



# CITY OF SANTA BARBARA

## COUNCIL AGENDA REPORT

**AGENDA DATE:** September 16, 2014

**TO:** Mayor and Councilmembers

**FROM:** Water Resources Division, Public Works Department

**SUBJECT:** Stage Two Drought Update

**RECOMMENDATION:** That Council:

- A. Receive an update on the status of the current drought; and
- B. Appropriate \$225,000 from the Water Fund Reserves to the Fiscal Year 2015 Drought Fund budget for continued Water Conservation staffing needs in response to the drought.

### **DISCUSSION:**

On February 11, 2014, Council declared a Stage One Drought and asked customers to reduce water use by 20 percent. Council requested that staff keep them informed and report back monthly with a status update on the City's water supplies, conservation efforts, and current work efforts. On May 20, 2014, Council declared a Stage Two Drought in response to a continued water shortage forecasted for next year, and the inability of the community to reduce water usage by 20-percent. This report will cover the following items:

- *Water Supply Outlook*
- *Supplemental Water*
- *Tools for Influencing High Water Usage*
- *Drought Response Capital Projects*
- *Conservation Efforts*

The water supply outlook remains unchanged from the August 5, 2014, drought update presentation. There is no significant rain projected in the coming months, and staff continues to work on securing additional supplemental water, accelerating drought related capital projects, and sustaining a strong message for extraordinary conservation. The most recent water conservation numbers for July 2014, show that the community successfully reduced its water usage by 20-percent. Staff is hopeful that with the drought water rates that went into effect on July 1, 2014, the community will be able to sustain the 20-percent water use reduction target.

The City has secured, or is under contract for delivery of, sufficient supplemental water to meet the projected shortages in local supplies for next year, assuming the community can sustain a 20-percent reduction. In July, the Central Coast Water Authority, on behalf of the City, negotiated a purchase of supplemental water from the Mojave Water Agency. The City's portion, approximately 535 acre feet, is currently stored in the San Luis Reservoir, which will make for easy delivery once the agreement is finalized.

Concerned the community might be challenged to meet and sustain the 20-percent reduction goal, Council requested that staff investigate the use of other tools (including penalties) to reduce high-water use. Staff will provide Council with information and recommendations for consideration should we need to move to a Stage 3 Drought Emergency.

Staff is moving forward with the design and construction of capital work to assist with water supply during the drought. This includes the acceleration of groundwater well replacements and projects that use poor quality groundwater in place of potable water for irrigation. These include the Corporation Yard Well, the Vera Cruz Well, and the City Hall Well, which will augment the City's drinking water supplies; and the Valle Verde Well, which will be connected directly to the City's recycled water system.

Staff has increased the water conservation outreach program through an enhanced drought media campaign: additional targeted outreach, including increased weekly messaging through social media, online news outlets, and industry contacts; presentations to community and industry groups; additional printed materials with drought messaging; targeted utility bill messaging; drought signage at City facilities; and additional trainings and workshops.

Workload for the Water Conservation program has increased dramatically as a result of the drought. Below is a summary of staff responses to certain items, comparing the January through August period last year to the same period in the current year.

| <b>Item</b>                            | <b>Jan 2013 – Aug 2013</b> | <b>Jan 2014 – Aug 2014</b> |
|--|----------------------------|----------------------------|
| Water Checkups                         | 347                        | 784                        |
| Smart Landscape Rebate Pre-Inspections | 58                         | 243                        |
| Complaints on Water Waste              | ~30                        | 455                        |

Due to the increased workload, the Water Conservation program has hired several hourly staff that are currently working full-time to support drought response efforts. In preparation for continued drought conditions, staff requests authorization to appropriate \$225,000 from Water Fund Reserves to the FY15 Drought Fund budget to meet staffing needs and continue drought response efforts through June 2015. The staffing budget for Fiscal Year 2016 will be assessed at a later time. Staff will prepare an amendment to the Salary and Control resolution that reflects the limited term positions and return to Council for approval.

**PREPARED BY:** Joshua Haggmark, Water Resources Manager/JH/mh

**SUBMITTED BY:** Rebecca J. Bjork, Public Works Director

**APPROVED BY:** City Administrator's Office



# Stage 2 Drought Update



City Council  
September 16, 2014

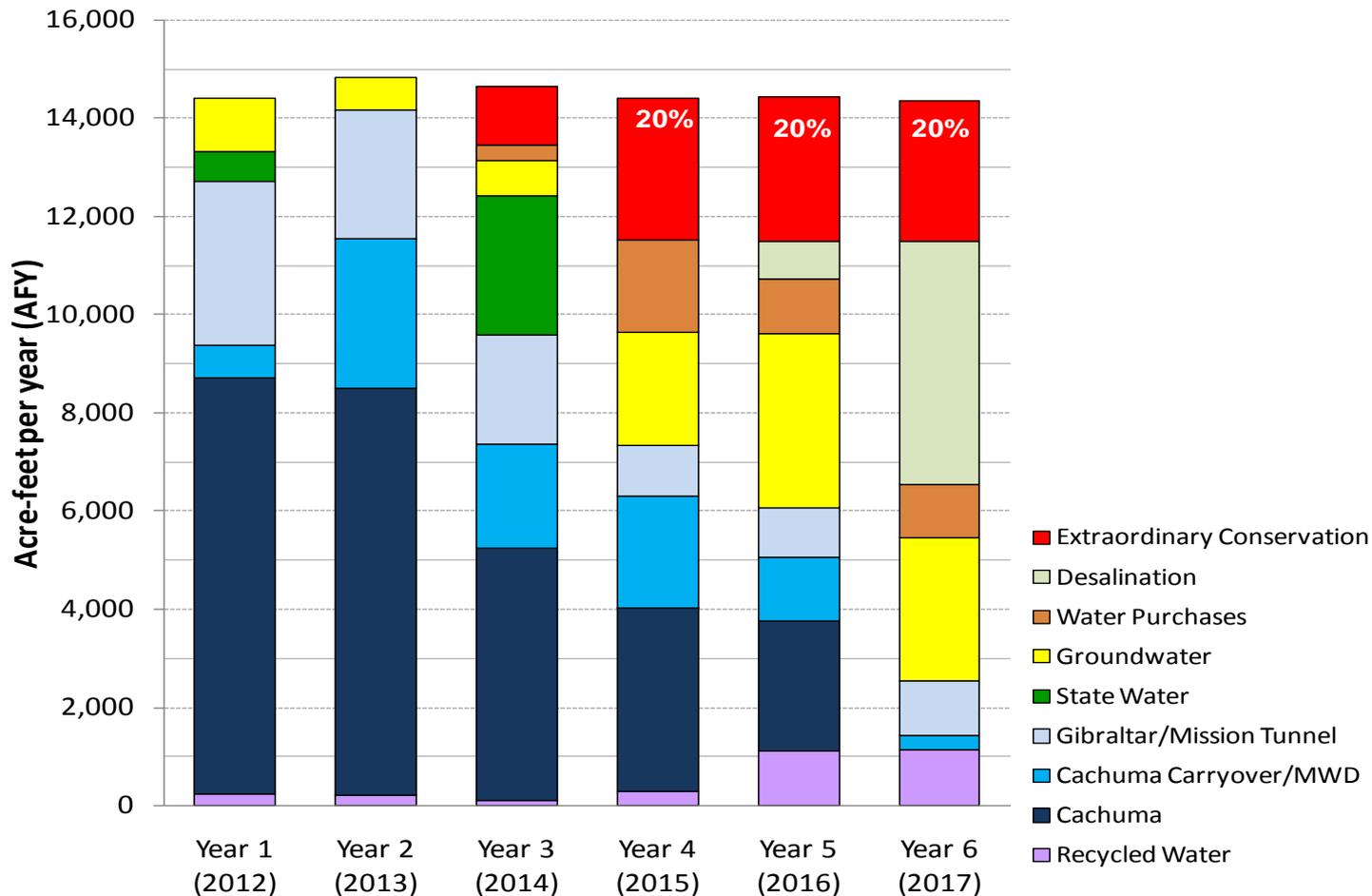


# Overview

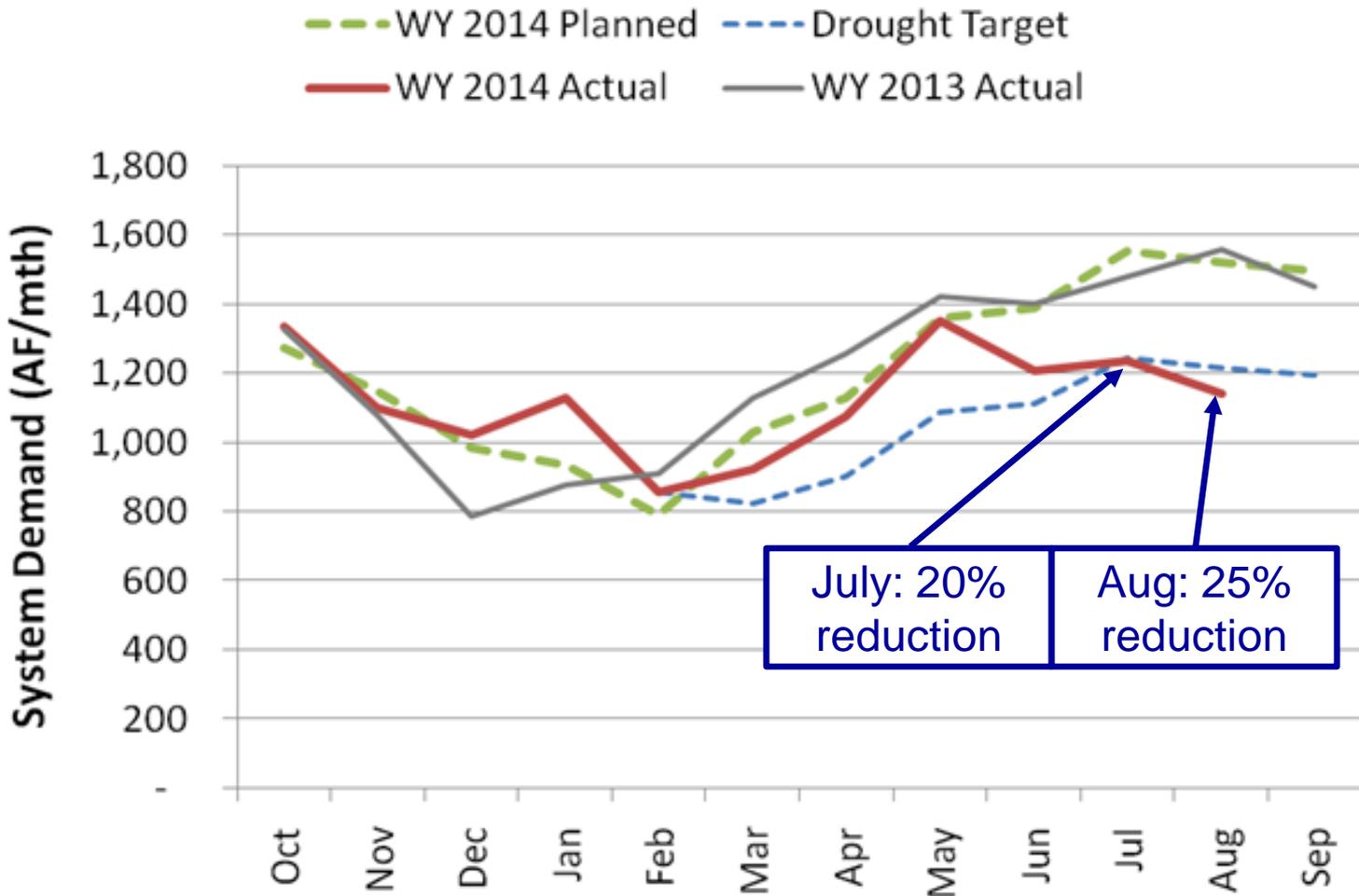
- ◆ Water Supply Outlook
- ◆ Supplemental Water
- ◆ CCWA Water Delivery Request Process
- ◆ Drought Response Capital Projects
- ◆ Water Conservation
- ◆ Tools for Influencing Water Usage

# Current Supply Strategy

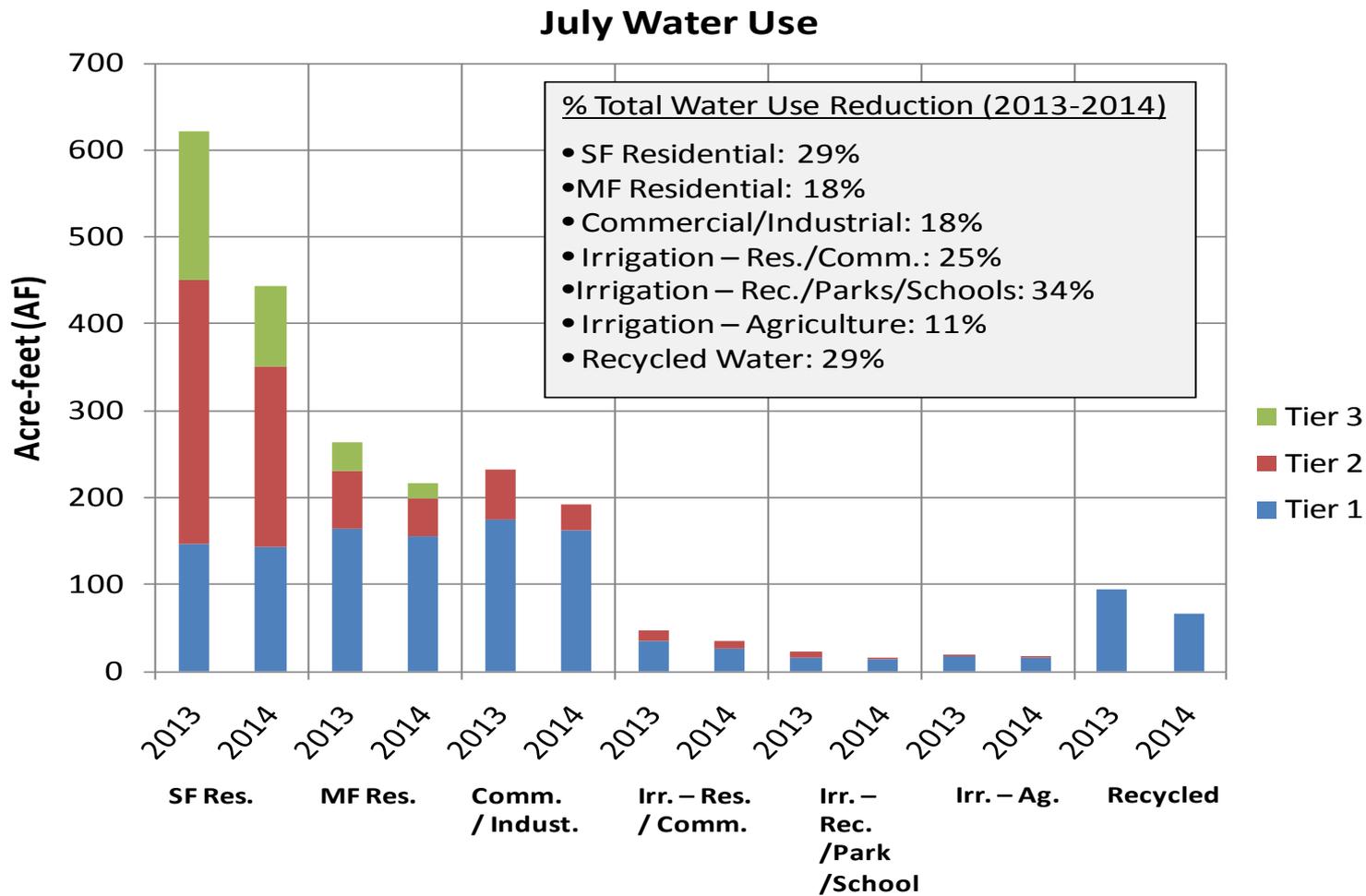
(based on no reservoir inflows, no State Water)



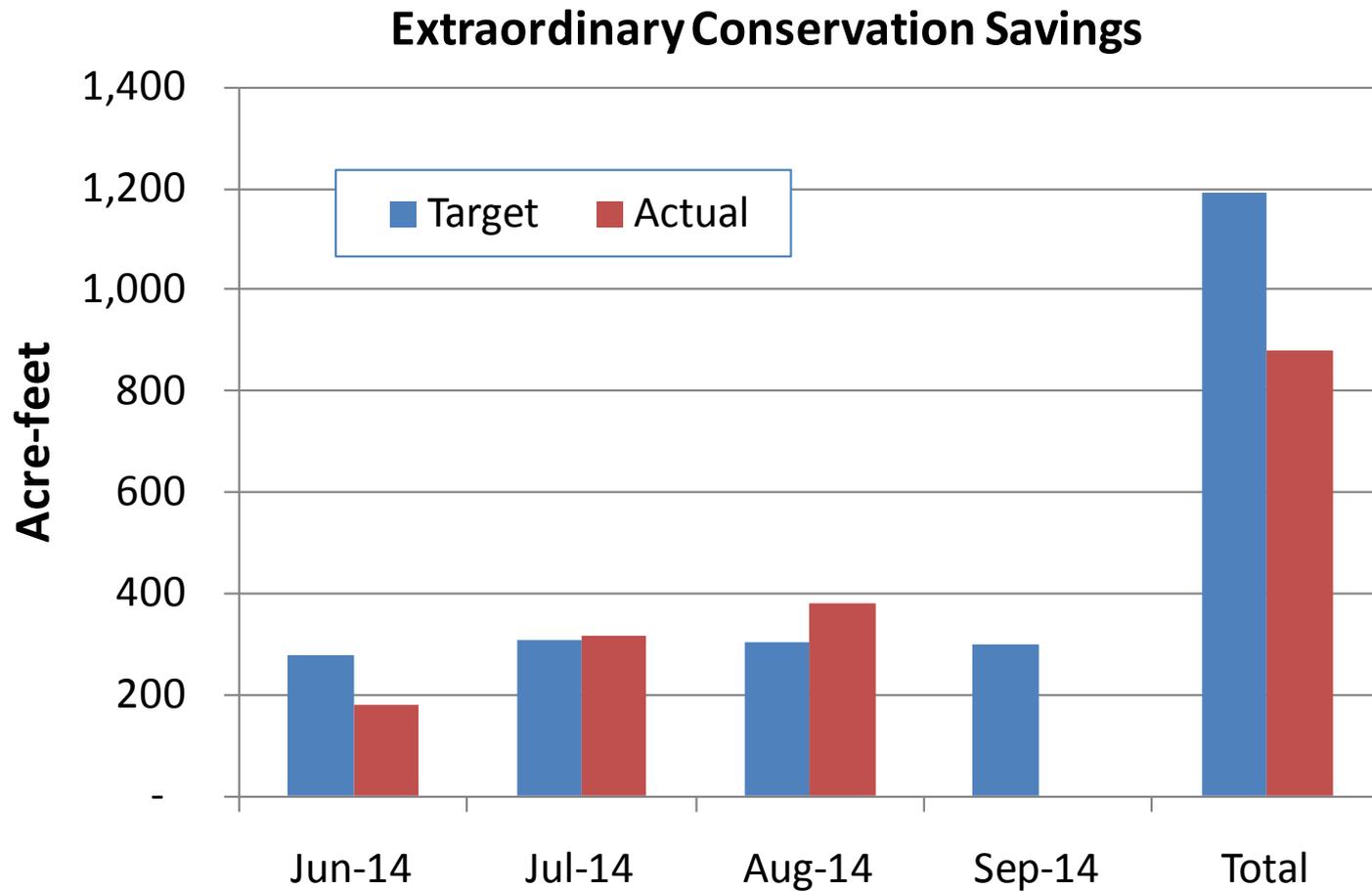
# Monthly Demands



# Water Use by Customer/Tier



# Total Water Saved



# Lake Cachuma Status Update

- ◆ 62,300 AF - Current Storage
- ◆ ~25-30K AF – Projected Available Project Water by Oct 1, 2014
- ◆ 6,000 AF – Planned City Supply next WY
  - 1,975 AF – Carryover of current entitlement
  - 3,725 AF – Next year's entitlement (55% reduction)
  - 300 AF – MWD transfer per Juncal Agreement



# Lake Cachuma Status

- ◆ 55% Reduction for WY 15 (~3,725 AF)
- ◆ Strategy – Stretch Cachuma supply through Winter of 2016
  - Maximize Imported Water Deliveries
  - Additional Opportunity in WY 16 for Inflow
- ◆ Bureau of Reclamation and National Marine Fisheries Service are in discussions concerning Fish Release Requirements in compliance with the Biological Opinion
- ◆ Downstream Water Rights Release: August 18-October 31; Satisfies Fish Water Release Requirements during this time period

# CCWA Delivery Request Process

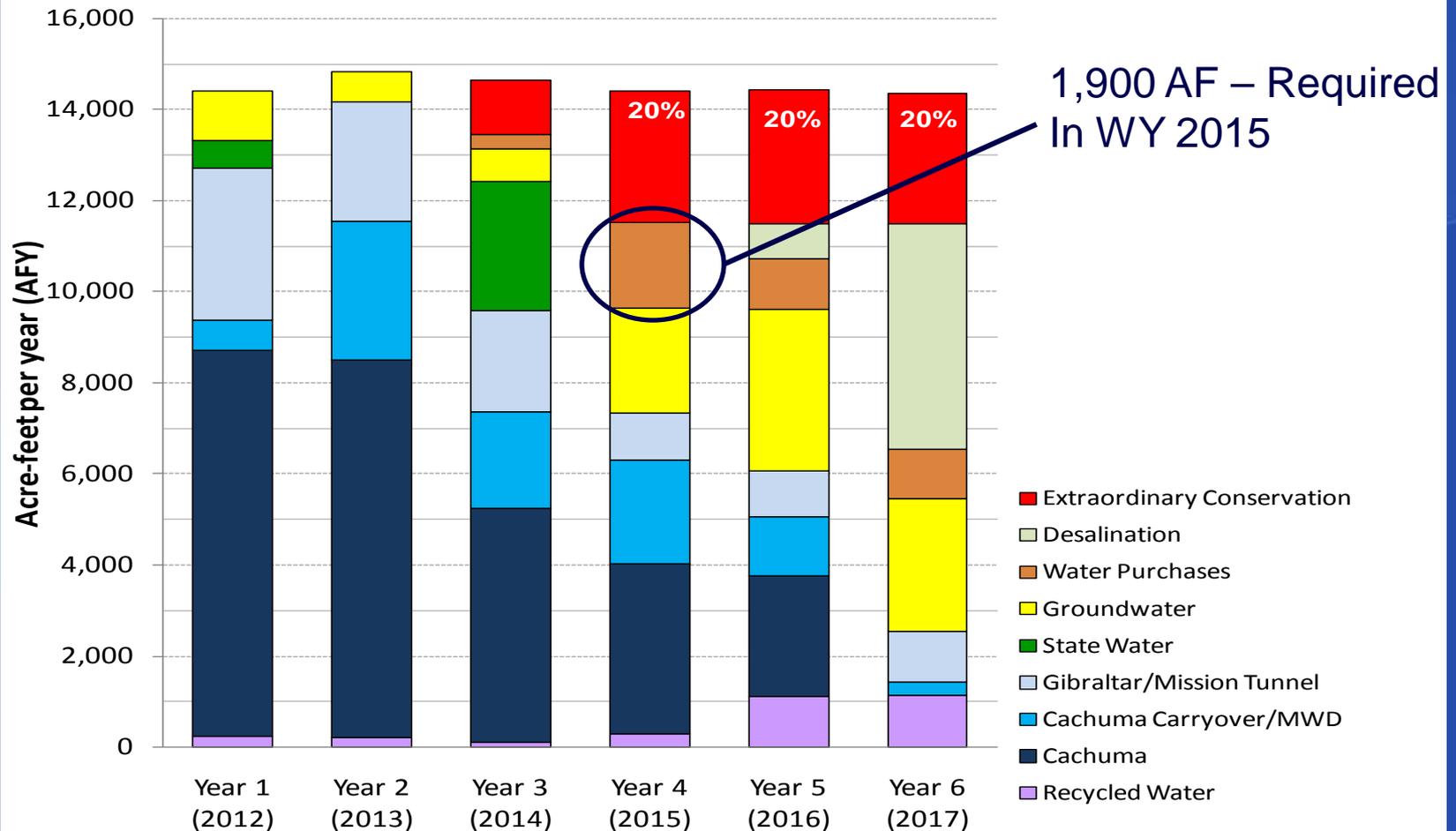
- ◆ City's Table A is 3000 AFY (plus additional 300 AFY drought buffer)
- ◆ Oct 1<sup>st</sup> – DWR Delivery Request Due
  - Monthly request sent to CCWA
  - CCWA checks capacity and works with member agencies to adjust deliveries
- ◆ Dec 15<sup>th</sup> – Revised Delivery Request Due
  - Determines “reserved” capacity for the year; basis for CCWA budgeting

# CCWA Delivery Request Process

- ◆ Capacity Allocation Procedures
  - Requested deliveries reduced to proportional Table A share of capacity
  - Unused capacity is reallocated to other participants who requested excess delivery
- ◆ Changes can be requested throughout year to access unused capacity

# WY 15 Supplemental Water Supply

(based on no reservoir inflows, no State Water)



# Supplemental Water

## ◆ Secured:

- Vandenberg AFB - 1,148 AF
- Mojave Water Agency ~ 535 AF
- Biggs West Gridley WD ~ 1,300 AF\*



## ◆ Unsecured: In Discussion

- Banked Water at Dudley Ridge – 1,427 AF

## ◆ Total Supplemental Water – 4,410 AF

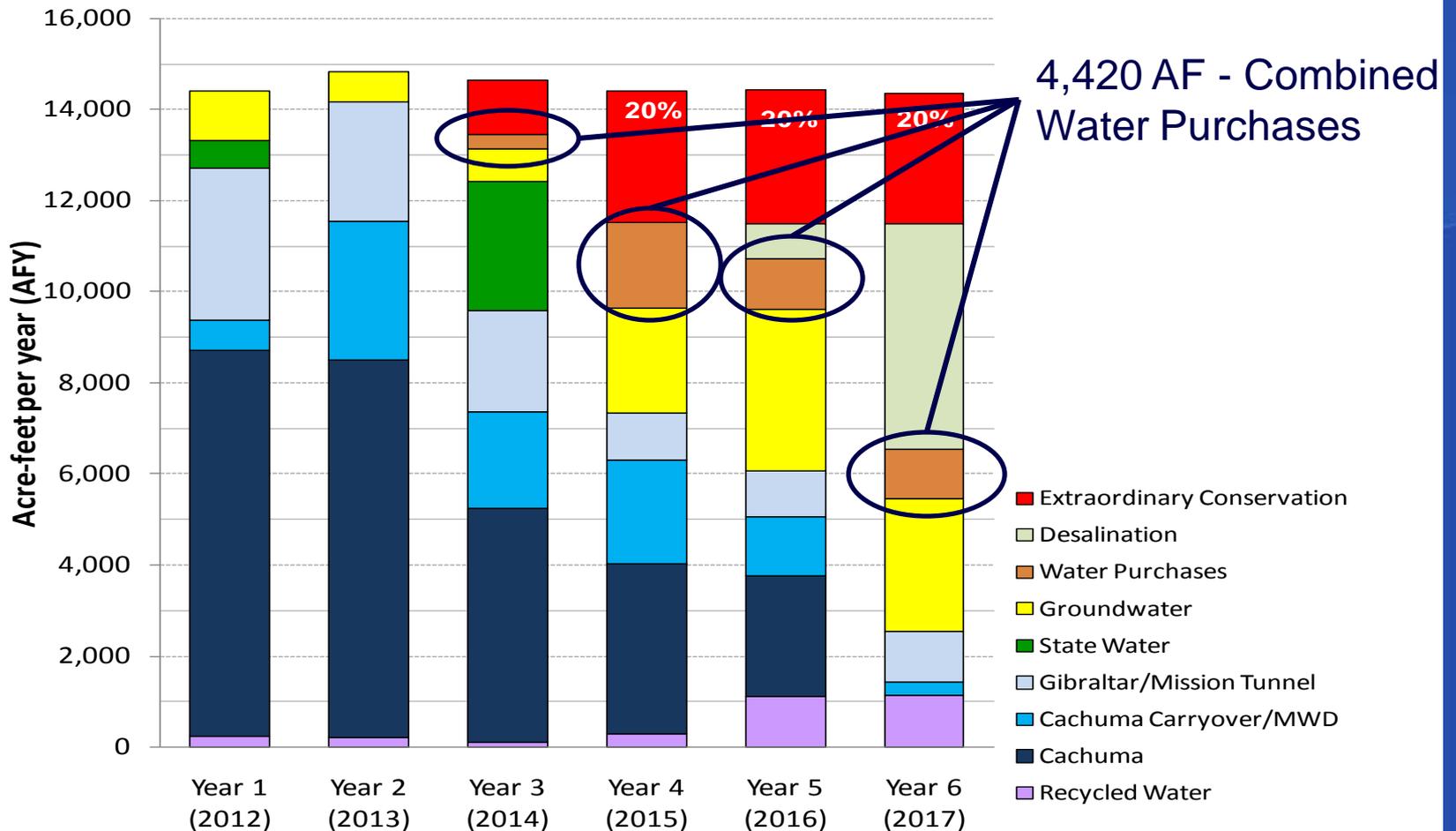
\* This water will all be secure in San Luis Reservoir by the end of September 2014. Final delivered amount to be confirmed by DWR

# CCWA Delivery Requests

- ◆ Maximizing available capacity in CY14 - 3,759 AF to be delivered
- ◆ 1,900 AF – Remaining Water for CY15 (Carried Over)
- ◆ 3,300 AF – City's Initial Request for CY15 Reserved Capacity (submit Oct 1)
- ◆ 4,500 AF – FY 15 budget included funds to deliver up to this amount if additional water and capacity are available (assuming energy costs for conveyance do not change)

# Current Supply Strategy

(based on no reservoir inflows, no State Water)



# Drought Response Capital Projects

- ◆ Recycled Water System
- ◆ Groundwater Projects
- ◆ Desalination Plant
- ◆ COMB Pumping Project



# Recycled Water System Projects

- ◆ Tertiary Treatment Plant – Online by Summer 2015 with a Capacity of 1,400 AFY
- ◆ Valle Verde Well ~ 300 AFY – Online in October 2014 (Non-potable groundwater to augment recycled water system)

# Tertiary Treatment Plant 9/8/2014

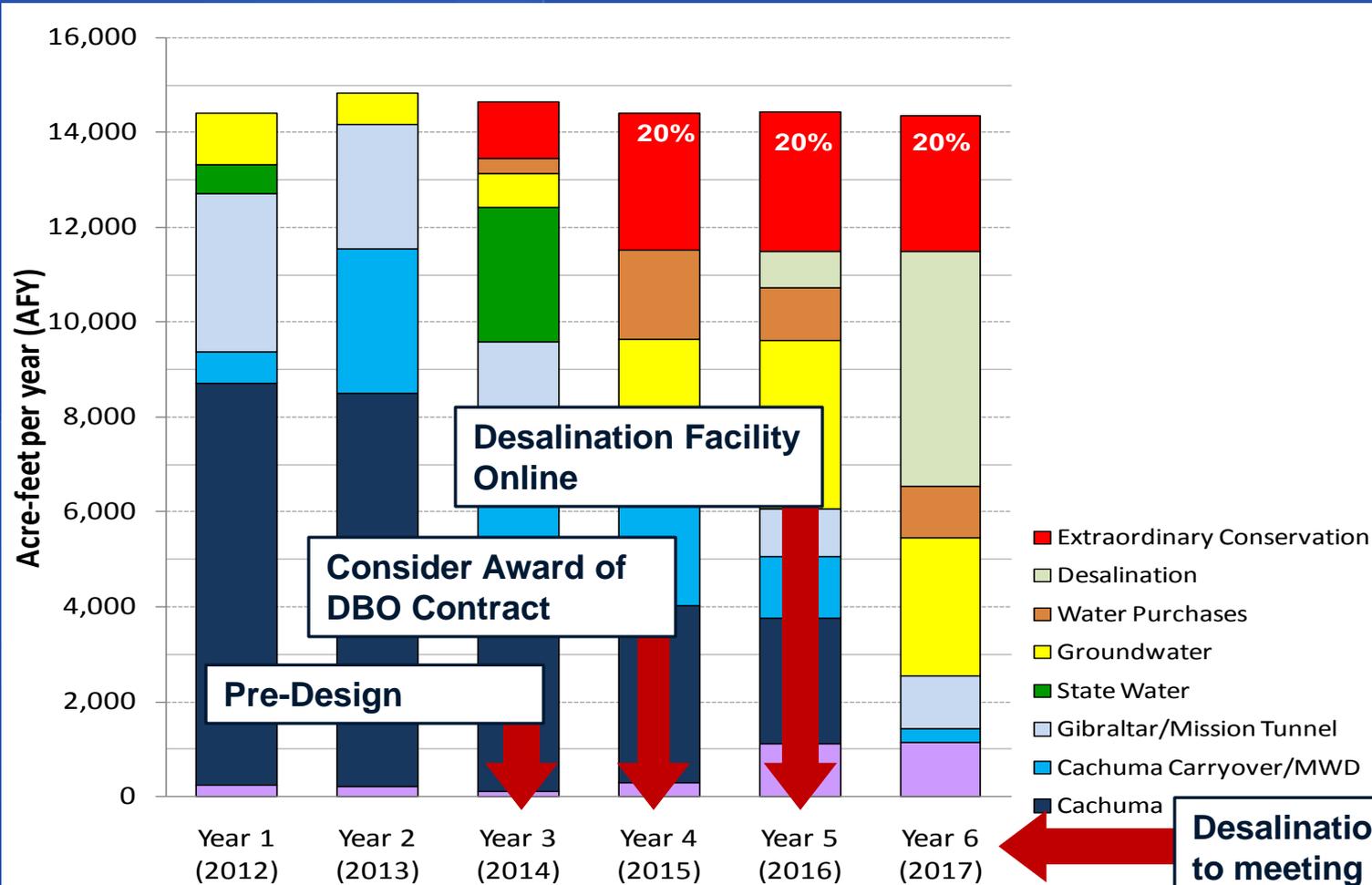


# Groundwater Project Highlights

- ◆ Alameda Well Replacement
  - In Design - scheduled to be online in Summer 2015
- ◆ High School Well
  - Pipeline is under Design - Water to be conveyed to Ortega Groundwater Treatment Plant for treatment
- ◆ Vera Cruz Well
  - Electrical failure - scheduled to be back online by October 2014
- ◆ City Hall Well
  - Pump failure - scheduled to be back online by October 2014

# Supply Strategy/Desal Timeline

(based on no reservoir inflows, no State Water)



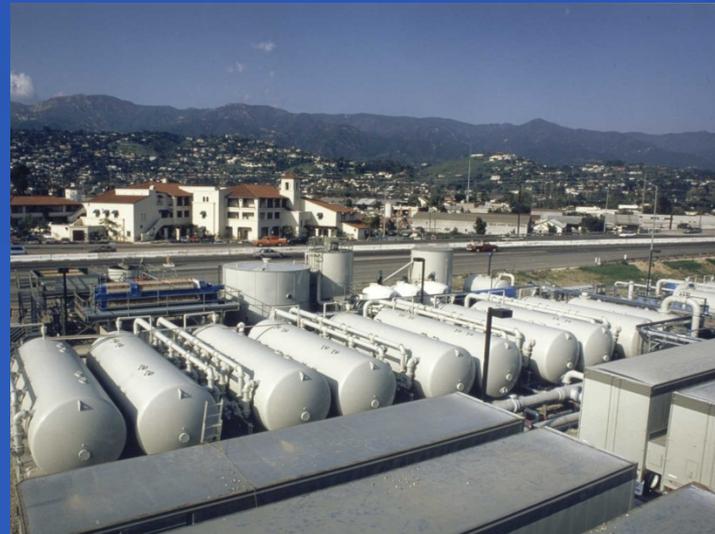


# Desal Project Milestones

- ◆ September 23, 2014 – Present Preliminary Design Findings with Recommendations
- ◆ November 2014 – Release RFP for DBO Services
- ◆ February 2015 – Receive Proposals for DBO Services
- ◆ April 2015 – Council to Consider Award; pending water supply status
- ◆ Summer 2016 – Projected Start of Desal Facility

# Summary of Upcoming Desal Presentation Highlights

- ◆ Status of Study Phase
- ◆ Permits
- ◆ Costs
- ◆ Funding



# COMB Pumping Project

- ◆ Project is complete and facility is in Standby
- ◆ Total Cost for Capital/Operation through March 2015 ~\$6.1 Million
- ◆ City Share of Costs is \$2.2M
- ◆ Grant Funding
  - City Received Preliminary Approval for a \$500K SWRCB Public Water System Drought Emergency grant
    - A Resolution for Council Approval is forthcoming
  - DWR IRWM Grant – Regional grant application has been submitted for ~\$2M



# Conservation Outreach Update

- ◆ Smart Landscape Rebate Program:

- Pre-Inspections:

- Jan 1 – Aug 1, 2013: 65

- Jan 1 – Aug 1, 2014: 324

- ◆ Pool covers:

- 41 since May 20th



# Conservation Outreach Update

## ◆ Advertising



**SAVE WATER DURING DROUGHT**

**We Have No Water To Waste**

- Automatic sprinkler systems are the #1 use of water in our city, adjust & check your system every month.
- If you hand water, feel for dry soil near the roots before applying water. Plants don't save water, people do!

*Lake Cachuma is at 34% of capacity*

***We are all in this together!***

Call 564-5460 for a free Water Checkup.  
The City is here to help. [WaterWiseSB.org](http://WaterWiseSB.org)



**SAVE WATER DURING DROUGHT**

**We Have No Water To Waste**

Only water your garden once a week and save 1,000 gallons or more!

***We are all in this together!***

Free Water Checkup  
[Click here to learn more](#)



**CHECK, REPAIR, ADJUST your sprinklers...**



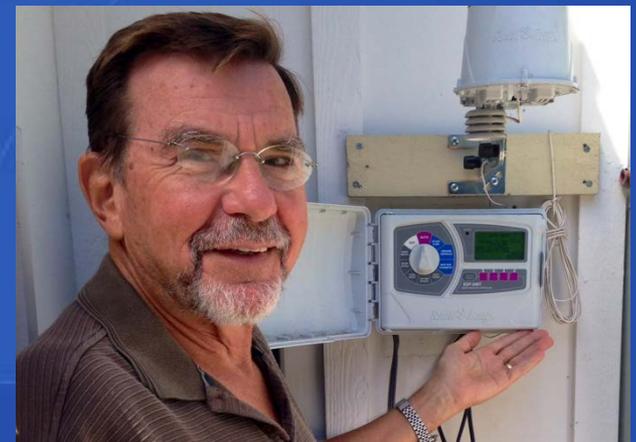
**SAVE 12-15 GALLONS each time you water.**



# Conservation Outreach Update

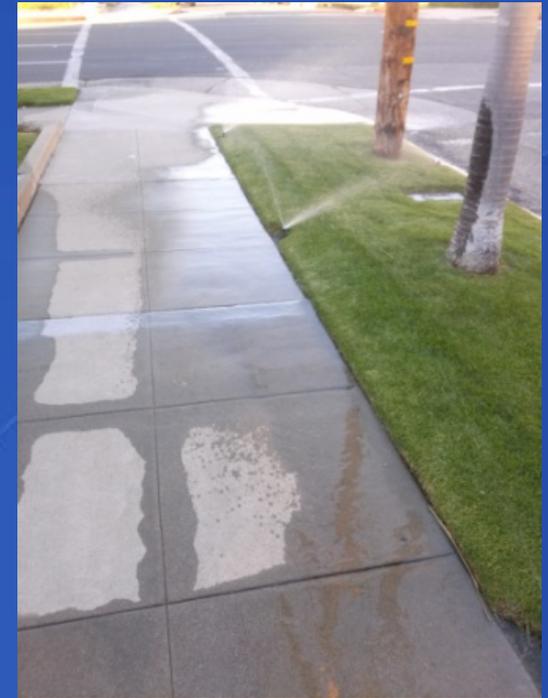
## ◆ Water Wise Citizen Spotlight

- Profile success stories of residents and businesses
- Release one per month via press release, bill insert, website, social media, etc.
- Always looking for more!



# Waste of Water Enforcement

- ◆ 624 complaints
  - 246 - resolved
  - 281 - no further occurrence
  - 50 - ongoing cases
  - 47- insufficient info
- ◆ 10 notices of violation
- ◆ 0 fines



# Conservation Staffing Update

- ◆ Recommend budget increase of \$225,000 in FY15 to meet ongoing staffing needs
- ◆ If approved, will return to Council on Consent for changes to Position Control Resolution

# Tools for Influencing Water Usage

- ◆ Planned Drought Response:
  - Conservation Based Water Rates (Stage 2 Rates)
  - Regulations - Water Use Application (Stage 2 Drought Resolution)
- ◆ Alternatives
  - Penalties
  - Water Use Allotments (Rationing)

# Legal Requirements for Regulatory Penalties

- ◆ Could be implemented under Municipal Code Water Use Regulations During Water Shortage Conditions (14.20.215)
- ◆ Legal Requirements:
  - Rationale for level of use resulting in penalty
  - Adoption of resolution that defines penalty
  - Revise Municipal Code

# Requirements for Water Use Allotments (Rationing)

- ◆ Develop Rationing Plan
  - Technical Analysis, Policy Design, Public Process
- ◆ Modification Required in Billing System
- ◆ Public Outreach
- ◆ ~9-12 months of work to get in place
- ◆ Hire more staff to develop/implement
- ◆ Legal Requirements
  - Prepare an Ordinance
  - Develop Appeal Process





# Stage 3 Water Rates

- ◆ Stage 3 Drought Rate Study underway
  - Incorporates cost of ocean desalination and other additional drought related costs (e.g. water purchases)
  - Result will be higher financial penalties for water use
- ◆ Staff recommends using Stage 3 Water Rates and Regulations as tool for accomplishing goals of penalties

An aerial photograph of a vast, winding reservoir nestled in a mountainous landscape. The foreground shows a dam structure on the left. The middle ground is dominated by the reservoir's blue water, which reflects the sky. The surrounding terrain is rugged, with green and brown hillsides. In the background, a range of mountains is visible, with the highest peaks covered in snow under a clear blue sky with some light clouds.

# Vision for a Wetter Tomorrow