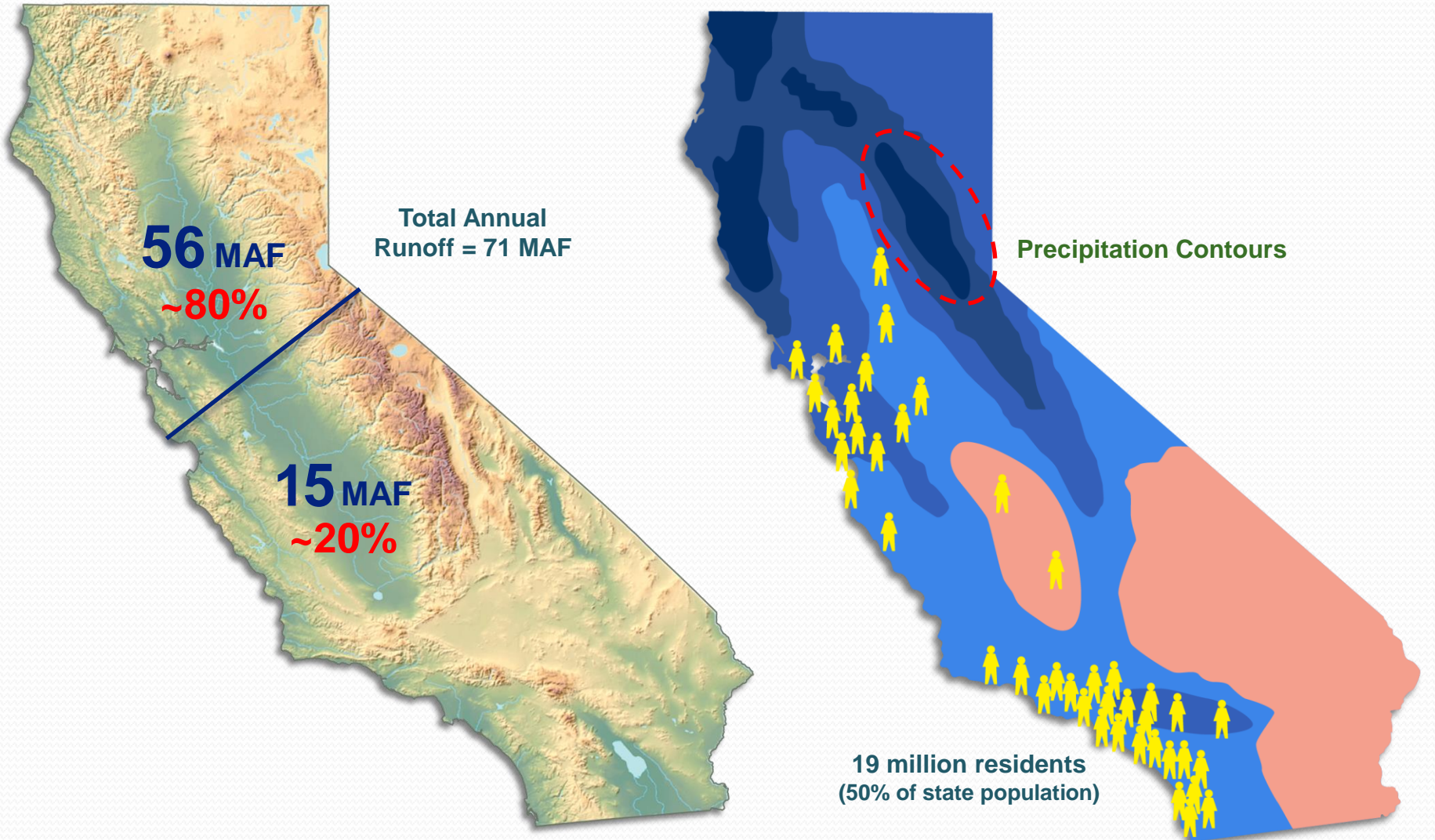


# Southern California Service Areas

# State Water Project

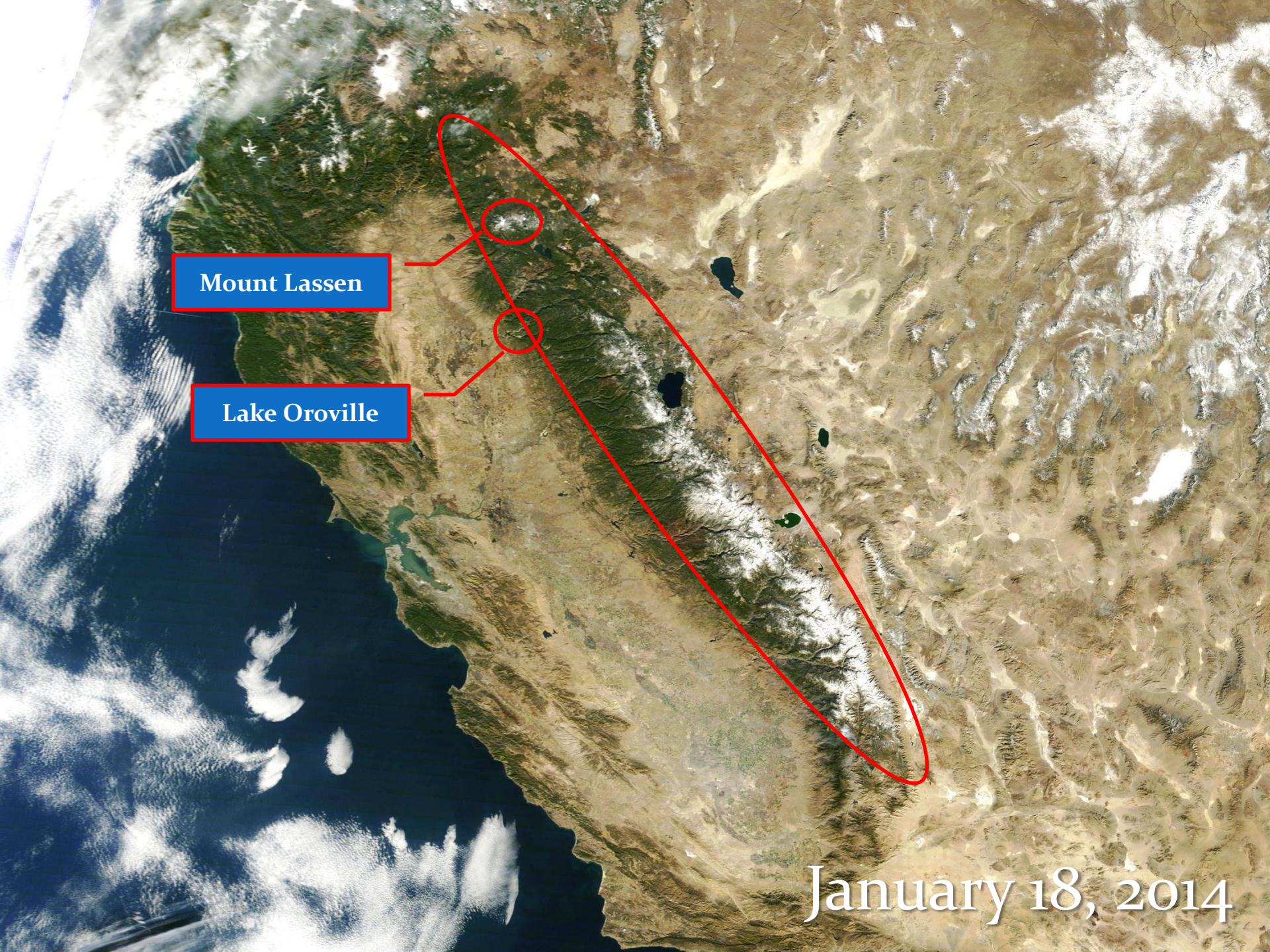


# Why the Sierra Nevada?



# Drought Conditions





Mount Lassen

Lake Oroville

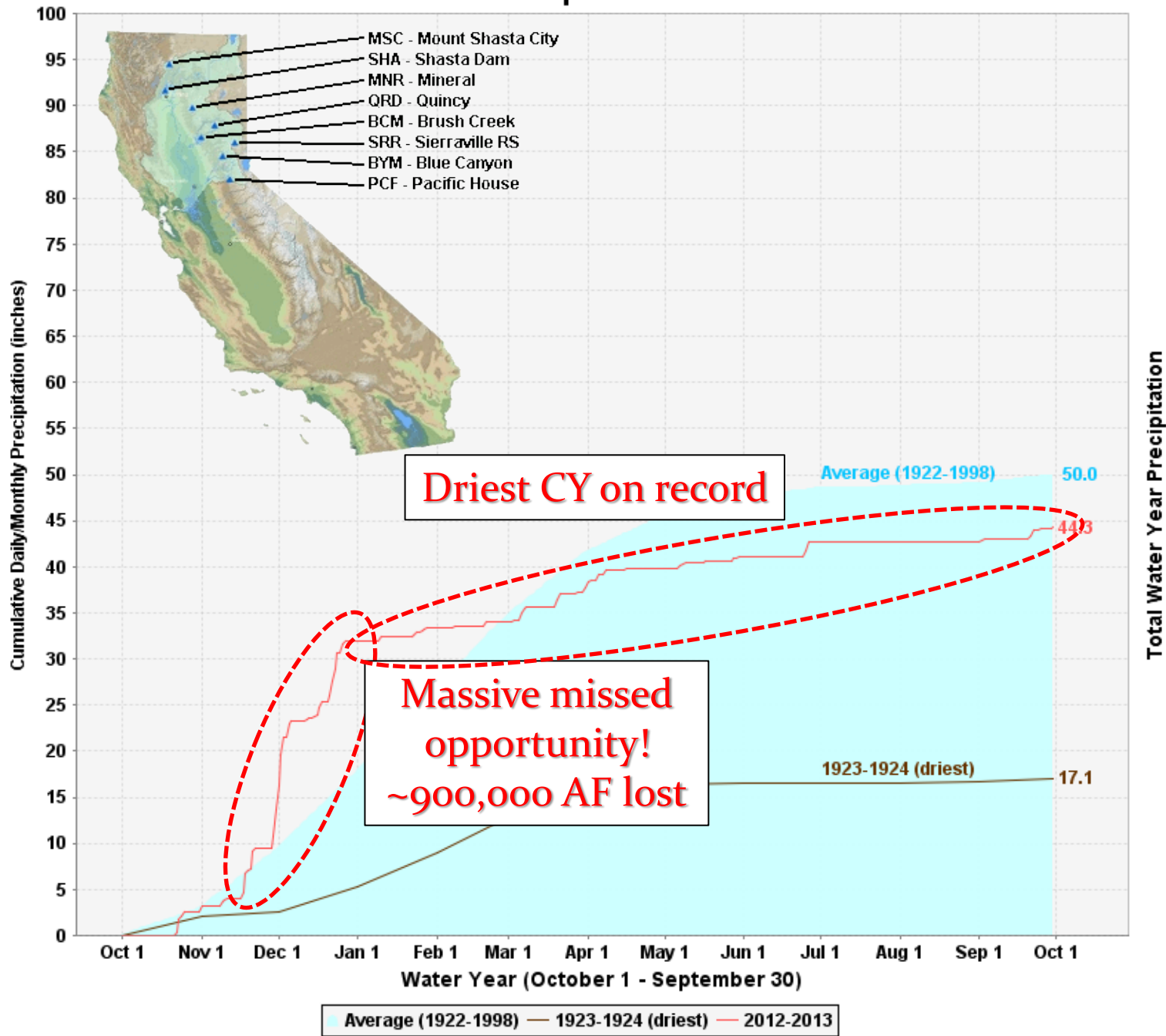
January 18, 2014

# Imported Water Supply

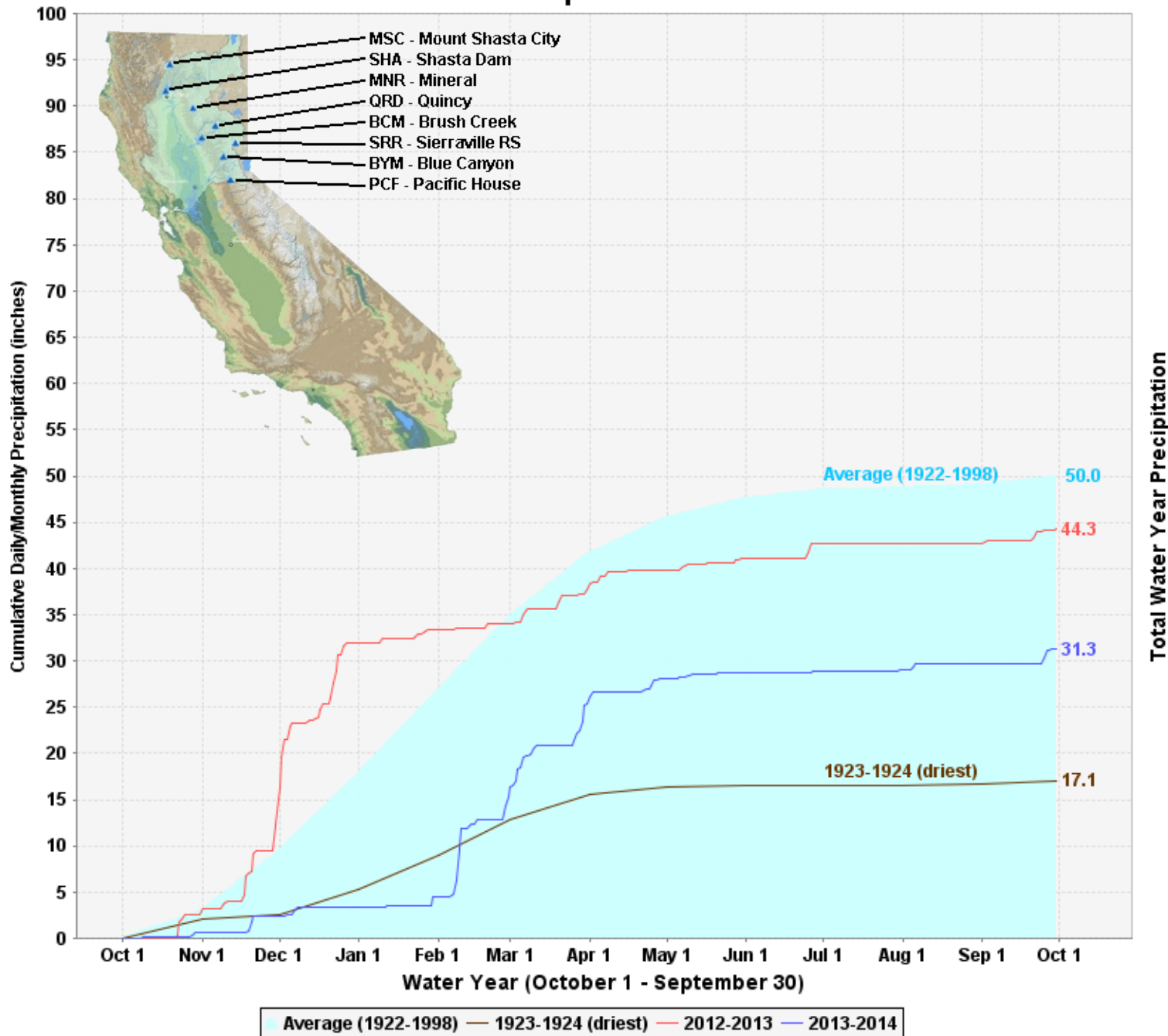
## - 2013/14 Water Year -

- ◆ Nov 19 – Initial SWP allocation – 5%
- ◆ Jan 17 – Governor Brown issues Executive Order declaring State of Emergency
- ◆ Jan 31 – DWR reduces SWP allocation from 5% to zero
  - ◆ “Worst-ever water supply outlook”
- ◆ April 18 – SWP allocation increased back to 5%
- ◆ April 25 - Governor Brown issues second Executive Order including more specific drought response provisions

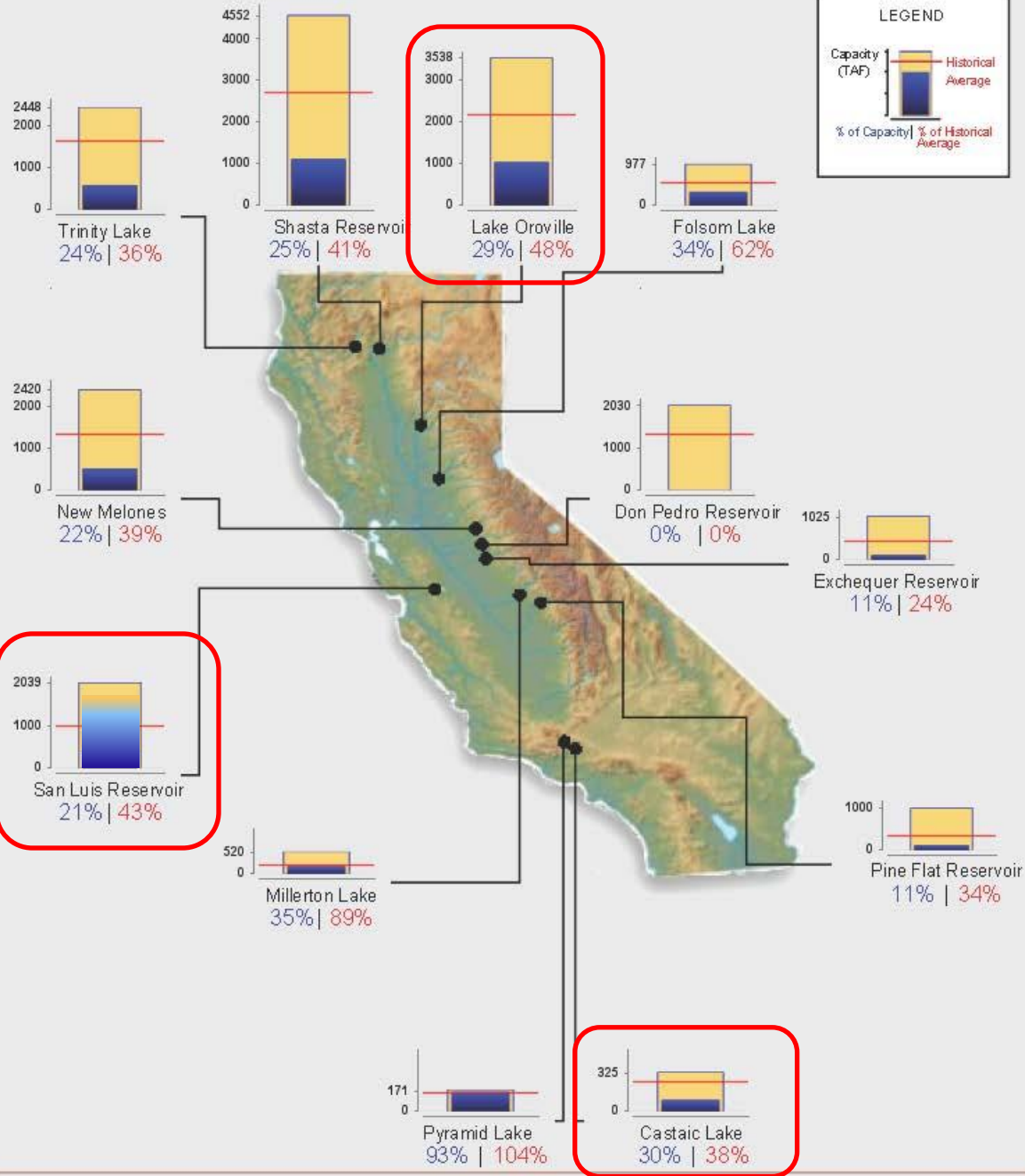
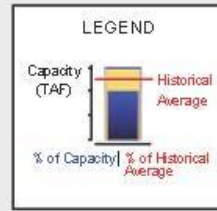
# Northern Sierra Precipitation: 8-Station Index



# Northern Sierra Precipitation: 8-Station Index

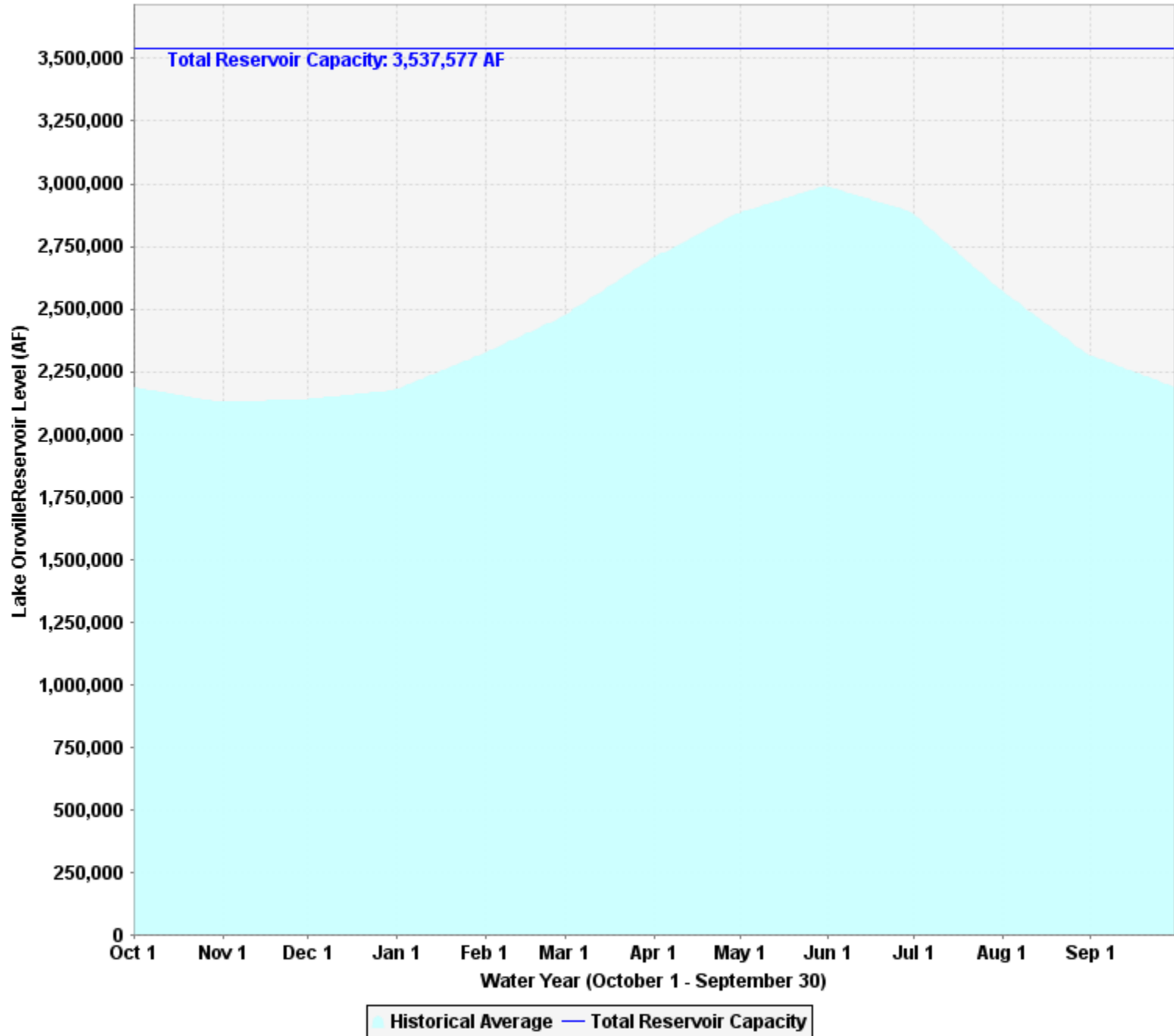


# CURRENT RESERVOIR CONDITIONS

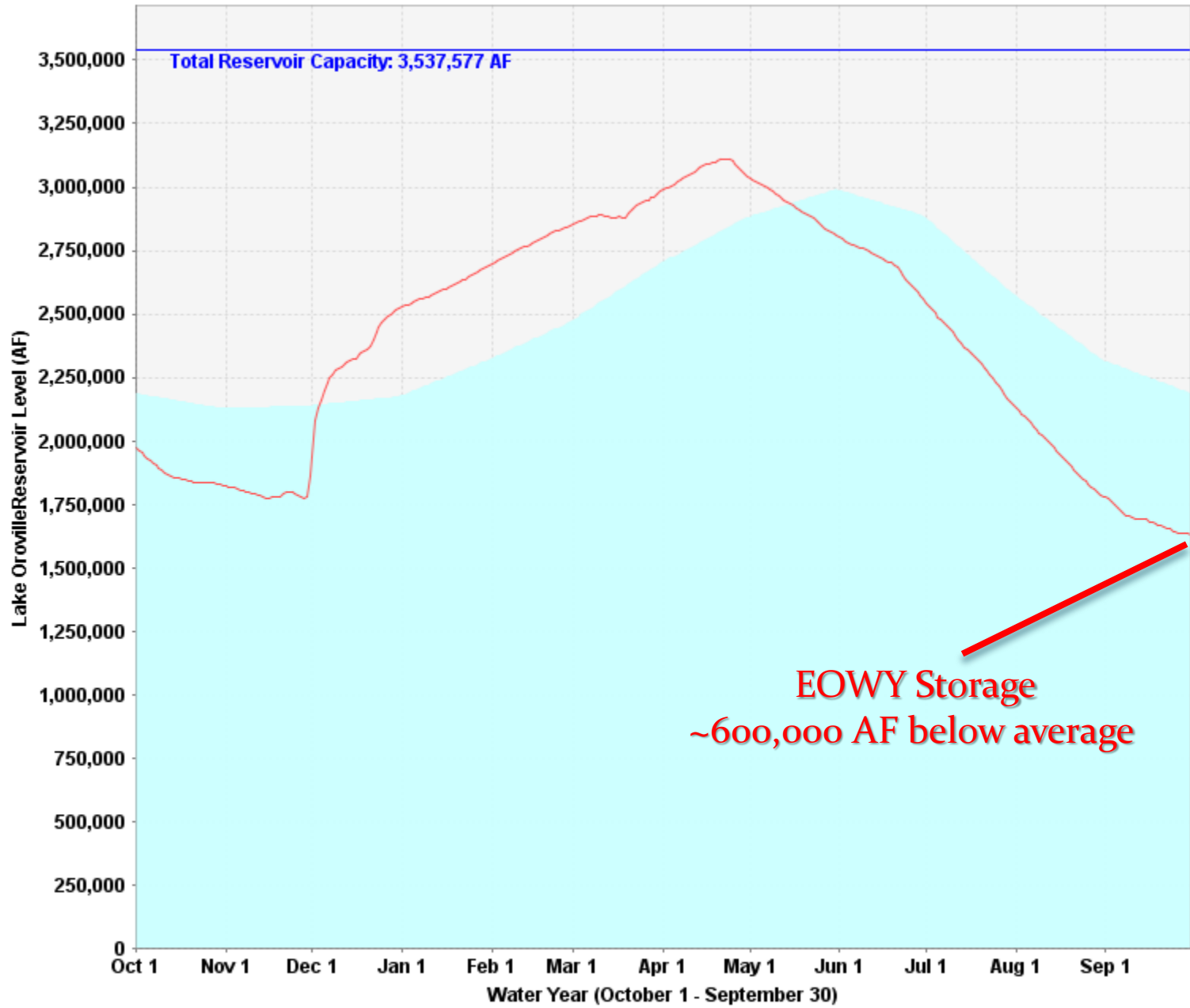


**Missed opportunity**

# Lake Oroville Storage Levels



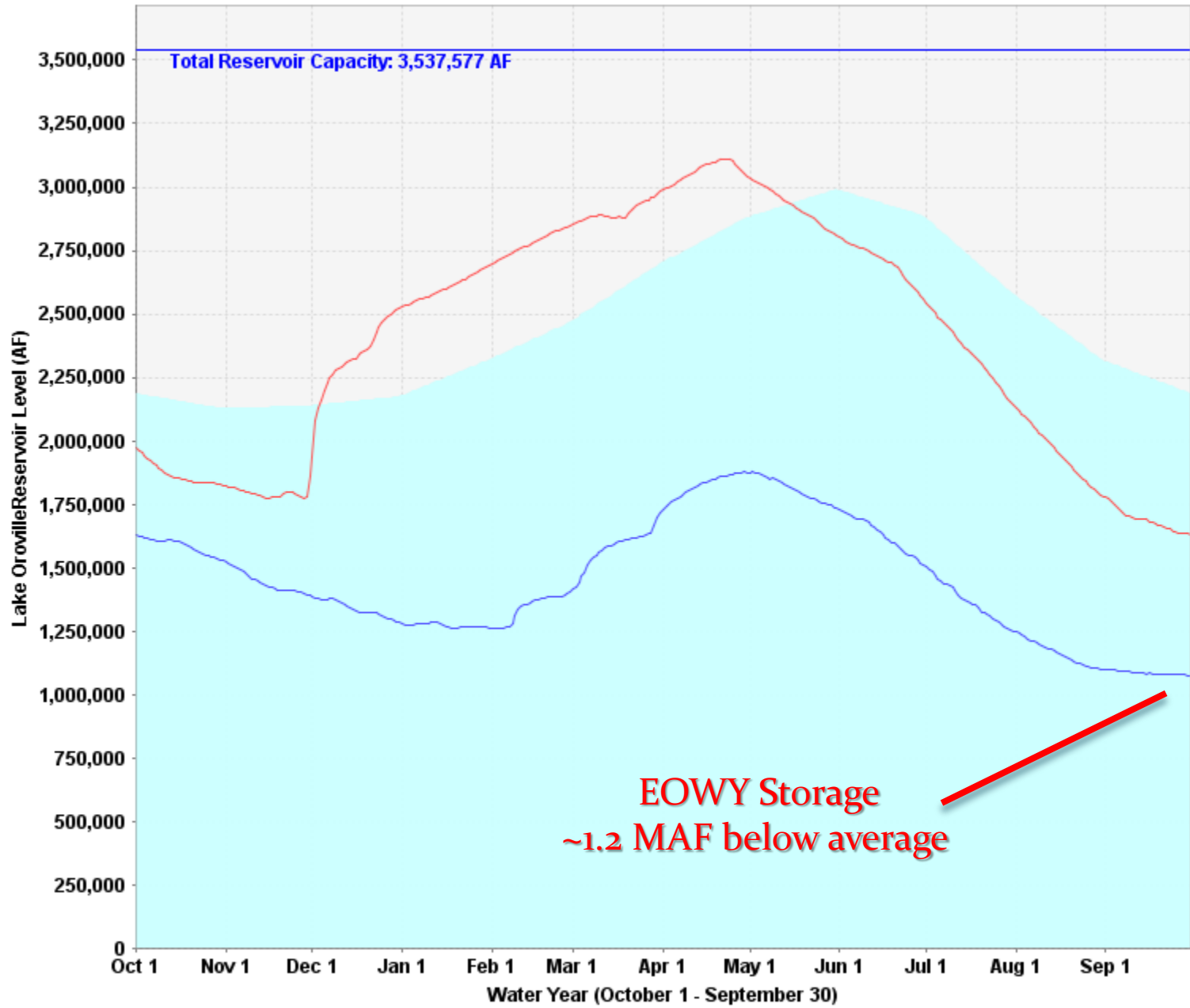
# Lake Oroville Storage Levels



**EOWY Storage**  
**~600,000 AF below average**

Historical Average — Total Reservoir Capacity — 2012-2013

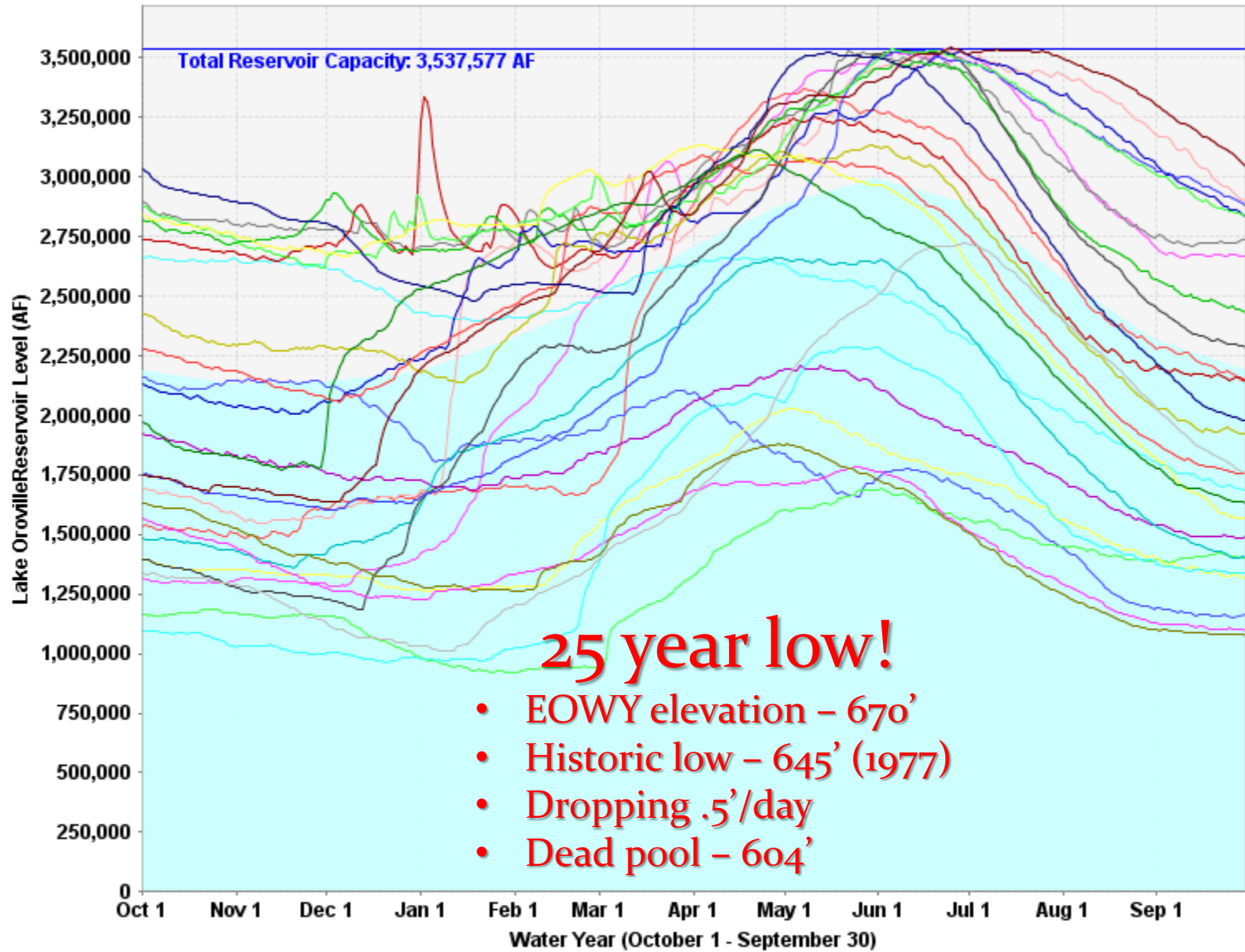
# Lake Oroville Storage Levels



Historical Average — Total Reservoir Capacity — 2012-2013 — 2013-2014



# Lake Oroville Storage Levels



Historical Average	Total Reservoir Capacity	1988-1989	1989-1990	1990-1991	1991-1992	1992-1993
1993-1994	1994-1995	1995-1996	1996-1997	1997-1998	1998-1999	1999-2000
2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007
2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014



*Lake Oroville - July 20, 2011*



*Lake Oroville - September 5, 2014*

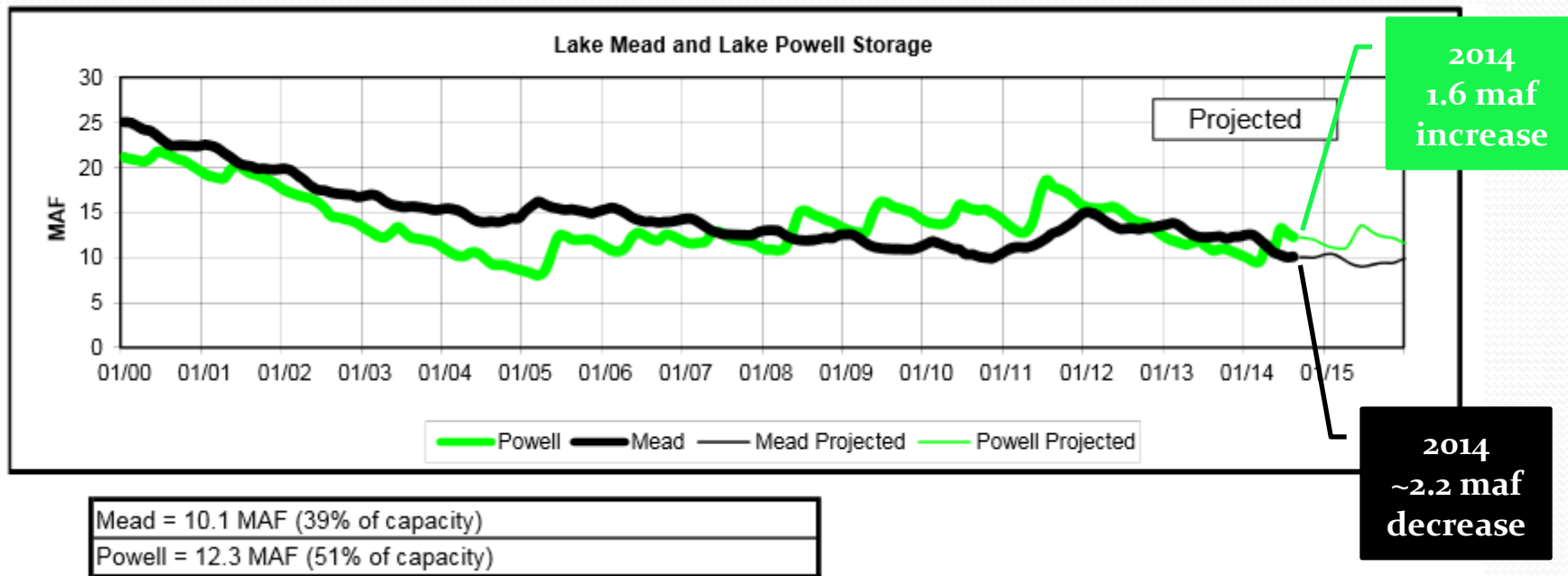


*Lake Oroville - July 20, 2011*



*Lake Oroville - September 5, 2014*

# Colorado River - Lake Mead / Lake Powell

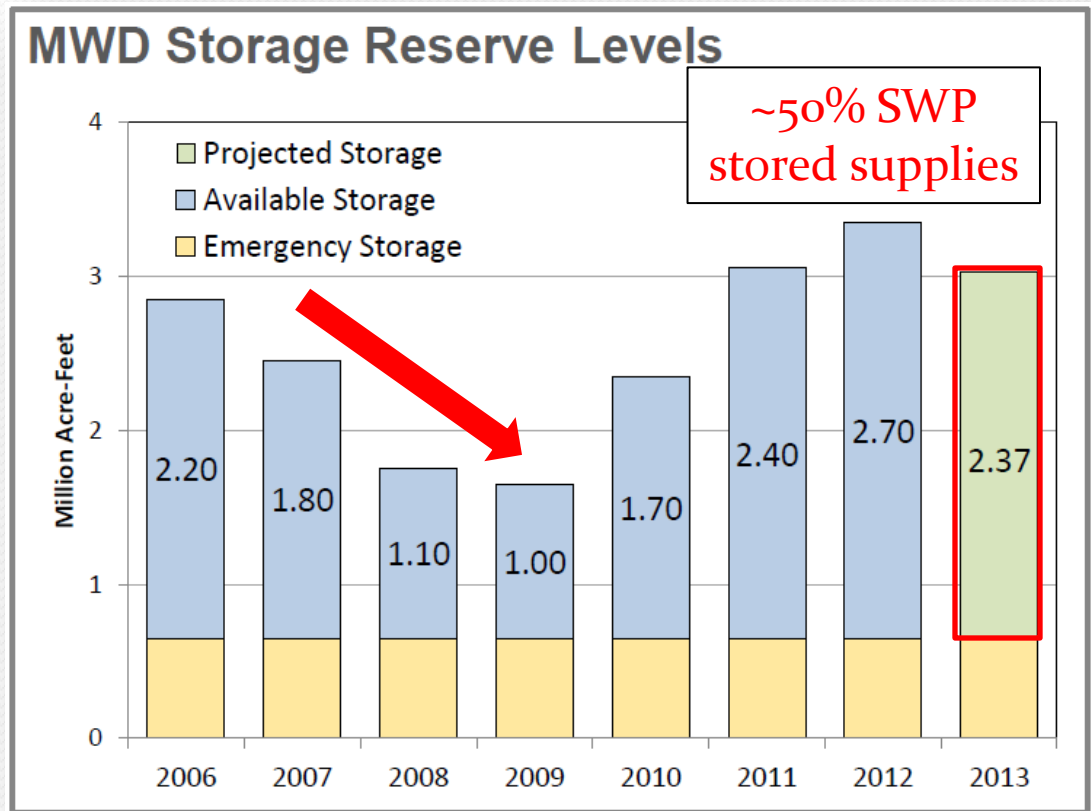
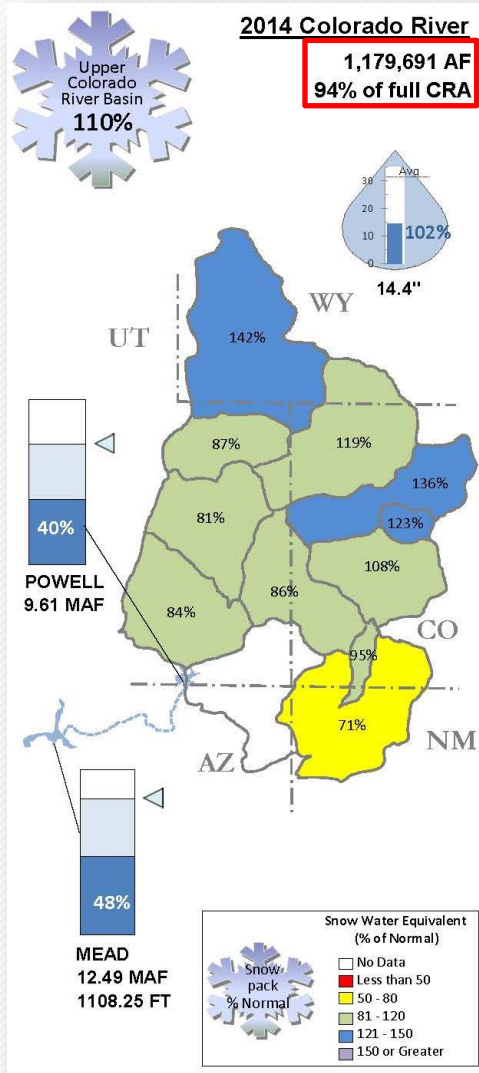


## Lake Mead

- Current level – 1,080'
- At 1,075' deliveries to NV and AZ curtailed
- At 1,000' two Las Vegas intakes go dry
  - Constructing “third straw” at 860'
- At 900' hydropower lost
  - ~60% of power produced to CA

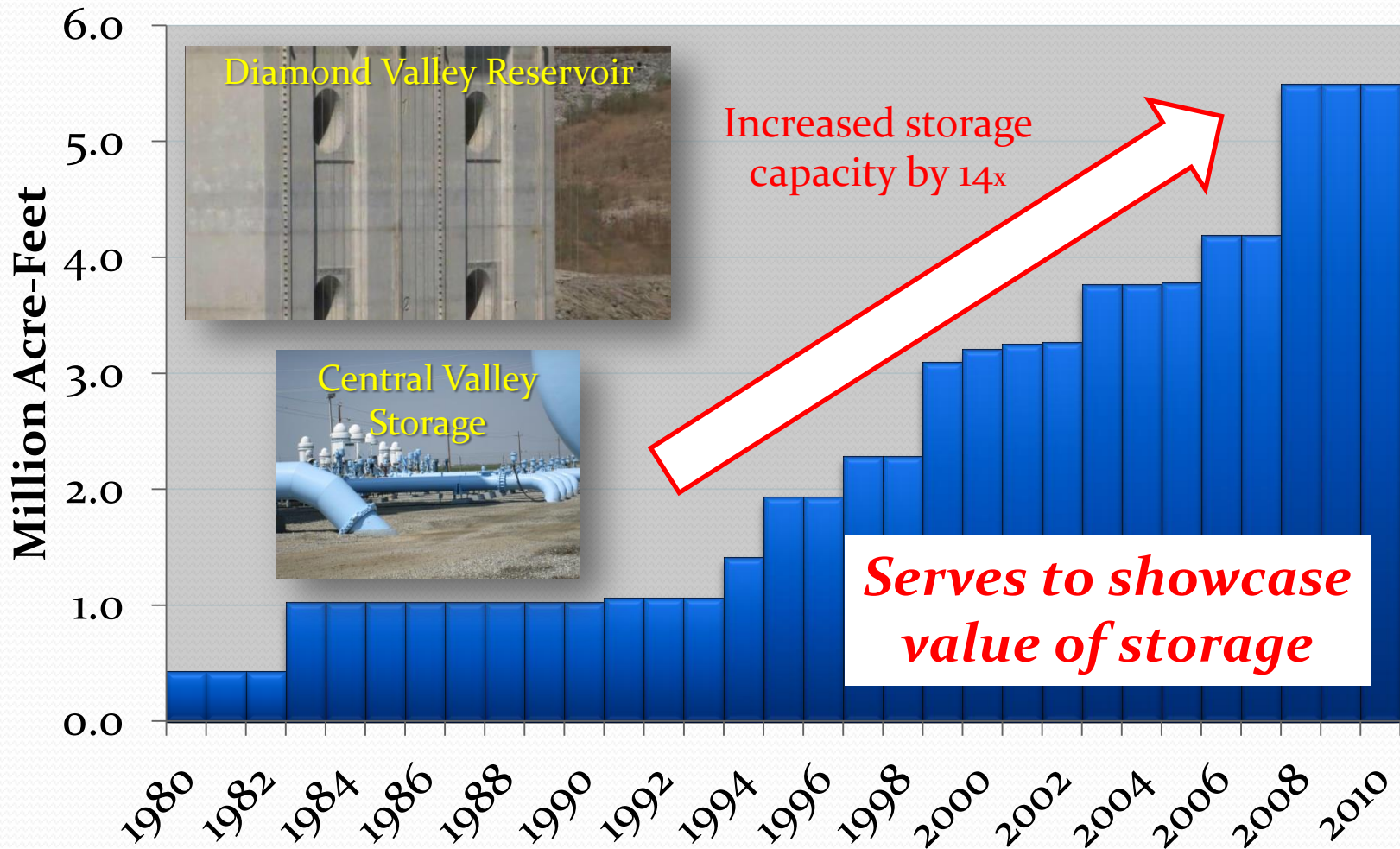
**Why hasn't water  
rationing been instituted?**

# Current Imported Water Conditions



# Metropolitan Service Area

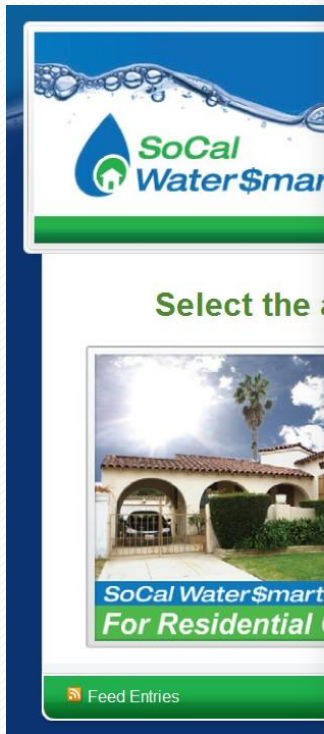
## - Storage Capacity -



# Conservation Programs

# bewaterwise.com<sup>®</sup>

REBATES & DROUGHT UPDATES





# Calleguas Outreach Campaign

## Movie Theater PSAs



Large Format **be**water**wise.com**<sup>®</sup> Banners  
REBATES & DROUGHT UPDATES



# Calleguas Outreach Campaign



**THOUSAND OAKS**  
Your Community Partner Since 1998

**Acorn**  
Your Community Partner Since 1998

**CAMARILLO**  
Your Community Partner Since 2006

**Acorn**  
Your Community Partner Since 2006

**MOORPARK**  
Your Community Partner Since 2003

**Acorn**  
Your Community Partner Since 2003

**SIMI VALLEY**  
Your Community Partner Since 2004

**Acorn**  
Your Community Partner Since 2004

**Waterbewise.com**  
For Water Efficiency Upgrade REBATES

**Residential WaterSmart Program**

<b>Indoor Fixtures</b> High-Efficiency Toilets (1.6/1.28 gpm) \$150 High-Efficiency Shower Heads \$75 Low-Flow and Low-Water Urinals \$100	<b>Rebate</b> \$150 \$75 \$100
<b>Landscaping Equipment</b> Smart Irrigation Controllers \$100 Soil Moisture Sensor Systems \$100 Turf Removal \$100	<b>Rebate</b> \$100 \$100 \$100
<b>Commercial WaterSmart Program</b>	
<b>Plumbing Fixtures</b> High-Efficiency Toilets (1.6/1.28 gpm) \$150 High-Efficiency Shower Heads \$75 Low-Flow and Low-Water Urinals \$100	<b>Rebate</b> \$150 \$75 \$100
<b>Landscaping Equipment</b> Smart Irrigation Controllers \$100 Soil Moisture Sensor Systems \$100 Turf Removal \$100	<b>Rebate</b> \$100 \$100 \$100
<b>Food Equipment</b> Commercial Food Processors \$100 Air-Cooled Ice Machines \$100	<b>Rebate</b> \$100 \$100
<b>HVAC Equipment</b> Cooling Towers \$100 Chilled Water Systems \$100 Medical and Dental Equipment Laminar Flow Benches \$100 City Vacuum Pumps \$100	<b>Rebate</b> \$100 \$100 \$100 \$100 \$100

**Waterbewise.com**

**Doctor Y's ANIMAL HOSPITAL**

**Dental Cleaning and FREE Exam**  
New Clients only \$245 (Reg \$290)  
(Average cost of dental cleaning in the Conejo Valley is \$500)  
Includes pre-anesthetic blood work, IV catheter, anesthesia, exam and cleaning.

**Vaccine Clinic \$15 per Vaccine**  
Includes rabies/leptos vaccine EVERY Saturday 10am-1pm (Except on short week times!)

**Meet our new Groomer, Edgar**  
10% OFF Grooming services  
New clients only

Quality care, Grooming and full-service animal hospital!  
Mon-Fri 9am-7pm • Sat 9am-5pm  
www.doctorysanimalhospital.com  
30849 E. Thousand Oaks Blvd., Westlake Village 818-707-0700

**JONES SPEAKS**  
As Cowboys run through training in Oxnard, their owner addresses the season ahead for team. SPORTS, 1C

**VENTURA COUNTY**

**Peace elusive as war rages in Gaza**  
Israel seeks to end Hamas military threat

**Do:**  
Realize I could be saving more water  
Don't panic  
Conserve Water and Save \$\$\$!  
Visit **waterbewise.com** for valuable rebates and information. \$1.00

**81°/66°**  
96°/66° Low clouds, sun  
Quick Road

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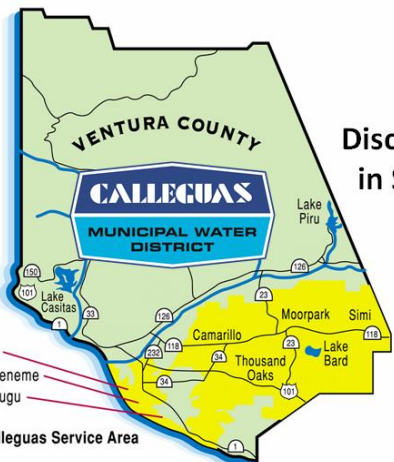
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# Calleguas Outreach Campaign - Radio Interviews -

Water Supply, Conservation & BDCP

Turf Removal Rebate Program



Discussion of Drought Impacts  
in Southern Ventura County  
July 18, 2014



NEWS TALK  
1590 KVTA

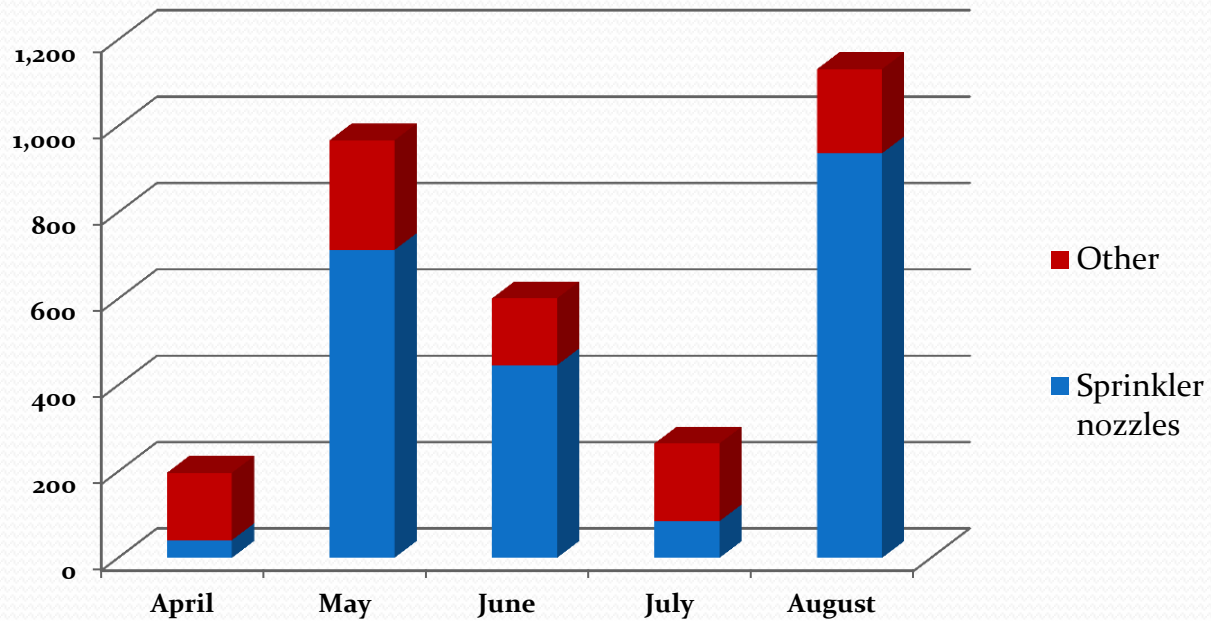


6:00 am – 7:00 am:  
Locals Only

Posted on Calleguas'  Channel



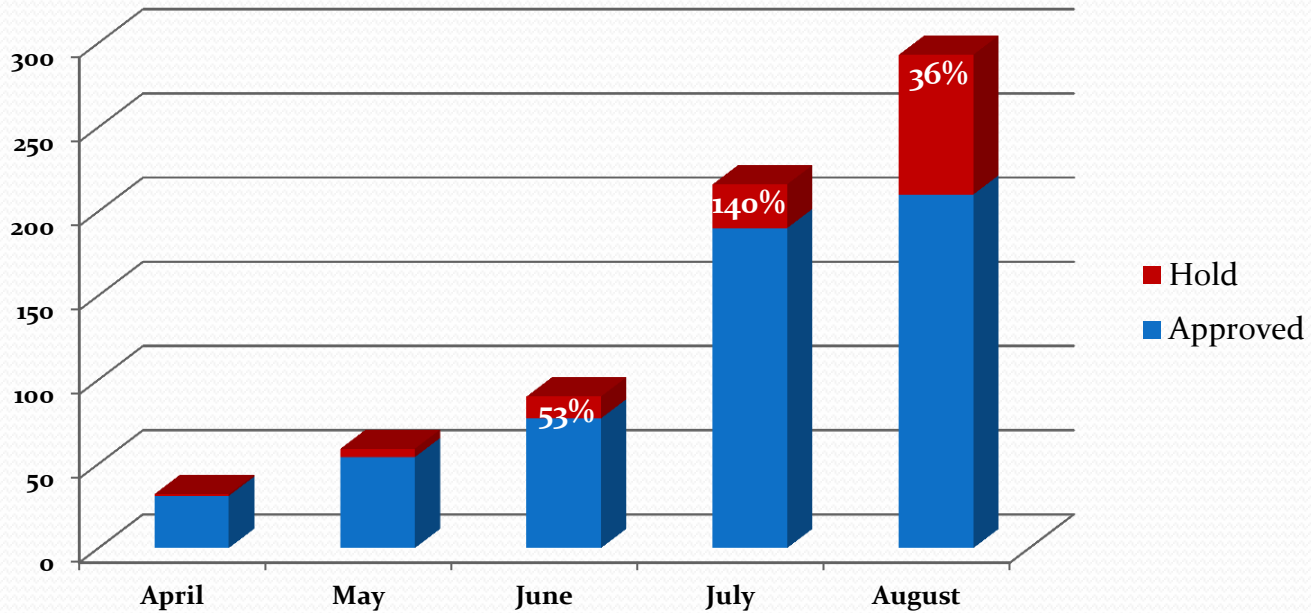
## All Device Types Single Family Residential





## Turf Replacement Rebate Program

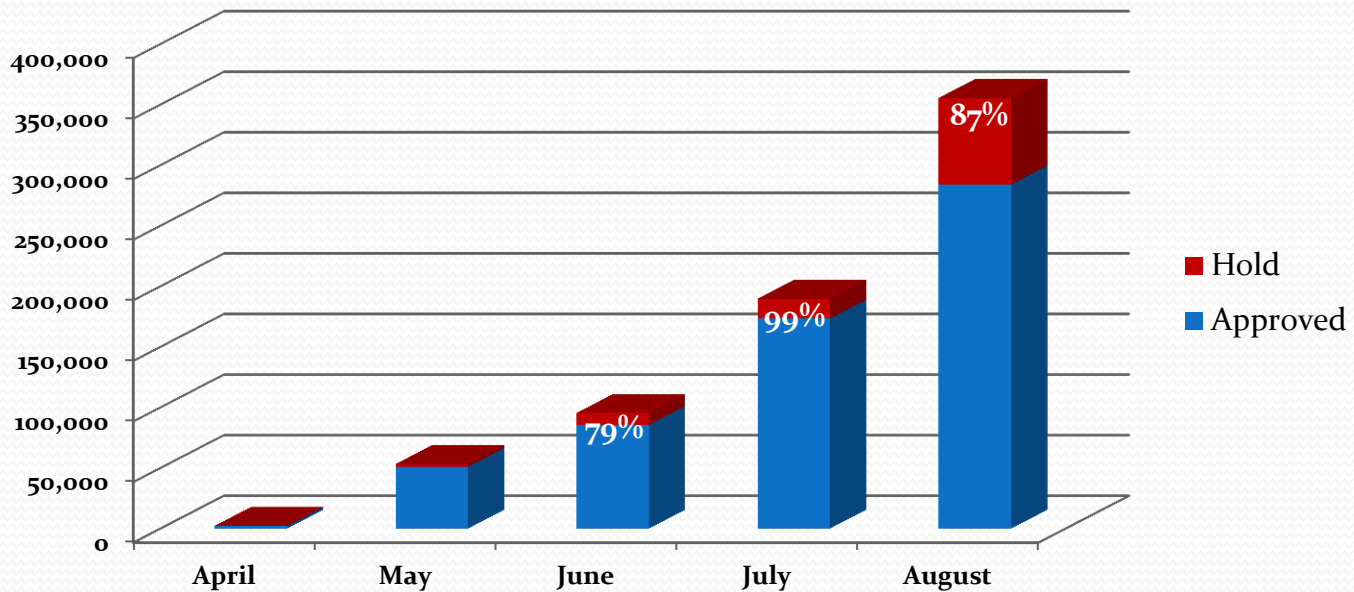
*Residential - Number of Reservations (MoM % increase)*





## Turf Replacement Rebate Program

*Residential - Square Feet (MoM % increase)*





## Turf Replacement Rebate Program Residential Activity through 9/11/14

Agencies	# Applications	Total Sq. Ft. Requested	Total Reservation Amount
1	2954	4,511,304	\$10,992,268
2	1667	2,636,384	\$4,956,236
Calleguas MWD	657	1,106,939	\$2,549,365
3	411	654,603	\$1,240,158
4	312	432,401	\$775,911
5	174	288,244	\$541,676
6	136	226,086	\$452,171
7	141	184,909	\$438,778
8	122	156,471	\$429,305
9	142	210,570	\$422,245
10	82	174,650	\$321,908
11	83	154,015	\$278,055
12	59	99,906	\$181,831
13	53	97,980	\$178,134
14	42	66,709	\$133,418
15	53	61,111	\$113,672
16	22	34,052	\$65,551
17	4	14,016	\$24,192
18	6	9,809	\$17,618
19	7	6,763	\$10,807
<b>Grand Total</b>	<b>7127</b>	<b>11,126,921</b>	<b>\$24,123,297</b>
Yellow Shaded indicates Member or Retail Agency supplemental funding			



## Turf Replacement Rebate Program

### Commercial, Industrial, & Institutional Activity through 9/11/14

Agencies	# Applications	Total Sq. Ft. Requested	Total Reservation Amount
1	98	4,616,890	\$8,943,381
Calleguas MWD	13	2,405,480	\$4,807,760
2	18	1,397,532	\$2,730,214
3	20	1,074,246	\$2,086,071
4	4	878,752	\$1,757,504
5	58	949,480	\$1,673,355
6	34	424,503	\$951,171
7	2	295,190	\$590,380
8	14	185,451	\$370,901
9	5	62,315	\$216,403
10	13	93,192	\$143,784
11	5	44,276	\$74,705
12	2	14,860	\$18,020
13	6	11,858	\$16,711
14	2	5,300	\$10,600
15	1	3,086	\$6,172
16	1	2,500	\$2,500
17	1	1,225	\$2,450
18	1	1,254	\$1,254
<b>Grand Total</b>	<b>298</b>	<b>\$12,467,389</b>	<b>\$24,403,335</b>
Yellow Shaded indicates Member or Retail Agency supplemental funding			



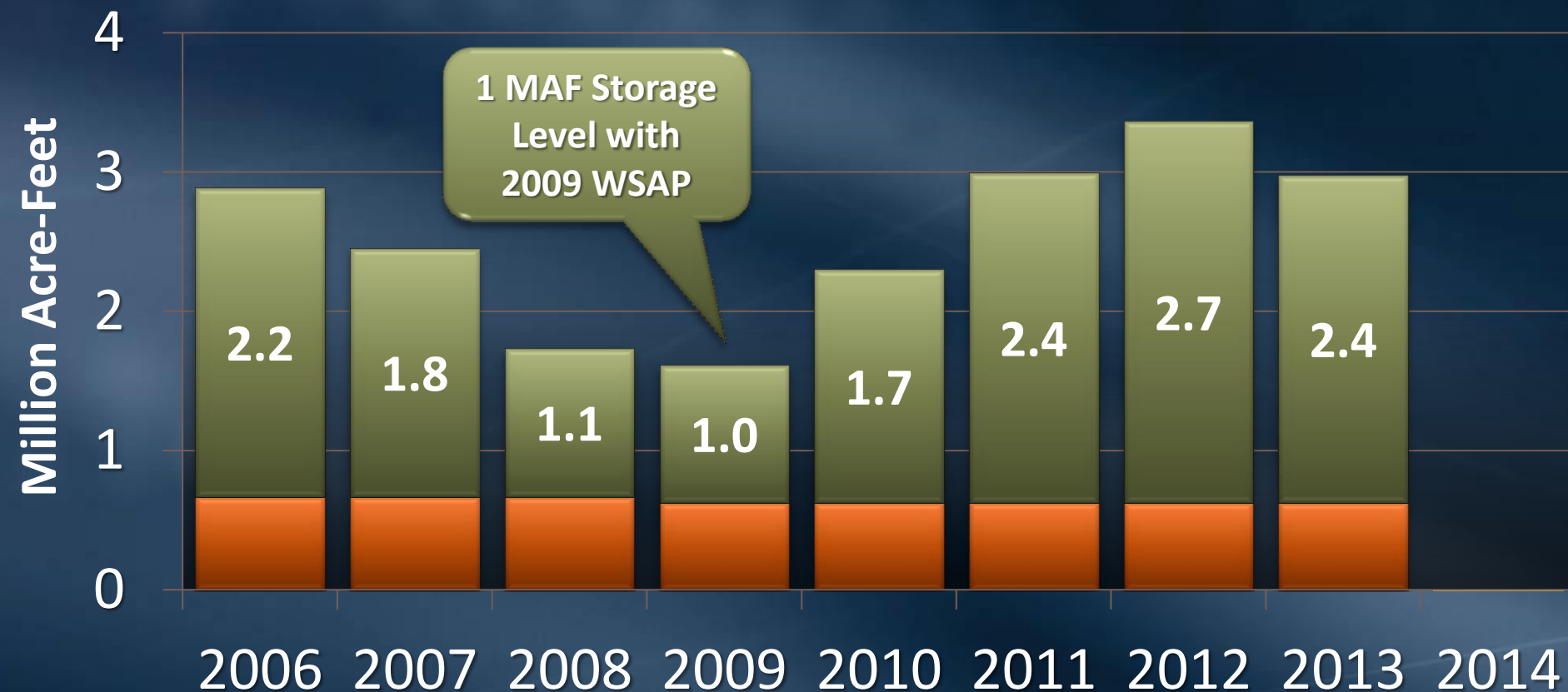
# 2015 Water Supply Scenarios

# MWD Storage Reserves

End of Year Balances\*

Emergency Storage

Dry-Year Storage



\*Estimated actual storage balances, may be subject to change.

# MWD Storage Reserves

End of Year Balances\*

Emergency Storage

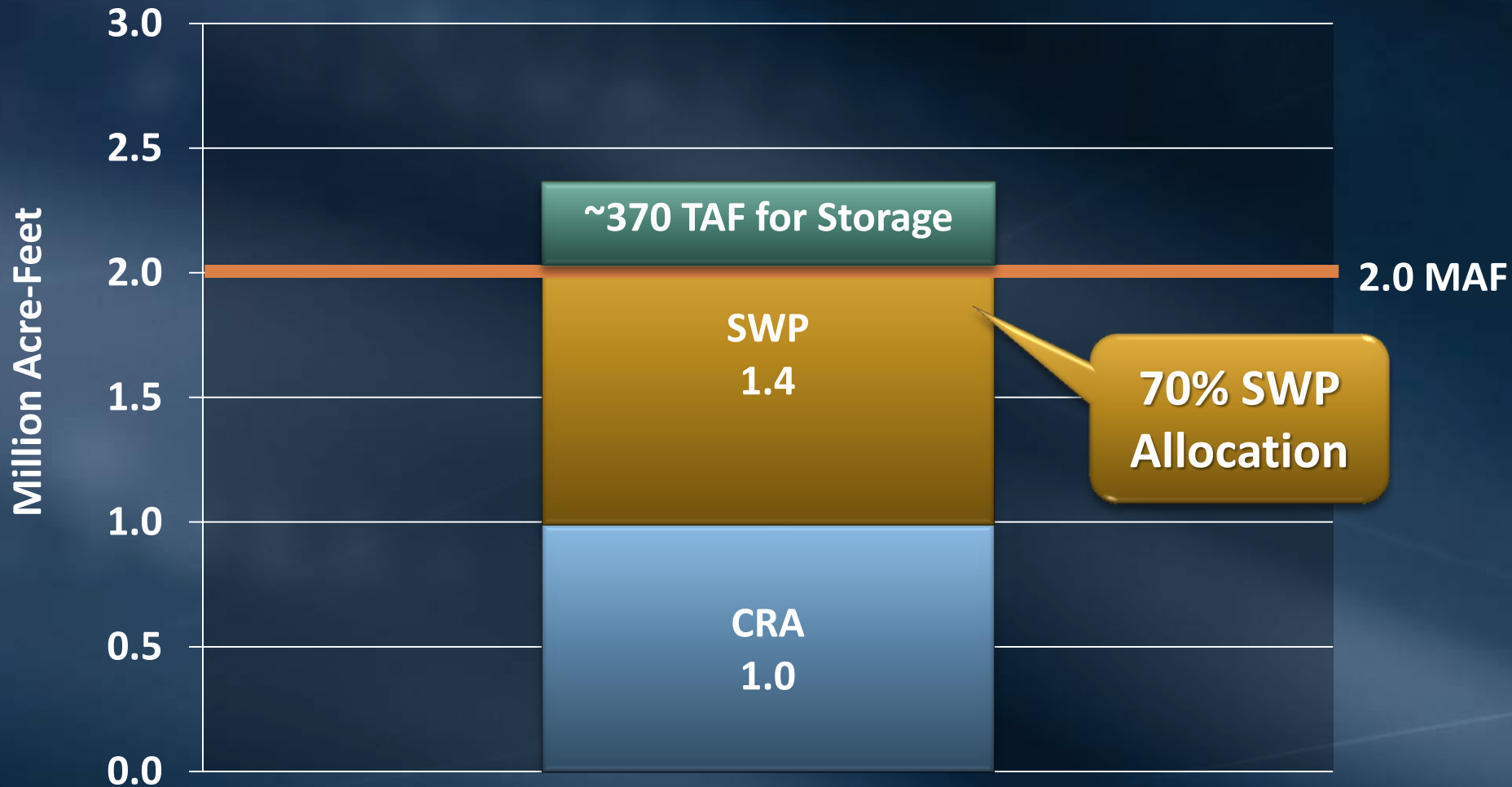
Dry-Year Storage



\*Estimated actual storage balances, may be subject to change.

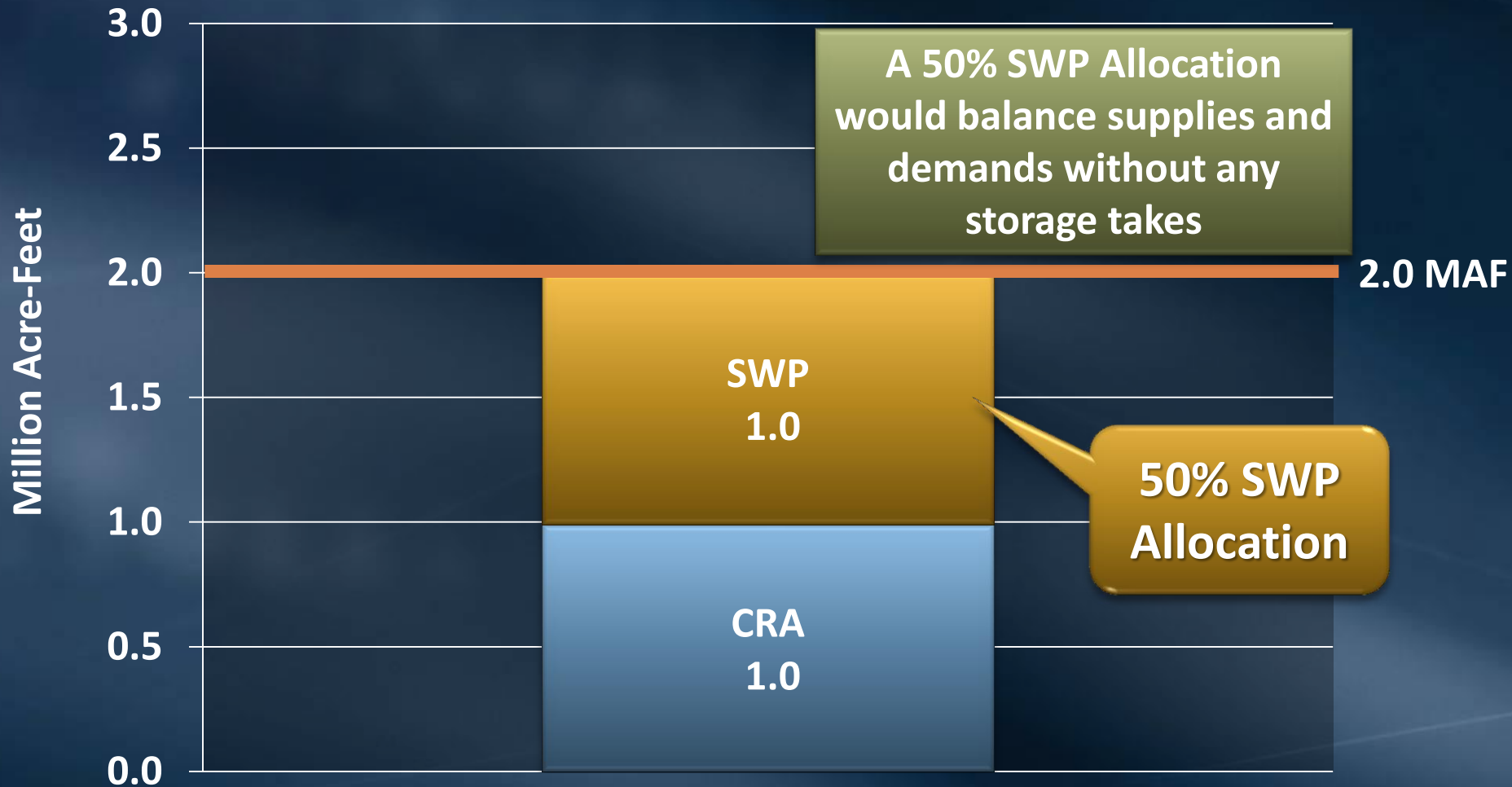
# Above Normal Conditions

# Above Normal SWP Results in Storage Puts

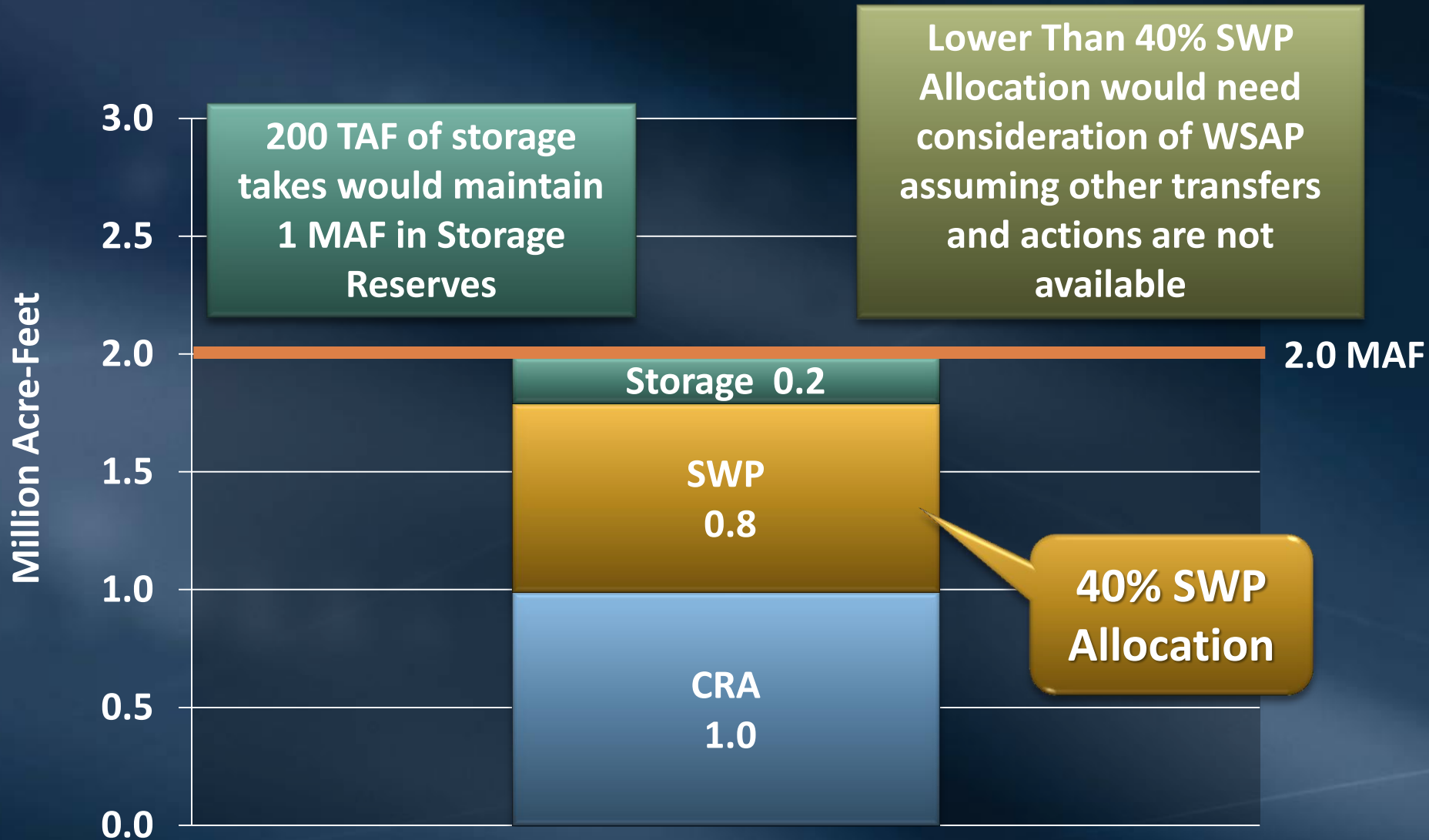


# Normal Conditions

# Normal SWP Conditions Can Balance Supply and Demand



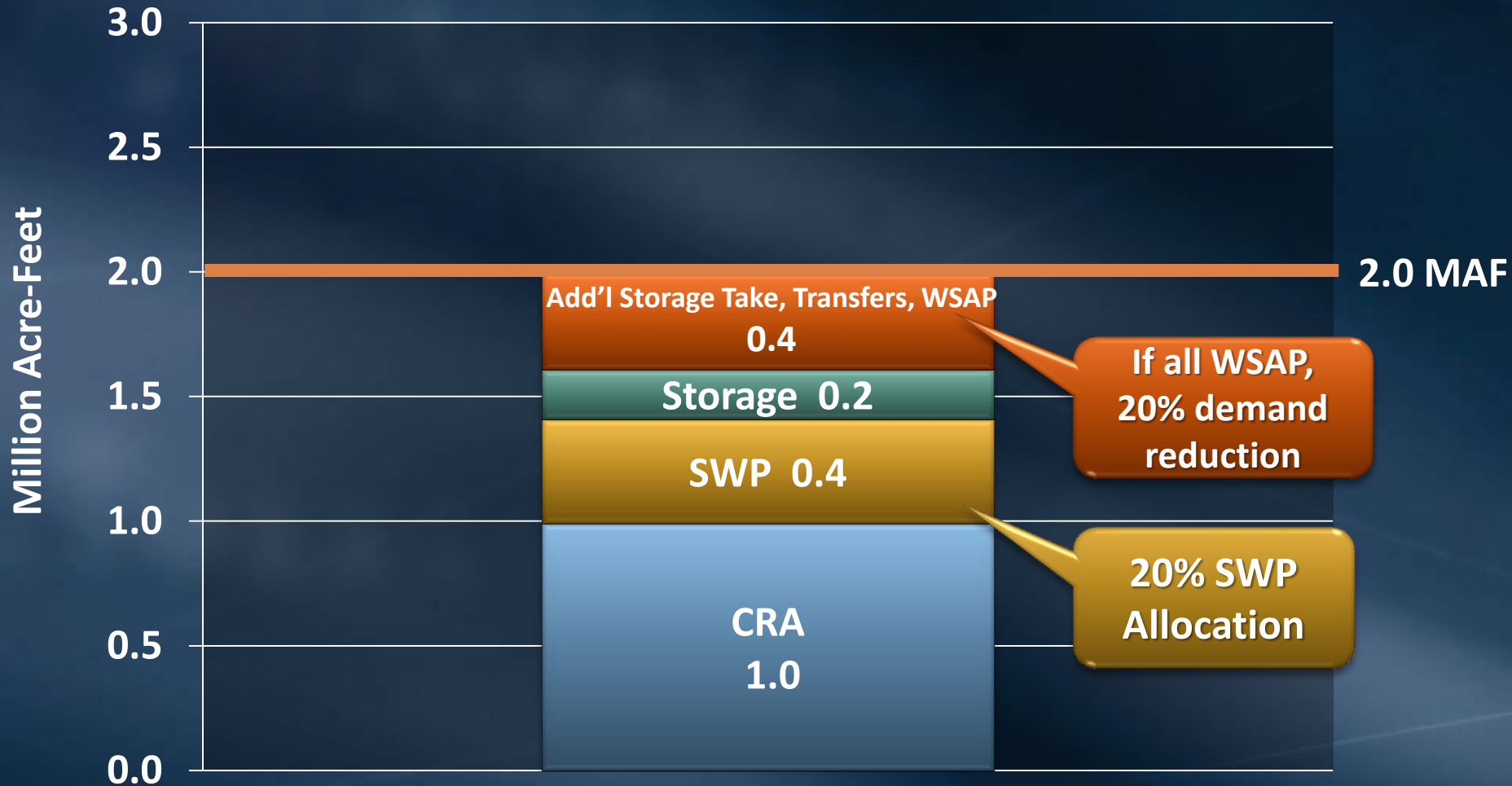
# 2015 SWP Conditions for Balance



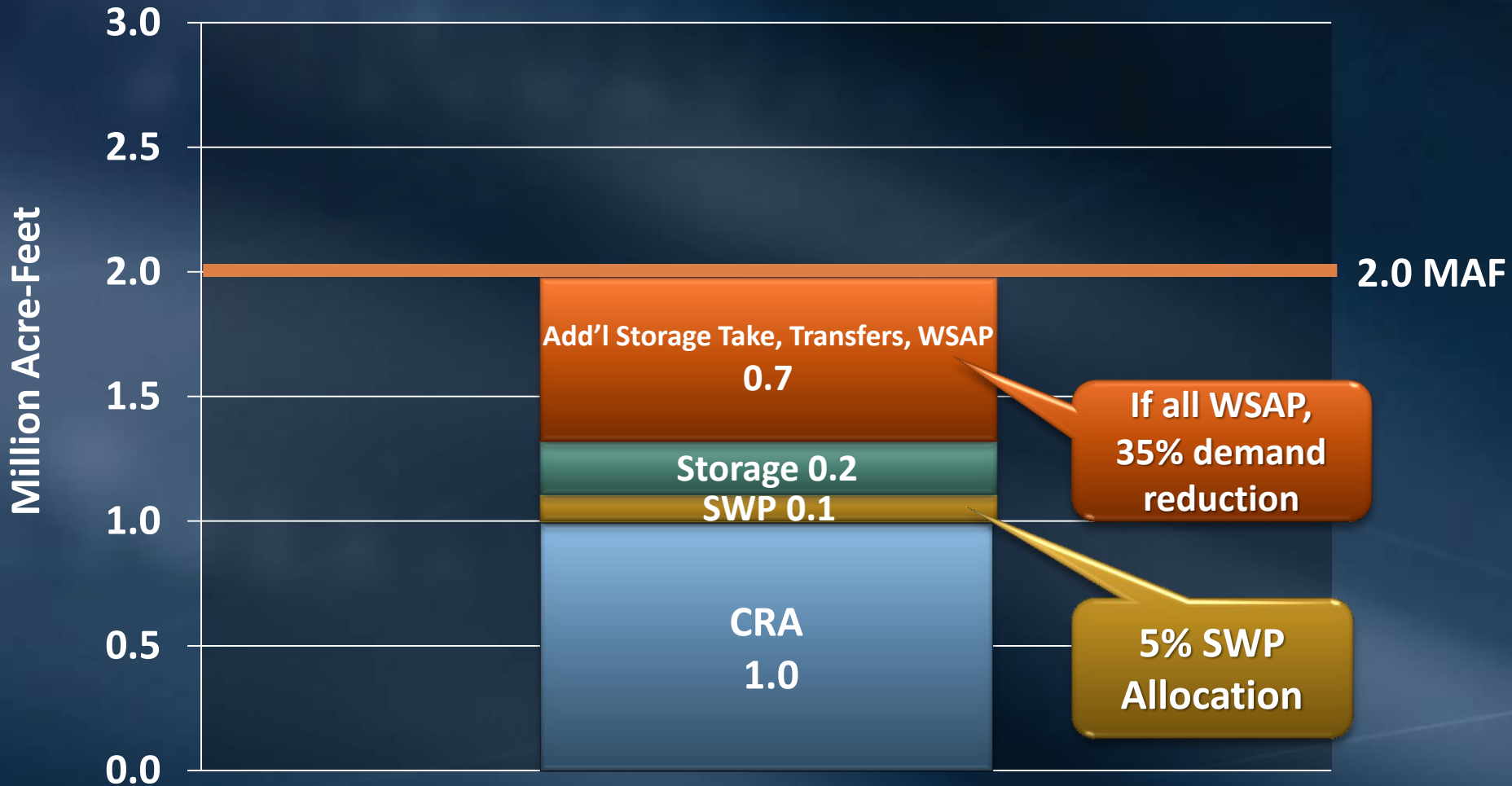


Dry Conditions

# Dry SWP Conditions Require Additional Actions



# Repeat of 2014?





[www.calleguas.com](http://www.calleguas.com)

CalleguasMWD



Calleguas Channel on 

Calleguas MWD

